### EASTERN WASHINGTON UNIVERSITY

## CAPITAL BUDGET REQUEST

2017-2019 BIENNIUM



start something **big** 



September 15, 2016

Governor Jay Inslee Office of the Governor PO Box 40002 Olympia, WA 98504

Dear Governor Inslee:

This letter transmits the 2017-19 biennial capital budget request for Eastern Washington University. Developed within the guidelines set by the Office of Financial Management, this request represents Eastern Washington University's efforts to focus on its mission to expand opportunities for personal transformation through excellence in learning.

This capital budget requests prioritized below support the university priorities and strategies currently in place to serve the higher education needs of our region. Eastern places a high priority on protecting the state's investment in our physical facilities.

#### **PRIORITY #1 – INTERDISCIPLINARY SCIENCE CENTER, CONSTRUCTION REQUEST**

Eastern Washington University's (EWU) top priority capital request is funding for the construction phase of the Interdisciplinary Science Center (ISC). The construction of the ISC allows EWU to increase the number and improve the quality of teaching labs, research labs, and lab support space in basic sciences to meet the increased demand in these highly competitive areas. Since 2008, EWU has nearly doubled the number of science, technology, engineering and mathematics graduates and this additional facility will allow the university to meet the growing student demand in these fields of study.

#### **PRIORITY #2 – SCIENCE RENOVATION, DESIGN REQUEST**

Eastern Washington University is requesting design funds supporting the proposed renovation of the Science Building to provide modernized classroom infrastructure, new opportunities for advanced STEM education and distance learning. Mandatory additional science prerequisites in the university's engineering program and additional growth of healthcare-related degrees continue to increase student and regional demand for basic sciences. Eastern is anticipating 20% growth over the next ten years with a disproportionate share in students seeking STEM related degrees.



#### **PRIORITY #4 – ENGINEERING BUILDING, PRE-DESIGN REQUEST**

This request is for pre-design funds to ultimately design and build a new engineering building on Eastern's Cheney campus to improve engineering facility infrastructure and accommodate additional program growth.

#### PRIORITY #3 – CHILLED WATER PRODUCTION AND DISTRIBUTION, CONSTRUCTION PRIORITY #5 – CENTRAL STEAM PRODUCTION AND DISTRIBUTION, CONSTRUCTION PRIORITY #6 – MEDIUM VOLTAGE ELECTRICAL DISTRIBUTION, CONSTRUCTION

Eastern's Cheney campus consists of 2,700,000 gross square feet of academic and student support facilities maintained by mission-critical university-owned infrastructure, including steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus.

A professional engineering consultant has examined each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. This request includes actions to reduce failures, lower maintenance costs, increase efficiencies, and facilitate long-range planning. This capital request supports the sequential implementation of Eastern's "2014 Comprehensive Campus Master Plan" and EWU's "Ten Year Capital Plan".

Eastern is working hard to ensure that facilities remain in good repair, and the university remains focused on the long-term needs of our region. Expansion and renewal of campus facilities provides vitally important access to higher education for Washington students. I request your thoughtful consideration of this capital funding request presented by EWU. Thank you for your continued support.

Sincerely,

Mary Cullinan, PhD President

MC:cgg

#### 370 – EASTERN WASHINGTON UNIVERSITY 2017-19 Biennial Capital Budget Request

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In 2014, Eastern Washington University updated our Comprehensive Campus Master Plan. The Eastern Washington University Comprehensive Campus Master Plan (EWU CCMP) is a critical part of the university's strategic planning process. It is a guide to plan and achieve a campus that reflects the programmatic and cultural needs of the university. The plan provides a means to track facility need as driven by both individual conditions and overall institutional growth.

Effective and strategic comprehensive campus master planning methods align the academic needs of the university with its physical needs, thus working to ensure that Eastern Washington University's (EWU) facilities support the university's mission, vision, and objectives. Comprehensive campus master plans are flexible, they are also living documents, appropriate and applicable to both immediate and long-term university goals. They address overlapping needs and potential shared capacities of university programs and services, and are by definition proactive in nature. Since the long-range goals of EWU must respond to the changing market for higher education, so too the EWU CCMP must be dynamic and flexible in its structure, presentation, and implementation.

The campus environment—its buildings, open space, and its neighbors—contribute significantly to student success, their collegiate experience, and their connection with the larger community. The condition of the campus facilities, availability of both instructional and research space, availability of desirable amenities, and options for a vibrant residential experience are vital to the successful recruitment and retention of EWU students, faculty, and staff.

Three primary categories of consideration—academic programs, facility condition, and enrollment—drive the concepts and recommendations of the Eastern Washington University (EWU) Comprehensive Campus Master Plan (CCMP). The concept and recommendations support the overall mission of the university through the implementation of physical improvements that strategically address these considerations.

The following capital budget request reflects the university strategic plan to link facilities with student success and the core values of our university's Strategic Plan. The following projects continue to align with the university's short and long term goals.

#### **Capital Request**

#### Priority #1 – Interdisciplinary Science Center – Construction Request – \$67,009,000

This is a request for Construction funds for a proposed Interdisciplinary Science Center (ISC) in the growth category, as described in the project update report submitted to OFM prior to July 1, 2016.

EWU expects that over the next ten years, its student population will grow by approximately twenty percent and that a disproportionately large share of the additional students will be seeking healthcare-related degrees. This growth, coupled with new programmatic offerings in the University's engineering program with mandatory science prerequisites, translates to a substantial increase in the demand for basic science courses including biology, chemistry/ biochemistry, geology, and physics. Without an improvement in the quantity and quality of science teaching labs, research labs, and lab support space, EWU will not be able to meet the increased demand for basic sciences.

#### Priority #2 – Renovate Science Building – Design Phase I request – \$7,592,440

# EWU requests design funds for Phase I of a two-phase renovation of the existing Science Building as described in the Predesign report submitted to OFM prior to July 1, 2016.

#### **Demand for Science Programs Increasing**

Recently, Eastern Washington University has seen twelve percent growth in student population; within the next ten years, another twenty percent growth in student population is expected. The combined increase in student population, as well as an increased interest in STEM fields, has led to a disproportionate number of students seeking degrees in the sciences (20.6% growth in three years), when compared to past trends. Additionally, regional demand for students in STEM (Science, Technology, Engineering, and Math) related fields has also increased, especially in the engineering, computer science, environmental, and healthcare fields. The growth of healthcare in the Spokane region will mean that a larger number of students will seek related degrees to fill the increased need. Increasing numbers of pre-med students have pushed the need for chemistry and biology courses. Growth in accredited mechanical and electrical engineering programs have put pressure on prerequisite chemistry and physics classes. Increasing student populations, more interest in STEM related fields, and a greater regional demand for graduates within STEM and healthcare fields have all put pressure on science program growth to fulfill the basic and advanced science courses - especially biology, chemistry, physics, and geology classes - which are prerequisites to completing degree requirements. Given the current facilities available, EWU will not be able to meet the increased demand for either quality or quantity of science classes available.

#### Inadequate Capacity and Amenities within the Science Building

The existing Science Building is the only building on the EWU campus capable of supporting chemistry, physics, biology, and geology teaching and research. Lower division chemistry, general biology, anatomy, and physiology courses are at, or beyond, the capacity of the space available in the teaching laboratories of the Science Building. Many introductory classes are offered currently as lecture only, without a laboratory component, due to lack of space; this approach compromises the instructional program. Existing labs are insufficient in size to accommodate the increased number of students per section. Additionally, research lab space is not able to serve the research needs required to add faculty or address the requirements of the various science majors. Specialized resource areas do not have space to accommodate student research projects. The program also lacks an inorganic/physical chemistry and an analytical chemistry teaching lab, which are key program components in the degree field. There is also a

great need for adjacent support space, including preparation space for teaching labs and equipment storage. Utilization rates for teaching labs are reduced as lab support storage occurs within the classrooms and more time is required to prepare the lab for each class.

The Science Building contains serious deficiencies that are at odds with the university's strategies to achieve its mission of fostering excellence in learning through quality academic programs, undergraduate and graduate student research, and individual student-faculty interactions with the existing Science Building. These deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and soaring energy costs.

Taking no action to renovate the Science Building stifles Eastern Washington University's ability to meet their strategic goals, the State's ability to address the growing demand within our higher education systems, specifically in STEM related fields, and promotes ongoing health, safety, welfare, maintenance, and repair issues on campus.

#### Priority #3 – Chilled Water Production/Distribution – Infrastructure - \$8,606,000

This request includes the necessary upgrades to our chilled water production plant and distribution system to service the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions or the chilled water system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions

Eastern Washington University enrollment continues to grow and facilities are requiring expansion to accommodate this growth. This expansion requires that our Chilled Water Production and Distribution system grow with us. This request is to expand, upgrade, and improve the equipment and operations of Eastern Washington University chilled water plant and campus wide chilled water infrastructure.

#### Priority #4 – Engineering Building – Pre Design – \$345,000

The current success and sustained growth of EWU's Engineering programs and degrees is being limited by the lack of appropriate space for STEM-related programs. EWU's current facilities infrastructure and technology are inadequate for continued student success. EWU's currently cannot accommodate additional growth due to space limitations.

Eastern is proud to offer a wide range of engineering and technical programs related to engineering and design, including conceptual Electrical Engineering and Mechanical Engineering programs. We have rigorous, but pragmatic Mechanical Engineering Technology degrees that offer hands-on and production-oriented Technology degrees, with options in Construction, Design, and Manufacturing. A major in Visual Communication Design educates and prepares students to conceive and produce creative solutions to satisfy the visual communication needs of society. EWU's Engineering classes are taught exclusively by faculty with industry experience.

#### Priority #5 – Central Steam Production Distribution – Infrastructure - \$8,406,000

This request includes the necessary upgrades for our central steam plant and steam distribution system to provide service to the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions of the steam system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

Eastern Washington University enrollment continues to grow and facilities are requiring expansion to accommodate the enrollment growth. This expansion requires that our Central Steam Production and Distribution system grow with us. This request is to expand, upgrade, and improve the equipment and operations of Eastern Washington University Steam Plant and campus wide steam infrastructure.

#### Priority #6 – Medium Voltages Electrical Distribution – Infrastructure - \$4,766,000

This request includes the necessary upgrades for our medium voltage (13,200V) electrical distribution system to provide required service to the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions of the electrical distribution systems that are reaching the end of their lifecycle, and present hazards to maintenance and operations staff relating to current Labor and Industries workplace safety codes and regulations.

To support the growth in our academic programs and facilities' investments, the university's medium voltage electrical system is in need of increased capacity, expansion and replacement of equipment that is at the end of its life cycle. This project requests capital funds to accomplish the upgrades in this system that support the entire Cheney campus.

#### Priority #7 – Minor Works Preservation - \$21,000,000

Project Request in the category of Facility Preservation are divided into three categories:

•	Life Safety Code Compliance	\$7,000,000
•	Facility Preservation	\$7,000,000
•	Infrastructure Preservation	\$7,000,000

The requests are priority based upon on-going assessment, review, and prioritization of the campus facilities' operations and the needs to support effective operation management. These projects were identified through the evaluation of our current systems by architectural engineering consultants, regulatory agencies, and plant staff. We captured the costs to maintain

and operate the existing structures through our computerized maintenance management systems (CMMS) to identify those properties and systems that are generating high operation costs and concerns. Once the maintenance items are captured, we then will prioritize these projects to improve and extend the lifecycle of our systems and equipment and reduce the maintenance and operating cost for the university.

Eastern's facilities are complex and costly resources to maintain and operate. These minor projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvement and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

#### Priority #8 – Minor Works Program - \$14,000,000

Program projects primarily achieve academic and student support goals. This project includes updating and improving spaces that are in need to improve the program delivery. Minor Works Program is divided into 2 categories:

-	Program State Resources 057	\$7,000,000
-	Program Eastern Washington University Local Capital 061	\$7,000,000

These projects will significantly improve the spaces and their functionality. The requests are priority based upon on-going assessment, review, and prioritization of campus programs and the needs to support academic instruction and university operations. These projects were identified through evaluation of our current systems by architectural engineering consultants, academic program departments, and plant staff. From these requests and assessment, we compiled a list for projects and budgetary estimate costs for review and funding requests. These projects are the highest priority to align facilities improvement with the current and future needs of individual departments and general campus spaces. In many cases, the evaluation of these request show the deteriorating condition of some of the spaces, systems, and equipment. We captured the costs to maintain and operate these facilities through our computerized maintenance management systems (CMMS) to identify those that have the highest need for improvements

#### Priority #9 – Preventative Maintenance and Building Systems Upgrades- \$2,217,000

RCW 43.88 requires that Eastern Washington University to submit a strategic plan for the reduction of our maintenance backlog. The plan includes specific goals, primarily:

- 1. Financial stewardship of university facilities
- 2. Reducing or stabilizing the cost of maintenance and operations of university facilities during times of reduced funding.
- 3. Surveying, indemnifying and prioritizing maintenance and operations for the best use of available resources.
- 4. Reduction in deferred maintenance backlog
- 5. Developing and promoting and standard for the quality of maintenance on campus.

This request specifically is assigned to the priorities listed above; it provides resources to meet the university's goals of providing a safe and quality academic environment, reduction of operating costs, and extending lifecycles of equipment and system at the university.

Each biennium, the university completes a comprehensive survey of the condition of each of our campus facilities. Through this analysis, a qualitative report is developed that identifies the condition of each facility, major and secondary building system and prioritizes projects that need to be accomplished to reduce backlog and extend system longevity. The condition survey provides a condition score from 1 to 5 for each element in a facility as defined by the ASTM Uniformat classification system. A copy of that report is included below.

#### Eastern Washington University's Ten Year Capital Plan (attached)

New and improved facilities play a critical role in Eastern's Strategic Plan. Reflected in our Ten-Year Capital Plan and our Comprehensive Campus Master Plan are commitments to:

- Student Success
- Institution of Innovation and Opportunity
- Community Engagement

Eastern's Capital request is about students and they are at the center of all that Eastern does. Eastern defines student success as their students' ability to fulfill their goals in education, career, and life. The campus, facilities, and activities support student success. We are committed to consistently contributing Eastern's mission and reputation as a safe, healthy, and attractive place to learn, work, live, play, and visit. Facilities' goals are achieved by consistently investing our available resources in all areas of facilities and the campus as a whole.

#### **Maintenance Backlog Reduction Plan**

Per RCW 43.88.030 Eastern Washington University is required to develop and submit a strategic plan for reducing the university's facility maintenance backlog.

The FCA (Facilities Condition Assessment) defines the condition of facilities under the following levels:

5 - Needs Improvement; Marginal Functionality – A building with some major system that are failing and that significantly reduce the quality and usability of the building.

4 – Needs Improvement; Limited Functionality – A building with some major systems that are in poor condition, exceed expected life cycles, and require immediate attention to prevent negative impacts on facility use.

3 - Fair; System approaching end of expected life cycles – a building with some older major systems that are still functional but are approaching the end of their expected life cycles.

2- Adequate – A building with systems in good condition and functioning adequately within their expected life cycle.

1 - Superior – A building with major systems that are in extremely good condition and functioning well.

These scores are aggregate, averaged, and correlated to historical data ranges to determine the applicable facility condition index of each building system. Eastern's overall backlog is \$68,987,973.

#### **Prioritized Preservation Project List (attached)**

Eastern's Facilities and Planning uses the results produced from this qualitative facility condition assessment in order to identify capital preservation projects that will reduce the maintenance backlog. This information is used in conjunction with data extracted from the university's Computerized Maintenance Management System (CMMS). AiM, by Asset Works, is the CMMS product that the university currently uses.

The Facility Condition Assessment (FCA) software allowed Eastern to score individual systems within each university facility. A report was generated from the software that grouped and sorted building system elements into capital projects. Each system element was assigned a cost estimate, an FCA condition score of 1 to 5, and a system significance ranking with sequential numbers based on the significance of a system to a building's overall operation.

The combination of the facility condition score and a systems significance ranking determined the priority order of projects on the preservation list. Only system elements with a condition score of 3 and above were included on the prioritized project list. Any system with a score of 2 or less is considered in adequate condition and maintained sufficiently with only minor mounts of deferred maintenance. The significance ranking structure is described below (1 is the highest rank or highest priority, based on ASTM Uniformat II Level 2 Group Elements).

- 1. Fire Protection
- 2. Conveyance Systems
- 3. Electrical
- 4. HVAC
- 5. Plumbing
- 6. Roofing
- 7. Exterior Closure
- 8. Superstructure
- 9. Staircases
- 10. Interior Construction
- 11. Interior Finishes
- 12. Fixed Furnishings and Equipment
- 13. Substructure

#### Summary

For 2016 Eastern's Facility Condition Assessment generated the following information:

- Current Replacement Value
- Preservation Backlog Value
  \$ 68,987,973

\$479,478,493

-	Facility Condition Index	14.38%
-	Facility Condition Score (average)	2.52

The intention of the university is to impact the deferred maintenance backlog each biennium through effective use of specific state funds for backlog reduction (\$2,217,000) and additional Minor Works Preservation requested funding. Depending upon funds available, through comprehensive planning, Eastern intends on providing up to \$5,000,000 per biennia to address this issue. Additional deterioration of systems and equipment continue to add to the inventory if maintenance issues are deferred. It would take multi-biennia (10 plus) with more than the \$5,000,000 assigned to reduce the overall deferred maintenance backlog substantially.

Through comprehensive planning of our major projects, minor works preservation, and our backlog maintenance reduction program, it is the university's goal to reduce the maintenance backlog by more than the \$5,000,000 stated above.

Eastern Wa	ishingto	on University Tel Major Pro	n-Year Capital ojects	Plan 2017-27		
	Р	2017-19	2019-21	2021-23	2023-25	2025-27
Interdisciplinary Science Center (ISC)						
Construction	1	\$67,009,000				
Renovate Science Building						
Design Phase I		\$7,592,000				
Design Phase II	2		\$6,255,000			
Construction Phase I			\$43,074,000			
Construction Phase II				\$45,453,000		
Chilled Water Production/Distribution	2					
Design and Construction	3	\$8,606,000				
Engineering Building						
Pre Design	4	\$345,000				
Design	4		\$3,415,000			
Construction				\$53,280,000		
Central Steam Production/Distribution	5					
Design and Construction	3	\$8,406,000				
Medium Voltage Electrical Distribution						
Design and Construction	0	\$4,766,000				
Martin Williamson						
Pre Design						
Design				\$3,550,000		
Construction					\$51,000,000	
Renovate Kingston Hall						
Pre Design				\$350,000		
Design					\$5,000,000	
Construction						\$50,000,000
Restoration of Showalter Hall						
Pre Design					\$300,000	
Design						\$3,500,000
Construction						
Totals		\$96,724,000	\$52,744,000	\$102,633,000	\$56,300,000	\$53,500,000

Eastern Washin	igte	on University T	en-Year Capital	l Plan 2017-19				
		Minor Work Projects						
	P	2017-19	2019-21	2021-23	2023-25	2025-27		
Health, Safety Code Compliance		\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000		
Facility Preservation	7	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000		
Infrastructure Preservation	1	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000		
Total		\$21,000,000	\$21,000,000	\$21,000,000	\$21,000,000	\$21,000,000		
EWU Capital Projects State 061		\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000		
State Building Construction 057	8	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000		
Total		\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000		
Preventive Maintenance / Backlog Reduction	9	\$2,217,000	\$2,217,000	\$2,217,000	\$2,217,000	\$2,217,000		
Grand Totals		\$133,941,000	\$89,961,000	\$139,850,000	\$93,517,000	\$90,717,000		

370 - Eastern Washington University Ten Year Capital Plan by Project Priority 2017-19 Biennium

Version: A6 Eastern Washington University

OFM

Report Number: CBS001 Date Run: 9/15/2016 9:18AM

Version: A6 Eastern Washington University

OFM

**Project by Agency Priority** 

Date Run: 9/15/2016 9:18AM Report Number: CBS001

id Estimated Estimated Estimate 11 <u>2021-23</u> 2025-2						3,550,000 51,000,000	300,000 3,500,000	350,000 5,000,000 50,000,000	0 116,633,000 70,300,000 53,500,000		L Fatimated Fatimated
Estimate 2019-2									66,744,00		Ectimate
New Approp 2017-19	7,000,000	7,000,000	7,000,000	7,000,000	2,217,000				147,941,000		New Approp
Reapprop 2017-19									5,000,000		Reannron
Current Expenditures	ervation	mpliance							18,116,000		Current
Prior Expenditures	astructure Prese	Safety Code Co	sources 057	esources 061	og Reduction						Drior
Estimated <u>Total</u>	ervation - Infra 7,000,000	<b>ervation - Life</b> 7,000,000	<b>ram - State Re</b> 7,000,000	<b>ram - Local R</b> ( 7,000,000	<b>tenance/Backl</b> 2,217,000	<b>ation</b> 54,550,000	<b>smodel</b> 3,800,000	<b>ovation</b> 55,350,000	478,234,000		Ectimated
V Projectby Account-EAType	3000566 Minor Works Pres 057-1 State Bldg Constr-State	3000569 Minor Works Pres 057-1 State Bldg Constr-State	3000567 Minor Works Prog 057-1 State Bldg Constr-State	3000568 Minor Works Prog 061-1 EWU Capital Projects-State	30000615 Preventative Main 061-1 EWU Capital Projects-State	30000543 Martin Hall Renov 057-1 State Bldg Constr-State	30000545 Showaltter Hall Re 057-1 State Bldg Constr-State	3000544 Kingston Hall Rer 057-1 State Bldg Constr-State	Total	Account Summary	
Priorit	7	7	Ø	∞ 11	6	10		12		Total	

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# 370 - Eastern Washington University Ten Year Capital Plan by Project Priority 2017-19 Biennium

Version: A6 Eastern Washington University

**Total Account Summary** 

Report Number: CBS001 Date Run: 9/15/2016 9:18AM

					New				
	Estimated	Prior	Current	Reapprop	Approp	Estimated	Estimated	Estimated	Estimated
Account-ExpenditureAuthority   ype	10131	Expenditures	Expenditures	<u>81-7107</u>	<u>51-1107</u>	12-61.02	2021-23	27-5202	17-0707
061-1 EWU Capital Projects-State	46,384,000		7,167,000	2,000,000	16,217,000	7,000,000	7,000,000	7,000,000	

53,500,000

70,300,000

116,633,000

66,744,000

147,941,000

5,000,000

18,116,000

478,234,000

Total

OFM

# Ten Year Capital Plan by Project Priority 2017-19 Biennium

Report Number: CBS001 Date Run: 9/15/2016 9:18AM

InterpretedAs 2017-19	All Functional Areas	370	A6-A	All Project Classifications	No	Priority	yes	Z	Agency Budget All User Ids
EnteredAs 2017-19	*	370	A6-A	*	No	Project Priority	У	Z	Agency Budget *

User Group User Id

Include Page Numbers

For Word or Excel

Project Classification

Functional Area

Agency Version

**Parameter** Biennium Include Enacted

Sort Order

#### 370 - Eastern Washington University

**Capital FTE Summary** 

2017-19 Biennium

Version: A6 Eastern Washington University

#### Report Number: CBS004 Date Run: 9/8/2016 12:23PM

#### FTEs by Job Classification

	Authorized Bud	get		
	2015-17 Biennie	2015-17 Biennium		ium
JobClass	<u>FY2016</u>	<u>FY2017</u>	FY2018	<u>FY2019</u>
1102 Assoc VP-Facilities			0.5	0.5
1104 Sr Project Manager			3.0	3.0
1107 Dir-Construction Planning			1.0	1.0
1373 Dir-Facilities Services			1.0	1.0
1588 Admin Specialist			1.0	1.0
537 L Const Project Coodinator 4			1.0	1.0
537K Const Project Coodinator 3			2.0	2.0
5381 Engineering Technician 3			1.0	1.0
569K Maintenance Specialist 4			2.0	2.0
605E Carpenter			1.0	1.0
608F Electrician			3.8	3.8
619F Painter			3.0	3.0
6191 Sign Painter Lead			1.0	1.0
621F Plumbr/Pipeftr/Stmftr			2.0	2.0
626K Maintenance Mechanic 2			8.0	8.0
626L Maintenance Mechanic 3			2.0	2.0
7100H Office Aide 1			1.0	1.0
Τ	otal FTEs		34.3	34.3

#### Account **Authorized Budget** 2015-17 Biennium 2017-19 Biennium Account-ExpenditureAuthoritvTvpe FY2016 FY2017 FY2018 FY2019 001-1 General Fund-State 1,370,000 1,450,000 148-6 HE - Dedicated Locl-Non-Appropriated 1,770,000 1,700,000 **Total Funding** 3,070,000 3,220,000

#### Narrative

The total number of FTE are lower than the previous biennium due to a smaller capital workload.

#### Deferred Maintenance Backlog Reduction Plan 2017-2019

#### Facility Condition Assessment 2016



EWU Current Replacement Value:	479,748,493
EWU Preservation Back Log Value:	68,987,973
EWU Facility Condition Index:	14.38%
EWU Facility Condition Score:	2.52

	CRV	FCA Score	CI	Backlog
Capital Funding Source: Mixed	68,735,930	2.08	15.92%	10,943,835
Pence Union Building				
Gross SF: 141,025 CRV \$/SF: 275	38,760,749	3.13	19.55%	7,575,946
Equipment and Furnishings	404.601	2.00	6.98%	28,221
Equipment and Furnishings	404.601	2.00	6.98%	28.221
Interiors	8,092,015	3.13	19.18%	1,552,150
Interior Construction	3,641,407	3.33	20.63%	751,040
Interior Finishes	3,641,407	3.00	18.00%	655,453
Staircases	809,201	3.00	18.00%	145,656
Services	17,721,512	3.28	20.70%	3,668,717
Electrical	5,664,410	3.00	17.57%	995,014
Fire Protection	728,281	3.33	12.75%	92,856
HVAC	7,282,813	3.67	25.44%	1,852,566
Plumbing	3,641,407	3.00	18.00%	655,453
Vertical Transportation	404,601	3.00	18.00%	72,828
Shell	9,710,417	3.13	18.84%	1,829,807
Exterior Closure	3,641,406	3.00	18.00%	655,453
Roofing	1,213,802	3.33	24.75%	300,416
Superstructure	4,855,209	3.00	18.00%	873,938
Substructure	2,832,205	3.00	17.55%	497,052
Foundations	2,832,205	3.00	17.55%	497,052
Tawanka Commons				
Gross SF: 73,735 CRV \$/SF: 252	18,570,071	2.85	16.19%	3,006,852
Equipment and Furnishings	193,438	2.00	6.75%	13,057
Equipment and Furnishings	193,438	2.00	6.75%	13,057
Interiors	3,868,765	2.25	7.88%	304,665
Interior Construction	1,740,944	2.00	6.75%	117,514
Interior Finishes	1,740,944	2.00	6.75%	117,514
Staircases	386,876	3.00	18.00%	69,638
Services	8,511,282	3.11	20.51%	1,745,925
Electrical	2,708,135	2.33	14.18%	383,878
Fire Protection	386,876	3.75	56.08%	216,941
HVAC	3,481,888	3.17	22.29%	776,026
Plumbing	1,740,944	3.20	20.45%	356,023
Vertical Transportation	193,438	2.00	6.75%	13,057
Shell	4,642,518	3.25	18.35%	851,805
Exterior Closure	1,740,944	2.67	14.55%	253,307
Roofing	580,315	4.00	32.93%	191,117
Superstructure	2,321,259	3.00	17.55%	407,381
Substructure	1,354,068	2.00	6.75%	91,400
Foundations	1,354,068	2.00	6.75%	91,400
University Recreation Center				
Gross SF: 25,875 CRV \$/SF: 441	11,405,110	1.22	3.17%	361,036
Equipment and Furnishings	116,024	1.00	2.25%	2,611
Equipment and Furnishings	116,024	1.00	2.25%	2,611
Interiors	2,320,470	1.06	2.53%	58,737

	CRV	FCA Score	CI	Backlog
Interior Construction	1,044,211	1.00	2.25%	23,495
Interior Finishes	1,044,212	1.17	2.88%	30,021
Staircases	232,047	1.00	2.25%	5,221
Services	5,255,865	1.36	3.75%	197,356
Electrical	1,682,341	1.00	2.25%	37,853
Fire Protection	208,842	1.33	4.25%	8,876
HVAC	2,204,446	1.43	4.38%	96,590
Plumbing	1,044,212	1.60	4.93%	51,427
Vertical Transportation	116,023	1.00	2.25%	2,611
Shell	2,784,564	1.19	2.93%	81,448
Exterior Closure	1,044,211	1.00	2.25%	23,495
Roofing	348,071	1.50	7.65%	26,627
Superstructure	1,392,282	1.00	2.25%	31,326
Special Construction	116,023	1.00	2.25%	2,611
Special Construction	116,023	1.00	2.25%	2,611
Substructure	812,164	1.00	2.25%	18,274
Foundations	812,164	1.00	2.25%	18,274
Capital Funding Source: State	411,012,564	2.56	14.12%	58,044,138
Aquatics Building				
Gross SF: 21,237 CRV \$/SF: 219	4,659,443	2.47	12.04%	561,195
Interiors	999.880	2.13	7.59%	75.928
Interior Construction	449.946	2.33	8.63%	38.808
Interior Finishes	449.946	2.00	6.75%	30.371
Staircases	99.988	2.00	6.75%	6.749
Services	2,109,748	2.75	15.64%	330,036
Electrical	699,916	2.33	14.18%	99,213
Fire Protection	9,999	2.00	6.75%	675
HVAC	949.886	2.43	10.89%	103.488
Plumbing	449.946	3.60	28.15%	126.660
Shell	1,199,856	2.38	10.97%	131,609
Exterior Closure	449,946	3.00	18.00%	80,990
Roofing	149,982	2.00	6.75%	10,124
Superstructure	599,928	2.00	6.75%	40,495
Substructure	349,958	2.00	6.75%	23,622
Foundations	349,958	2.00	6.75%	23,622
Art Building				
Gross SF: 35.493 CRV \$/SF: 307	10.884.688	2.95	18.88%	2.054.569
Equipment and Eurnishings	111 523	2 50	10 13%	11 292
Equipment and Furnishings	111,523	2.50	10.13%	11,272
Interiors	2 230 469	2.50	10.46%	233 363
Interior Construction	1 003 711	2.67	11.50%	115 427
Interior Finishes	1,003,711	2.33	9.88%	99,116
Staircases	223 047	2.50	8 44%	18 820
Services	4.862.422	3.47	27.54%	1.339.174
Electrical	1 561 328	3.33	23.96%	374 133
Fire Protection	178 438	3 50	59.47%	106 115
HVAC	2 007 422	3.67	25 44%	510 638
Plumbina	1,003 711	3.40	32.70%	328 214
Vertical Transportation	111.523	3.00	18.00%	20.074
Shell	2.676.563	2.38	10.97%	293,585
Exterior Closure	1,003,711	3.00	18.00%	180.668
Roofing	334.570	2.00	6.75%	22,583
Superstructure	1.338.281	2.00	6.75%	90.334
Special Construction	223.047	3.00	18.00%	40.148
Special Construction	223,047	3.00	18.00%	40,148
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				CRV	FCA Score	CI	Backlog
Substructure				780,664	3.00	17.55%	137,007
Foundations	6			780,664	3.00	17.55%	137,007
Biology Boat G	arage						
Gross SF:	1.973	CRV \$/SF:	123	243,591	2.50	12,61%	30,721
Services	.,			67 949	3.00	18 00%	12 231
Electrical				67 949	3.00	18.00%	12,231
Shell				130 770	2.33	10.28%	13 442
Exterior Clo	sure			41 026	3.00	18.00%	7 385
Roofing	ouro			12.821	2.00	6.75%	865
Superstruct	ure			76,923	2.00	6.75%	5.192
Substructure				44.872	2.50	11.25%	5.048
Foundations	3			44.872	2.50	11.25%	5.048
Biology Storage	e S			,•			0,0.0
Gross SE:	508		152	01 511	3 00	18 00%	16 /72
Unteriore	570	CRV \$/31.	155	12,620	3.00	10.00%	10,472
	haa			12,029	3.00	18.00%	2,213
Interior Finis	snes			12,029	3.00	10.00%	2,213
Services				20,393	3.00	18.00%	3,707
Shall				20,090	3.00	10.00%	5,707
Shell Exterior Cla	0			44,087	3.00	18.00%	8,044
Exterior Cio	sure			17,400	3.00	10.00%	3,140 600
Superstruct	uro			0,000 02,215	3.00	18.00%	099
Substructure	ure			20,010	2.00	10.00%	4,197
Substructure	<b>.</b>			13,000	3.00	10.00%	2,440
	<b>b</b>			15,000	5.00	10.00 %	2,440
	10 107		207	0 111 010	2.24	22 ( 20)	477 / 04
Gross SF:	10,187	CRV \$/SF:	207	2,111,810	3.24	22.62%	477,684
Equipment and	d Furnishing	S		25,201	3.00	18.00%	4,536
Equipment a	and Furnishin	gs		25,201	3.00	18.00%	4,536
Interiors				504,012	3.00	18.00%	90,722
Interior Con	struction			226,805	3.00	18.00%	40,825
Interior Finis	shes			226,805	3.00	18.00%	40,825
Staircases				50,401	3.00	18.00%	9,072
Services				801,379	3.79	31.24%	250,311
Electrical				352,808	3.67	29.93%	105,578
Fire Protect	ion			40,321	4.50	62.84%	25,339
HVAC				216,725	4.00	34.24%	74,203
Plumbing				191,525	3.25	23.60%	45,191
Snell				604,814	2.63	16.59%	100,361
Exterior Clo	sure			226,805	3.00	18.00%	40,825
Rooting				75,602	2.00	6.75%	5,103
Superstruct	ure			302,407	3.00	18.00%	54,433
Substructure				176,404	3.00	18.00%	31,/53
Foundations	5			176,404	3.00	18.00%	31,753
Carpenter Stora	ige						
Gross SF:	3,600	CRV \$/SF:	96	345,721	2.00	6.75%	23,336
Interiors				102,436	2.00	6.75%	6,914
Interior Con	struction			48,017	2.00	6.75%	3,241
Interior Finis	shes			41,615	2.00	6.75%	2,809
Staircases				12,804	2.00	6.75%	864
Services				67,864	2.00	6.75%	4,581
Electrical				67,864	2.00	6.75%	4,581
Shell				130,606	2.00	6.75%	8,816
Exterior Clo	sure			40,974	2.00	6.75%	2,766
Roofing				12,804	2.00	6.75%	864
Superstruct	ure			76,827	2.00	6.75%	5,186

	CRV	FCA Score	CI	Backlog
Substructure	44,816	2.00	6.75%	3,025
Foundations	44,816	2.00	6.75%	3,025
Central Services Building				
Gross SF: 13,091 CRV \$/SF: 158	2,069,684	2.48	13.28%	274,902
Equipment and Furnishings	6,984	3.00	18.00%	1,257
Equipment and Furnishings	6.984	3.00	18.00%	1.257
Interiors	430,699	2.29	11.43%	49,239
Interior Construction	174.608	2.50	14.55%	25.405
Interior Finishes	209,529	2.33	9.88%	20,691
Staircases	46,562	2.00	6.75%	3,143
Services	910,288	2.67	16.71%	152,118
Electrical	325,934	2.33	14.18%	46,201
Fire Protection	9,312	1.00	2.25%	210
HVAC	398,106	3.17	18.55%	73,859
Plumbing	176,936	3.00	18.00%	31,848
Shell	558,745	2.38	10.97%	61,287
Exterior Closure	209,529	3.00	18.00%	37,715
Roofing	69,843	2.00	6.75%	4,714
Superstructure	279,372	2.00	6.75%	18,858
Substructure	162,967	2.00	6.75%	11,000
Foundations	162,967	2.00	6.75%	11,000
Chemical Storage				
Gross SF: 864 CRV \$/SF: 152	131,220	2.48	11.61%	15,236
Interiors	25.353	2.40	10.84%	2.748
Interior Construction	11.524	2.00	6.75%	778
Interior Finishes	13.829	2.67	14.25%	1.971
Services	58,235	2.92	15.92%	9,272
Electrical	21,512	2.00	6.75%	1,452
Fire Protection	2,151	2.00	6.75%	145
HVAC	26,275	3.17	18.55%	4,875
Plumbing	8,297	4.00	33.75%	2,800
Shell	36,877	2.00	6.75%	2,489
Exterior Closure	13,829	2.00	6.75%	933
Roofing	4,610	2.00	6.75%	311
Superstructure	18,438	2.00	6.75%	1,245
Substructure	10,756	2.00	6.75%	726
Foundations	10,756	2.00	6.75%	726
Cheney Hall				
Gross SF: 31,018 CRV \$/SF: 286	8,873,722	2.86	16.00%	1,419,935
Equipment and Furnishings	92.821	1.50	3.60%	3.342
Equipment and Furnishings	92,821	1.50	3.60%	3,342
Interiors	1,856,427	2.75	16.19%	300,532
Interior Construction	835,392	3.00	18.00%	150,371
Interior Finishes	835,392	3.00	16.48%	137,631
Staircases	185,643	2.00	6.75%	12,531
Services	4,047,011	3.29	20.34%	823,256
Electrical	1,299,499	2.67	13.31%	172,926
Fire Protection	148,514	4.00	60.88%	90,408
HVAC	1,670,785	3.50	21.15%	353,371
Plumbing	835,392	3.20	22.73%	189,843
Vertical Transportation	92,821	3.00	18.00%	16,708
Shell	2,227,713	2.63	11.18%	248,947
Exterior Closure	835,392	3.00	15.30%	127,815
Roofing	278,464	2.67	16.50%	45,947
Superstructure	1,113,856	2.00	6.75%	75,185

	CRV	FCA Score	CI	Backlog
Substructure	649,750	2.00	6.75%	43,858
Foundations	649,750	2.00	6.75%	43,858
Childcare Facility				
Gross SF: 14,865 CRV \$/SF: 179	2,658,278	2.34	10.95%	291,170
Equipment and Furnishings	8.812	2.00	6.75%	595
Equipment and Furnishings	8.812	2.00	6.75%	595
Interiors	528,718	2.00	8.81%	46,593
Interior Construction	264.359	2.00	6.75%	17.844
Interior Finishes	264,359	2.00	10.88%	28,749
Services	1,210,177	2.33	10.33%	124,976
Electrical	411,225	2.00	6.75%	27,758
Fire Protection	46,997	2.00	6.75%	3,172
HVAC	528,718	2.83	14.94%	78,977
Plumbing	223,237	2.00	6.75%	15,068
Shell	704,958	2.50	11.63%	81,995
Exterior Closure	264,359	3.00	10.77%	28,463
Roofing	88,120	2.00	6.75%	5,948
Superstructure	352,479	2.50	13.50%	47,585
Substructure	205,613	3.00	18.00%	37,010
Foundations	205,613	3.00	18.00%	37,010
Communications Center				
Gross SF: 19.289 CRV \$/SF: 228	4.404.291	2.89	16.98%	748.002
Equipment and Euroisbings	47 717	3.00	18.00%	8 589
Equipment and Euroishings	47,717	3.00	18.00%	8 589
Interiors	954.343	2.38	9.62%	91,796
Interior Construction	429 454	2.33	9.63%	41 335
	429 454	2.33	9.88%	42 409
Staircases	95 434	2.50	8 44%	8 052
Services	1.923.000	3.40	24.10%	463,381
Electrical	668.040	3.33	23.96%	160.079
Fire Protection	76.347	3.00	18.00%	13.743
HVAC	768.246	3.60	24.46%	187.886
Plumbina	362.650	3.25	23.60%	85.569
Vertical Transportation	47.717	4.00	33.75%	16.105
Shell	1,145,211	2.38	10.97%	125,615
Exterior Closure	429,454	3.00	18.00%	77,302
Roofing	143,151	2.00	6.75%	9,663
Superstructure	572,606	2.00	6.75%	38,651
Substructure	334,020	3.00	17.55%	58,620
Foundations	334,020	3.00	17.55%	58,620
Computing and Engineering Sciences Bldg				
Gross SF: 98.383 CRV \$/SF: 286	28.145.704	1.70	6.31%	1.777.286
Equipment and Euroishings	294 411	2 00	13 28%	39 083
Equipment and Furnishings	294 411	2.00	13 28%	39,083
Interiors	5 888 223	1.38	3 85%	226 549
Interior Construction	2 649 700	1 00	2 25%	59 618
	2,649,700	1.60	5 65%	149 708
Staircases	588 822	1.50	2.93%	17 223
Services	12.836.325	2.06	8.15%	1.046.632
Electrical	4,121,756	1.67	5.66%	233,174
Eire Protection	471 058	2.00	6.75%	31 796
HVAC	5,299,400	2.33	11.00%	582 934
Plumbing	2,649,700	2.00	6.75%	178 855
Vertical Transportation	294 411	2.00	6.75%	19 873
Shell	7.065.867	1.00	2.25%	158.982

	CRV	FCA Score	CI	Backlog
Exterior Closure	2,649,700	1.00	2.25%	59,618
Roofing	883,233	1.00	2.25%	19,873
Superstructure	3,532,933	1.00	2.25%	79,491
Substructure	2,060,878	2.50	14.85%	306,040
Foundations	2,060,878	2.50	14.85%	306,040
Electric Storage				
Gross SF: 1,600 CRV \$/SF: 83	133,167	2.00	6.75%	8,989
Interiors	25,040	2.00	6.75%	1,690
Interior Construction	6,545	2.00	6.75%	442
Interior Finishes	18,495	2.00	6.75%	1,248
Services	30,162	2.00	6.75%	2,036
Electrical	30,162	2.00	6.75%	2,036
Shell	58,047	2.00	6.75%	3,918
Exterior Closure	18,211	2.00	6.75%	1,229
Roofing	5,691	2.00	6.75%	384
Superstructure	34,145	2.00	6.75%	2,305
Substructure	19,918	2.00	6.75%	1,344
Foundations	19,918	2.00	6.75%	1,344
Fifth Street Hall				
Gross SF: 7,163 CRV \$/SF: 199	1,424,691	4.63	53.22%	758,245
Equipment and Furnishings	11,385	5.00	67.00%	7,628
Equipment and Furnishings	11,385	5.00	67.00%	7,628
Interiors	300,876	4.00	33.75%	101,546
Interior Construction	121,977	4.00	33.75%	41,167
Interior Finishes	146,372	4.00	33.75%	49,401
Staircases	32,527	4.00	33.75%	10,978
Services	624,522	5.00	67.00%	418,430
Electrical	172,394	5.00	67.00%	115,504
Fire Protection	3,253	5.00	67.00%	2,179
HVAC	309,008	5.00	67.00%	207,036
Plumbing	123,603	5.00	67.00%	82,814
Vertical Transportation	16,264	5.00	67.00%	10,897
Shell	374,063	4.43	45.32%	169,507
Exterior Closure	146,372	4.67	57.39%	84,010
Roofing	32,527	4.50	60.35%	19,630
Superstructure	195,163	4.00	33.75%	65,868
Substructure	113,845	4.50	53.70%	61,135
Foundations	113,845	4.50	53.70%	61,135
Greenhouse Boneyard				
Gross SF: 1,421 CRV \$/SF: 63	90,121	3.47	23.69%	21,347
Equipment and Furnishings	554	4.00	33.75%	187
Equipment and Furnishings	554	4.00	33.75%	187
Services	49,677	3.20	20.40%	10,134
Electrical	9,788	3.00	18.00%	1,762
HVAC	24,192	3.00	18.00%	4.355
Plumbing	15.697	3.50	25.60%	4.018
Shell	28,440	3.60	28.23%	8,028
Exterior Closure	16,621	3.67	32.70%	5,435
Roofing	2,955	4.00	33.75%	997
Superstructure	8,864	3.00	18.00%	1,596
Special Construction	3,693	5.00	67.00%	2,475
Special Construction	3,693	5.00	67.00%	2,475
Substructure	7,756	2.00	6.75%	524
Foundations	7,756	2.00	6.75%	524

				CRV	FCA Score	CI	Backlog
Greenhouse S	cience						
Gross SF:	1,754 0	CRV \$/SF:	96	168,455	2.83	15.85%	26,701
Interiors				14,817	2.00	6.75%	1,000
Interior Fini	ishes			14,817	2.00	6.75%	1,000
Services				80,694	3.64	24.99%	20,162
Electrical				24,163	3.00	18.00%	4,349
HVAC				41,031	3.67	25.79%	10,581
Plumbing				15,501	4.00	33.75%	5,231
Shell				52,428	2.00	6.75%	3,539
Exterior Clo	osure			20,515	2.00	6.75%	1,385
Roofing				4,559	2.00	6.75%	308
Superstruc	ture			27,354	2.00	6.75%	1,846
Special Const	truction			4,559	3.00	20.25%	923
Special Co	nstruction			4,559	3.00	20.25%	923
Substructure				15,956	2.00	6.75%	1,077
Foundation	IS			15,956	2.00	6.75%	1,077
Grounds Cove	red Storage						
Gross SF:	2,920	CRV \$/SF:	93	271,590	2.21	9.16%	24,875
Interiors				60.757	2.00	6.75%	4,101
Interior Cor	nstruction			27.003	2.00	6.75%	1.823
Interior Fini	ishes			33,754	2.00	6.75%	2.278
Services				55.045	3.00	18.00%	9,908
Electrical				55.045	3.00	18.00%	9,908
Shell				119,437	2.14	7.04%	8,413
Exterior Clo	osure			46.736	2.33	7.50%	3.505
Roofing				10,386	2.00	6.75%	701
Superstruc	ture			62.315	2.00	6.75%	4.206
Substructure				36,350	2.00	6.75%	2,454
Foundation	IS			36,350	2.00	6.75%	2,454
Hargreaves Ha	all						
Gross SF:	56.616 (	CRV \$/SF:	221	12,498,390	1.19	3.04%	380,254
Equipment an	nd Furnishings			133 387	1.00	2 25%	3 001
Equipment	and Furnishings			133,307	1.00	2.25%	3,001
Interiors	and Furnishings			2 667 746	1.00	2.25%	60 024
Interior Cor	nstruction			1 200 486	1.00	2.25%	27 011
Interior Fini	ishes			1 200 486	1.00	2.25%	27,011
Staircases				266 775	1.00	2 25%	6 002
Services				5 562 250	1.25	2.65%	147 360
Electrical				1.867.422	1.00	2.25%	42.017
Fire Protec	tion			213.420	2.00	6.75%	14,406
HVAC				2.147.535	1.40	2.84%	60.925
Plumbina				1,200,486	1.00	2.25%	27.011
Vertical Tra	ansportation			133.387	1.00	2.25%	3.001
Shell	P			3,201,295	1.13	3.34%	106,843
Exterior Clo	osure			1,200,486	1.33	5.15%	61.825
Roofing				400.162	1.00	2.25%	9.004
Superstruc	ture			1.600.647	1.00	2.25%	36.015
Substructure	-			933.711	2.00	6.75%	63.025
Foundation	1S			933.711	2.00	6.75%	63.025
Hazardous Wa	ste Transfer Faci	lity		;			,
Gross SE	1 196	RV \$/SE	146	17/ 6/8	2 25	8 77%	15 325
Interiore		γ/3F.	40	2/ / 21	2.00	6.750/	- 1 472
	netruction			30,031	2.00	6.75%	2,4/3
	ishos			Z1,Z/U	2.00	0.10%	1,430
Sonviece				10,301	2.00	0./0%	I,U37
Services				13,262	2.00	11.30%	8,481

	CRV	FCA Score	CI	Backlog
Electrical	25,051	2.00	6.75%	1,691
Fire Protection	473	3.00	18.00%	85
HVAC	30,959	3.00	18.00%	5,573
Plumbing	16,779	2.00	6.75%	1,133
Shell	48,211	2.00	6.75%	3,254
Exterior Closure	15,125	2.00	6.75%	1,021
Roofing	4,727	2.00	6.75%	319
Superstructure	28,360	2.00	6.75%	1,914
Substructure	16,543	2.00	6.75%	1,117
Foundations	16.543	2.00	6.75%	1.117
Huston Hall	- j			,
Gross SE: 27 125 CDV \$/SE: 225	6 16/ 100	2 76	16 /18%	1 015 770
Equipment and Eurnishings	64,613	2.50	10.13%	6 5/2
Equipment and Furnishings	64,613	2.50	10.13%	0,342
Equipment and Furnishings	1 202 244	2.50	10.13%	0,042
Interior Construction	1,292,200	2.03	10.04%	202,078
	561,520	3.00	10.00%	104,074
	581,520	2.07	15.25%	00,002
Staircases	129,227	2.00	6.75%	8,723
Services	2,804,217	2.89	18.78%	526,566
Electrical	904,586	2.33	14.18%	128,225
Fire Protection	116,304	2.33	8.00%	9,304
HVAC	1,227,653	3.29	23.54%	289,015
Plumbing	491,061	3.00	18.00%	88,391
Vertical Transportation	64,613	3.00	18.00%	11,630
Shell	1,550,719	2.75	14.81%	229,700
Exterior Closure	581,520	2.67	10.75%	62,513
Roofing	193,840	2.67	14.25%	27,622
Superstructure	775,360	3.00	18.00%	139,565
Substructure	452,293	2.50	11.25%	50,883
Foundations	452,293	2.50	11.25%	50,883
Indian Education Center				
Gross SF: 3,537 CRV \$/SF: 216	763,319	2.62	15.88%	121,246
Equipment and Furnishings	2,500	2.00	6.75%	169
Equipment and Furnishings	2.500	2.00	6.75%	169
Interiors	166,663	2.25	9.11%	15,187
Interior Construction	74.999	2.00	6.75%	5.062
Interior Finishes	74,999	2.33	9.88%	7.406
Staircases	16.666	2.50	16.31%	2.719
Services	335.827	2.93	18.18%	61.065
Electrical	116.664	3.00	17.57%	20,493
	13 333	4 00	60.88%	8 117
HVAC	142 497	3.00	18.00%	25,650
Plumbing	63 332	2.25	10.00%	6,806
Shell	199 996	2.20	6 75%	13 500
Exterior Closure	7/ 000	2.00	6 75%	5.062
Roofing	77,333 25 000	2.00	6.75%	1 627
Superstructure	20,000	2.00	6 75%	1,007 6 750
	59,390	2.00 4.50	53.70%	21.224
Foundations	50,332 50,332	4.50	53.70%	21 22/
	00,002	4.00	55.70/0	31,324
Gross SF: 34,322 CRV \$/SF: 232	7,955,670	3.58	30.06%	2,391,137
Equipment and Furnishings	84,906	3.00	14.85%	12,609
Equipment and Furnishings	84,906	3.00	14.85%	12,609
Interiors	1,698,115	3.38	29.72%	504,616
Interior Construction	764,152	3.33	20.63%	157,606

	CRV	FCA Score	CI	Backlog
Interior Finishes	764,152	3.67	41.41%	316,444
Staircases	169,812	3.00	18.00%	30,566
Services	3,540,570	3.75	30.60%	1,083,355
Electrical	1,188,681	4.00	33.75%	401,180
Fire Protection	135,849	4.50	62.84%	85,373
HVAC	1,366,983	3.40	24.55%	335,654
Plumbing	764,152	3.60	30.43%	232,493
Vertical Transportation	84,906	4.00	33.75%	28,656
Shell	2,037,738	3.75	33.55%	683,576
Exterior Closure	764,152	4.00	42.31%	323,279
Roofing	254,717	3.67	31.65%	80,618
Superstructure	1,018,869	3.50	27.45%	279,680
Substructure	594,340	3.00	18.00%	106,981
Foundations	594,340	3.00	18.00%	106,981
Jim Thorpe Fieldhouse				
Gross SF: 51,316 CRV \$/SF: 195	9,997,886	2.76	16.02%	1,602,107
Interiors	2,128,434	2.14	8.15%	173,439
Interior Construction	862,879	2.50	10.20%	88,014
Interior Finishes	1,035,454	2.00	6.75%	69,893
Staircases	230,101	2.00	6.75%	15,532
Services	4,302,888	3.17	20.83%	896,445
Electrical	1,610,707	2.67	15.27%	245,920
Fire Protection	23,010	2.00	6.75%	1,553
HVAC	1,852,313	3.60	24.46%	453,011
Plumbing	816,858	3.33	23.99%	195,960
Shell	2,761,211	2.75	15.99%	441,621
Exterior Closure	1,035,454	3.33	28.15%	291,480
Roofing	345,151	2.67	16.50%	56,950
Superstructure	1,380,606	2.00	6.75%	93,191
Substructure	805,353	2.50	11.25%	90,602
Foundations	805,353	2.50	11.25%	90,602
John F Kennedy Library				
Gross SF: 165,159 CRV \$/SF: 230	38,036,248	2.50	11.56%	4,396,105
Equipment and Furnishings	397,038	2.00	6.75%	26,800
Equipment and Furnishings	397,038	2.00	6.75%	26,800
Interiors	7,940,762	2.25	9.00%	714,669
Interior Construction	3,573,343	2.33	8.63%	308,201
Interior Finishes	3,573,343	2.33	9.88%	352,868
Staircases	794,076	2.00	6.75%	53,600
Services	17,390,268	2.83	15.57%	2,707,701
Electrical	5,558,533	3.00	18.00%	1,000,536
Fire Protection	714,669	2.00	6.75%	48,240
HVAC	7,146,685	3.00	13.21%	944,256
Plumbing	3,573,343	3.00	18.00%	643,202
Vertical Transportation	397,038	3.00	18.00%	71,467
Shell	9,528,914	2.25	7.97%	759,335
Exterior Closure	3,573,343	2.00	6.75%	241,201
Roofing	1,191,114	2.67	16.50%	196,534
Superstructure	4,764,457	2.00	6.75%	321,601
Substructure	2,779,267	2.00	6.75%	187,601
Foundations	2,779,267	2.00	6.75%	187,601
Kingston Hall				
Gross SF: 49,427 CRV \$/SF: 232	11,456,934	2.69	15.00%	1,718,357
Fauinment and Eurnishings				
	122,273	3.00	18.00%	22,009

	CRV	FCA Score	CI	Backlog
Interiors	2,445,450	2.38	10.18%	248,977
Interior Construction	1,100,453	2.67	11.25%	123,801
Interior Finishes	1,100,453	2.33	9.88%	108,670
Staircases	244,545	2.00	6.75%	16,507
Services	5,098,764	3.06	20.94%	1,067,714
Electrical	1,711,815	2.33	14.18%	242,650
Fire Protection	195,636	2.50	29.81%	58,324
HVAC	1,968,587	3.60	24.46%	481,448
Plumbing	1,100,453	3.40	25.18%	277,039
Vertical Transportation	122,273	2.00	6.75%	8,253
Shell	2,934,540	2.38	10.97%	321,882
Exterior Closure	1,100,453	3.00	18.00%	198,081
Roofing	366,818	2.00	6.75%	24,760
Superstructure	1,467,270	2.00	6.75%	99,041
Substructure	855,908	2.00	6.75%	57,774
Foundations	855,908	2.00	6.75%	57,774
Martin Hall				
Gross SF: 57,792 CRV \$/SF: 220	12,730,768	3.30	21.73%	2,766,900
Equipment and Furnishings	136,158	2.50	10.13%	13,786
Equipment and Furnishings	136,158	2.50	10.13%	13,786
Interiors	2,723,159	3.13	19.18%	522,336
Interior Construction	1,225,422	3.33	20.63%	252,743
Interior Finishes	1,225,422	3.00	18.00%	220,576
Staircases	272,316	3.00	18.00%	49,017
Services	5,650,555	3.41	23.15%	1,308,035
Electrical	2,042,369	3.75	26.83%	548,002
Fire Protection	245,084	4.00	57.86%	141,809
HVAC	2,328,301	3.17	18.55%	431,961
Plumbing	1,034,800	3.00	18.00%	186,264
Shell	3,267,791	3.50	23.12%	755,472
Exterior Closure	1,225,422	3.00	18.00%	220,576
Roofing	408,474	4.00	33.75%	137,860
Superstructure	1,633,895	3.50	24.30%	397,037
Substructure	953,106	3.00	17.55%	167,270
Foundations	953,106	3.00	17.55%	167,270
Monroe Hall				
Gross SF: 49,194 CRV \$/SF: 217	10,697,668	2.09	10.03%	1,072,838
Equipment and Furnishings	115,901	2.50	14.63%	16,951
Equipment and Furnishings	115,901	2.50	14.63%	16,951
Interiors	2,318,021	1.50	4.84%	112,134
Interior Construction	1,043,110	2.00	6.75%	70,410
Interior Finishes	1,043,110	1.33	3.50%	36,509
Staircases	231,802	1.00	2.25%	5,216
Services	4,670,813	2.20	11.44%	534,333
Electrical	1,622,615	2.33	9.48%	153,859
Fire Protection	185,442	2.00	6.75%	12,517
HVAC	1,866,007	2.40	16.11%	300,676
Plumbing	880,848	2.00	6.75%	59,457
Vertical Transportation	115,901	2.00	6.75%	7,823
Shell	2,781,625	2.13	9.47%	263,385
Exterior Closure	1,043,110	2.33	14.00%	146,035
Roofing	347,703	2.00	6.75%	23,470
Superstructure	1,390,813	2.00	6.75%	93,880
Substructure	811,307	3.00	18.00%	146,035
Foundations	811,307	3.00	18.00%	146,035

			CRV	FCA Score	CI	Backlog
Music Building						
Gross SF: 47,618	CRV \$/SF:	218	10,377,391	2.94	17.65%	1,831,974
Equipment and Furnishings	5		112,188	2.50	10.13%	11,359
Equipment and Furnishing	IS		112,188	2.50	10.13%	11,359
Interiors			2,243,760	2.38	9.62%	215,822
Interior Construction			1,009,692	2.33	9.63%	97,183
Interior Finishes			1,009,692	2.33	9.88%	99,707
Staircases			224,376	2.50	8.44%	18,932
Services			4,543,614	3.56	25.79%	1,171,635
Electrical			1,570,632	3.00	18.00%	282,714
Fire Protection			201,938	4.33	37.44%	75,615
HVAC			1,806,227	3.80	32.77%	591,932
Plumbing			852,629	3.25	23.60%	201,181
Vertical Transportation			112,188	3.00	18.00%	20,194
Shell			2,692,512	2.38	10.97%	295,335
Exterior Closure			1,009,692	3.00	18.00%	181,745
Roofing			336,564	2.00	6.75%	22,718
Superstructure			1,346,256	2.00	6.75%	90,872
Substructure			785,316	3.00	17.55%	137,823
Foundations			785,316	3.00	17.55%	137,823
One Room School House						
Gross SF: 1,136	CRV \$/SF:	232	263.732	1.79	7.45%	19.637
Equipment and Eurnishings			918	1.00	2 25%	21
Equipment and Eurnishing	, 19		918	1.00	2.25%	21
Interiors	,0		50.482	1.40	4.64%	2.341
Interior Construction			22.946	1.00	2 25%	516
Interior Einishes			27,536	1.67	6.63%	1 824
Services			117,486	2.15	6.67%	7.831
Electrical			42,833	1.67	5.66%	2.423
Fire Protection			612	5.00	67.00%	410
HVAC			52.318	2.00	6.75%	3.531
Plumbing			21.723	2.00	6.75%	1.466
Shell			73,429	1.63	11.68%	8.577
Exterior Closure			27,536	1.67	12.40%	3,414
Roofing			9.179	1.00	2.25%	207
Superstructure			36,714	2.50	13.50%	4.956
Substructure			21,417	1.50	4.05%	867
Foundations			21,417	1.50	4.05%	867
P.E. Activities Building			,			
Gross SE 93 859	CRV \$/SF	218	20 482 386	2 71	15 46%	3 166 816
Equipment and Eurnichings		210	66 206	2.00	19.00%	11 021
Equipment and Euroiching			66,286	3.00	18.00%	11,731
	12		4 410 060	2.00	10.00%	11,931
Interior Construction			4,417,007	2.30	11 50%	434,000
Interior Construction			1,900,001	2.07	0.88%	220,007
Stairageos			1,900,001	2.55	5.00 % 6 75%	20,820
Sanuicases			441,507 0 1/7 /72	2.00	22 0.75%	29,029
Flectrical			2,147,473	3.13	22.0270	675 102
Fire Protection			3,033,040 207 716	3.33 3.00	21.03 /0 18 በበ%	71 580
			2011,180 2077 160	0.00 0.82	20.00%	200,17 211 222
Plumbing			3,977,102 1 670 946	2.00	20.41/0 07 10%	011,000
Shell			5 202 Q02	2.30	10 07%	591 660
Exterior Closure			1 000 501	3.00	18.00%	357 0/5
			1,500,001 662,860	2.00	6 75%	557,545 AA 7A2
Superstructure			002,000 2 651 <i>11</i> 1	2.00	6.75%	44,74J 178 079
Superstructure			2,001,441	2.00	0.7570	110,912

	CRV	FCA Score	CI	Backlog
Substructure	1,546,674	2.00	6.75%	104,401
Foundations	1,546,674	2.00	6.75%	104,401
Patterson Hall				
Gross SF: 135,000 CRV \$/SF: 242	32,728,373	1.00	2.25%	736,388
Equipment and Furnishings	333,963	1.00	2.25%	7.514
Equipment and Eurnishings	333.963	1.00	2.25%	7.514
Interiors	6.679.260	1.00	2.25%	150,283
Interior Construction	3.005.667	1.00	2.25%	67.628
Interior Finishes	3,005,667	1.00	2.25%	67,628
Staircases	667,926	1.00	2.25%	15,028
Services	15,362,298	1.00	2.25%	345,652
Electrical	5,009,445	1.00	2.25%	112,713
Fire Protection	667,926	1.00	2.25%	15,028
HVAC	6,345,297	1.00	2.25%	142,769
Plumbing	3,005,667	1.00	2.25%	67,628
Vertical Transportation	333,963	1.00	2.25%	7,514
Shell	8,015,112	1.00	2.25%	180,340
Exterior Closure	3,005,667	1.00	2.25%	67,628
Roofing	1,001,889	1.00	2.25%	22,543
Superstructure	4,007,556	1.00	2.25%	90,170
Substructure	2,337,741	1.00	2.25%	52,599
Foundations	2,337,741	1.00	2.25%	52,599
Pavilion				
Gross SF: 119,658 CRV \$/SF: 244	29,162,590	2.79	15.49%	4,517,533
Equipment and Furnishings	219.740	3.00	18.00%	39.553
Equipment and Eurnishings	219,740	3.00	18.00%	39,553
Interiors	6.278.276	2.63	13.95%	875,819
Interior Construction	2.825.224	2.67	11.50%	324.901
Interior Finishes	2.825.224	3.00	18.00%	508.540
Staircases	627,828	2.00	6.75%	42,378
Services	12,933,248	3.13	20.32%	2,627,458
Electrical	4,394,793	2.33	14.18%	622,962
Fire Protection	502,262	2.50	16.59%	83,344
HVAC	5,650,448	3.33	20.19%	1,140,684
Plumbing	2,385,745	3.75	32.71%	780,468
Shell	7,533,931	2.50	10.97%	826,378
Exterior Closure	2,825,224	2.67	14.75%	416,721
Roofing	941,741	2.67	16.50%	155,387
Superstructure	3,766,965	2.00	6.75%	254,270
Substructure	2,197,396	2.00	6.75%	148,324
Foundations	2,197,396	2.00	6.75%	148,324
PE Classroom Building				
Gross SF: 31,848 CRV \$/SF: 226	7,193,123	2.12	8.81%	633,377
Equipment and Furnishings	78,786	2.00	6.98%	5,495
Equipment and Furnishings	78.786	2.00	6.98%	5.495
Interiors	1,575,712	2.38	10.07%	158,654
Interior Construction	709.070	3.00	14.13%	100.156
Interior Finishes	709.070	2.00	6.75%	47.862
Staircases	157,571	2.00	6.75%	10,636
Services	3,096,273	2.00	9.03%	279,551
Electrical	1,102,998	2.33	11.60%	127,987
Fire Protection	126,057	1.00	2.25%	2,836
HVAC	1,268,448	1.40	3.23%	40,949
Plumbing	598,770	3.00	18.00%	107,779
Shell	1,890,854	2.13	8.06%	152,450

			CRV	FCA Score	CI	Backlog
Exterior Closure			709,070	2.67	10.75%	76,225
Roofing			236,357	1.67	5.25%	12,409
Superstructure			945,427	2.00	6.75%	63,816
Substructure			551,499	2.00	6.75%	37,226
Foundations			551,499	2.00	6.75%	37,226
Plant Utilities						
Gross SF: 7,724	CRV \$/SF:	181	1,396,530	4.03	41.88%	584,871
Equipment and Furnishings	;		4,579	4.00	33.75%	1,545
Equipment and Furnishing	js		4,579	4.00	33.75%	1,545
Interiors			282,359	4.57	50.11%	141,477
Interior Construction			114,470	4.50	43.95%	50,306
Interior Finishes			137,364	4.67	57.76%	79,347
Staircases			30,525	4.50	38.74%	11,825
Services			636,451	4.33	46.60%	296,587
Electrical			228,939	3.75	28.19%	64,527
Fire Protection			30,525	5.00	67.00%	20,452
HVAC			260,991	5.00	67.00%	174,864
Plumbing			115,996	3.25	31.68%	36,745
Shell			366,303	2.88	29.81%	109,204
Exterior Closure			137,364	4.00	33.75%	46,360
Roofing			45,788	1.00	2.25%	1,030
Superstructure			183,151	4.00	33.75%	61,814
Substructure			106,838	4.00	33.75%	36,058
Foundations			106,838	4.00	33.75%	36,058
Practice Field Toilets						
Gross SF: 773	CRV \$/SF:	243	188,153	1.07	2.84%	5,344
Interiors			41,915	1.00	2.25%	943
Interior Construction			20,958	1.00	2.25%	472
Interior Finishes			20,958	1.00	2.25%	472
Services			74,050	1.18	3.75%	2,777
Electrical			24,683	2.00	6.75%	1,666
HVAC			32,834	1.00	2.25%	739
Plumbing			16,533	1.00	2.25%	372
Shell			55,887	1.00	2.25%	1,257
Exterior Closure			20,958	1.00	2.25%	472
Rooting			6,986	1.00	2.25%	157
Superstructure			27,943	1.00	2.25%	629
Substructure			16,300	1.00	2.25%	367
			16,300	1.00	2.25%	367
President's Garage						
Gross SF: 681	CRV \$/SF:	113	76,652	2.60	15.49%	11,871
Interiors			19,654	2.75	13.82%	2,717
Interior Construction			10,529	2.50	10.20%	1,074
Interior Finishes			9,125	3.00	18.00%	1,643
Services			14,881	3.00	18.00%	2,679
Electrical			14,881	3.00	18.00%	2,679
Snell			32,289	2.43	16.63%	5,370
Exterior Closure			12,635	3.00	18.00%	2,274
Rooting			2,808	1.00	2.25%	63
Superstructure			16,847	3.00	11.00%	3,032
Substructure			9,827	2.50	11.25%	1,106
Provident's House			9,827	2.30	11.23%	1,100
		100		2.42	14.040/	110.004
GIOSS SF: 4,545	CRV \$/SF:	183	832,013	2.43	14.34%	119,321
Interiors			173,336	2.00	6.75%	11,700

	CRV	FCA Score	CI	Backlog
Interior Construction	70,271	2.00	6.75%	4,743
Interior Finishes	84,326	2.00	6.75%	5,692
Staircases	18,739	2.00	6.75%	1,265
Services	377,592	2.57	15.52%	58,585
Electrical	131,173	3.00	21.23%	27,849
Fire Protection	1,874	4.00	33.75%	632
HVAC	178,021	2.14	11.78%	20,976
Plumbing	66,524	2.67	13.72%	9,128
Shell	215,499	2.29	15.36%	33,098
Exterior Closure	84,326	2.67	14.75%	12,438
Roofing	18,739	1.00	2.25%	422
Superstructure	112.434	3.00	18.00%	20.238
Substructure	65,587	3.50	24.30%	15,938
Foundations	65.587	3.50	24.30%	15.938
Radio-TV Building	,			,
Gross SF: 15,983 CRV \$/SF: 261	4,173,330	2.73	13.91%	580,337
Equipment and Furnishings	15,066	3.00	18.00%	2,712
Equipment and Furnishings	15,066	3.00	18.00%	2,712
Interiors	1,004,412	2.50	10.46%	105,087
Interior Construction	451,985	2.67	11.50%	51,978
Interior Finishes	451,985	2.33	9.88%	44.634
Staircases	100.441	2.50	8.44%	8.475
Services	1.597.015	3.00	17.45%	278.636
Electrical	703.088	2.67	13.74%	96.612
Fire Protection	80,353	3 50	59 47%	47 785
HVAC	381 676	3 25	19 24%	73 448
Plumbing	381 676	2.50	11 /0%	/3.8/3
Vertical Transportation	50 221	4.00	33 75%	16 9/9
Shall	1 205 204	2.20	10 07%	132 206
Shell	1,203,274	2.30	18.00%	81 357
	451,905	2.00	6 769/	10 170
Superstructure	602 647	2.00	0.7J% 6.7E%	10,170
Substructure	251 544	2.00	17 550/	40,079
Substructure	351,544	3.00	17.00%	01,090
Foundations	351,544	3.00	17.55%	01,090
	0.000.000	0.10		000 / 50
Gross SF: 14,589 CRV \$/SF: 152	2,223,493	2.43	13.07%	290,650
Equipment and Furnishings	7,784	1.00	2.25%	175
Equipment and Furnishings	7,784	1.00	2.25%	175
Interiors	467,011	2.33	10.81%	50,496
Interior Construction	233,506	2.00	6.75%	15,762
Interior Finishes	233,506	2.67	14.88%	34,734
Services	944,401	2.54	12.00%	113,302
Electrical	275,018	2.00	6.75%	18,564
Fire Protection	41,512	3.50	59.47%	24,687
HVAC	443,661	2.00	6.75%	29,947
Plumbing	184,210	3.33	21.77%	40,105
Shell	622,682	2.38	15.09%	93,986
Exterior Closure	233,506	2.33	14.00%	32,691
Roofing	77,835	2.00	6.75%	5,254
Superstructure	311,341	3.00	18.00%	56,041
Substructure	181,616	3.00	18.00%	32,691
Foundations	181,616	3.00	18.00%	32,691
Rozell Plant				
Gross SF: 56,561 CRV \$/SF: 186	10,505,866	2.33	10.94%	1,149,722
Equipment and Furnishings	33,529	2.00	6.75%	2,263

	CRV	FCA Score	CI	Backlog
Equipment and Furnishings	33,529	2.00	6.75%	2,263
Interiors	2,235,291	2.38	10.18%	227,581
Interior Construction	1,005,881	2.67	11.25%	113,162
Interior Finishes	1,005,881	2.33	9.88%	99,331
Staircases	223,529	2.00	6.75%	15,088
Services	4,548,817	2.60	14.75%	670,923
Electrical	1,564,703	2.33	14.18%	221,797
Fire Protection	178,823	2.00	6.75%	12,071
HVAC	1,799,409	3.00	18.00%	323,894
Plumbing	1,005,881	2.60	11.25%	113,162
Shell	2,682,349	2.00	6.75%	181,059
Exterior Closure	1,005,881	2.00	6.75%	67,897
Roofing	335,294	2.00	6.75%	22,632
Superstructure	1,341,174	2.00	6.75%	90,529
Special Construction	223,529	2.00	6.75%	15,088
Special Construction	223,529	2.00	6.75%	15,088
Substructure	782,352	2.00	6.75%	52,809
Foundations	782,352	2.00	6.75%	52,809
Science Building				
Gross SF: 148,149 CRV \$/SF: 293	43,446,916	3.27	20.61%	8,956,272
Equipment and Furnishings	443,336	3.00	18.00%	79,800
Equipment and Furnishings	443,336	3.00	18.00%	79,800
Interiors	8,866,718	2.88	18.61%	1,649,875
Interior Construction	3,990,023	3.00	18.00%	718,204
Interior Finishes	3,990,023	3.33	21.85%	871,820
Staircases	886,672	2.00	6.75%	59,850
Services	20,393,450	3.52	24.73%	5,044,054
Electrical	6,650,038	3.25	19.05%	1,266,832
Fire Protection	886,672	3.25	19.58%	173,566
HVAC	8,423,382	3.86	29.91%	2,519,367
Plumbing	3,990,023	3.40	23.43%	934,663
Vertical Transportation	443,336	4.00	33.75%	149,626
Shell	10,640,061	3.38	18.54%	1,973,066
Exterior Closure	3,990,023	3.67	29.20%	1,165,087
Roofing	1,330,008	4.00	33.75%	448,878
Superstructure	5,320,030	2.00	6.75%	359,102
Substructure	3,103,351	2.00	6.75%	209,476
Foundations	3,103,351	2.00	6.75%	209,476
Senior Hall				
Gross SF: 52,619 CRV \$/SF: 217	11,442,464	2.00	7.96%	910,717
Equipment and Furnishings	123,970	1.50	5.40%	6,694
Equipment and Furnishings	123,970	1.50	5.40%	6,694
Interiors	2,479,407	2.00	6.75%	167,360
Interior Construction	1,115,733	2.00	6.75%	75,312
Interior Finishes	1,115,733	2.00	6.75%	75,312
Staircases	247,941	2.00	6.75%	16,736
Services	4,996,006	1.93	6.37%	318,263
Electrical	1,735,585	1.67	5.66%	98,185
Fire Protection	198,353	2.00	6.75%	13,389
HVAC	1,995,923	2.00	6.75%	134,725
Plumbing	942,175	2.00	6.75%	63,597
Vertical Transportation	123,970	2.00	6.75%	8,368
Shell	2,975,289	2.13	10.13%	301,248
Exterior Closure	1,115,733	2.00	6.75%	75,312
Roofing	371,911	2.00	6.75%	25,104
Superstructure	1,487,644	2.50	13.50%	200,832

	CRV	FCA Score	CI	Backlog
Substructure	867,793	2.50	13.50%	117,152
Foundations	867,793	2.50	13.50%	117,152
Showalter Hall				
Gross SF: 100.091 CRV \$/SF: 194	19.443.277	3.14	20.92%	4.068.084
Equipment and Eurnishings	228,207	2.50	10.13%	23,106
Equipment and Euroishings	228 207	2.50	10 13%	23 106
Interiors	4.564.150	3.38	21.15%	965.318
Interior Construction	2.053.867	3.33	20.63%	423.610
Interior Finishes	2.053.867	3.33	21.85%	448.770
Staircases	456.415	3.50	20.36%	92.938
Services	7,576,488	3.59	28.33%	2,146,177
Electrical	3,423,112	3.00	22.41%	767,119
Fire Protection	456,415	3.00	12.15%	55,454
HVAC	1,734,377	4.00	33.75%	585,352
Plumbing	1,734,377	4.00	33.75%	585,352
Vertical Transportation	228,207	5.00	67.00%	152,899
Shell	5,476,979	2.63	16.39%	897,540
Exterior Closure	2,053,867	2.00	13.70%	281,380
Roofing	684,622	3.00	18.00%	123,232
Superstructure	2,738,490	3.00	18.00%	492,928
Substructure	1,597,452	1.00	2.25%	35,943
Foundations	1,597,452	1.00	2.25%	35,943
Solid Waste Transfer Station				
Gross SF: 1,085 CRV \$/SF: 125	135,455	2.00	6.75%	9,143
Interiors	16.980	2.00	6.75%	1.146
Interior Construction	4,438	2.00	6.75%	300
Interior Finishes	12.542	2.00	6.75%	847
Services	59,431	2.00	6.75%	4,012
Electrical	20,453	2.00	6.75%	1.381
HVAC	25,277	2.00	6.75%	1,706
Plumbing	13,700	2.00	6.75%	925
Shell	45,538	2.00	6.75%	3,074
Exterior Closure	17,366	2.00	6.75%	1,172
Roofing	5,017	2.00	6.75%	339
Superstructure	23,155	2.00	6.75%	1,563
Substructure	13,507	2.00	6.75%	912
Foundations	13,507	2.00	6.75%	912
Substation				
Gross SF: 2,916 CRV \$/SF: 131	380,869	1.76	7.26%	27,640
Interiors	50 706	1 67	5 57%	2 826
Interior Construction	13,253	1.00	2.25%	298
Interior Finishes	37.453	2.00	6.75%	2.528
Services	151.541	2.75	13.72%	20,795
Electrical	80.668	2.00	6.75%	5.445
Fire Protection	1,152	2.00	6.75%	78
HVAC	69,720	3.50	21.90%	15,272
Shell	138,288	1.00	2.25%	3,111
Exterior Closure	51.858	1.00	2.25%	1,167
Roofing	17,286	1.00	2.25%	389
Superstructure	69,144	1.00	2.25%	1,556
Substructure	40,334	1.00	2.25%	908
Foundations	40,334	1.00	2.25%	908
Surbeck Services				
Gross SF: 41,792 CRV \$/SF: 194	8.107.389	2.60	12.56%	1,018.019
Equipment and Furnishings	26,013	3.00	18.00%	4,682

	CRV	FCA Score	CI	Backlog		
Equipment and Furnishings	26,013	3.00	18.00%	4,682		
Interiors	1,560,781	2.67	12.88%	200,951		
Interior Construction	780,390	2.67	11.50%	89,745		
Interior Finishes	780,390	2.67	14.25%	111,206		
Services	3,659,164	2.69	12.59%	460,821		
Electrical	1,213,941	2.33	14.18%	172,076		
Fire Protection	138,736	3.00	10.13%	14,047		
HVAC	1,647,491	2.57	9.47%	156,078		
Plumbing	658,996	3.00	18.00%	118,619		
Shell	2,081,041	2.13	12.11%	252,066		
Exterior Closure	780,390	3.33	22.55%	175,978		
Roofing	260,130	1.00	2.25%	5,853		
Superstructure	1,040,520	2.00	6.75%	70,235		
Special Construction	173,420	4.00	33.75%	58,529		
Special Construction	173,420	4.00	33.75%	58,529		
Substructure	606,970	2.00	6.75%	40,970		
Foundations	606,970	2.00	6.75%	40,970		
Surplus Sales Building						
Gross SF: 10,880 CRV \$/SF: 169	1,842,454	3.07	22.79%	419,970		
Equipment and Furnishings	6,450	3.00	18.00%	1,161		
Equipment and Furnishings	6,450	3.00	18.00%	1,161		
Interiors	354,732	3.00	18.82%	66,754		
Interior Construction	161,242	2.50	14.55%	23,461		
Interior Finishes	193,490	3.33	22.38%	43,293		
Services	836,306	3.21	25.38%	212,258		
Electrical	300,984	3.33	27.19%	81,846		
Fire Protection	4,300	2.00	6.75%	290		
HVAC	367,631	3.50	27.39%	100,712		
Plumbing	163,391	3.00	18.00%	29,410		
Shell	494,474	2.86	22.79%	112,708		
Exterior Closure	193,490	4.00	33.75%	65,303		
Roofing	42,998	1.00	2.25%	967		
Superstructure	257,987	3.00	18.00%	46,438		
Substructure	150,492	3.00	18.00%	27,089		
Foundations	150,492	3.00	18.00%	27,089		
Sutton Hall						
Gross SF: 31,984 CRV \$/SF: 211	6,752,718	2.54	19.00%	1,282,889		
Equipment and Furnishings	21,877	2.00	6.75%	1,477		
Equipment and Furnishings	21,877	2.00	6.75%	1,477		
Interiors	1,458,470	2.50	20.55%	299,679		
Interior Construction	656,312	2.33	8.63%	56,607		
Interior Finishes	656,312	3.00	35.54%	233,228		
Staircases	145,847	2.00	6.75%	9,845		
Services	3,011,741	2.50	12.02%	362,065		
Electrical	1,020,929	1.67	5.66%	57,755		
Fire Protection	116,678	2.00	6.75%	7,876		
HVAC	1,246,992	3.33	19.72%	245,898		
Plumbing	554,219	2.00	6.75%	37,410		
Vertical Transportation	72,924	3.00	18.00%	13,126		
Shell	1,750,164	2.50	22.89%	400,678		
Exterior Closure	656,312	2.33	14.00%	91,884		
Roofing	218,771	1.67	6.15%	13,454		
Superstructure	875,082	4.00	33.75%	295,340		
Substructure	510,465	3.50	42.90%	218,989		
Foundations	510,465	3.50	42.90%	218,989		
			CRV	FCA Score	CI	Backlog
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Turnbull Research Lab						
Gross SF: 4,435	CRV \$/SF:	316	1,400,345	2.71	15.25%	213,490
Equipment and Furnishing	ļs		5,043	3.00	18.00%	908
Equipment and Furnishin	ngs		5,043	3.00	18.00%	908
Interiors			302,596	2.00	6.75%	20,425
Interior Construction			151,298	2.00	6.75%	10,213
Interior Finishes			151,298	2.00	6.75%	10,213
Services			554,759	3.46	26.20%	145,338
Electrical			235,352	3.67	29.90%	70,370
HVAC			176,514	3.33	21.75%	38,392
Plumbing			142,892	3.50	25.60%	36,576
Shell			386,650	1.71	6.36%	24,586
Exterior Closure			151,298	2.00	6.75%	10,213
Roofing			33,622	1.00	2.25%	756
Superstructure			201,730	2.00	6.75%	13,617
Special Construction			33,622	4.00	42.50%	14,289
Special Construction			33,622	4.00	42.50%	14,289
Substructure			117,676	2.00	6.75%	7,943
Foundations			117,676	2.00	6.75%	7,943
University Theater						
Gross SF: 36,130	CRV \$/SF:	305	11,023,454	2.85	15.28%	1,684,398
Equipment and Furnishing	IS		131,545	3.00	18.00%	23,678
Equipment and Furnishin	nas		131,545	3.00	18.00%	23.678
Interiors	<u> </u>		2,630,896	2.38	9.06%	238,261
Interior Construction			1,183,903	2.67	11.50%	136,149
Interior Finishes			1,183,903	2.00	6.75%	79,913
Staircases			263.090	2.50	8.44%	22,198
Services			4,183,125	3.36	21.86%	914,565
Electrical			1,841,627	3.00	18.00%	331,493
Fire Protection			210,472	3.50	19.97%	42,029
HVAC			999,740	3.75	31.68%	316,694
Plumbing			999,741	3.00	18.00%	179,953
Vertical Transportation			131,545	4.00	33.75%	44,396
Shell			3,157,075	2.38	10.97%	346,292
Exterior Closure			1,183,903	3.00	18.00%	213,103
Roofing			394,634	2.00	6.75%	26,638
Superstructure			1,578,538	2.00	6.75%	106,551
Substructure			920,814	3.00	17.55%	161,603
Foundations			920,814	3.00	17.55%	161,603
Visitor Center						
Gross SF: 2,844	CRV \$/SF:	179	508,587	1.09	2.41%	12,278
Equipment and Eurnishing	15		5 620	1 50	5 40%	303
Equipment and Eurnishi	nas		5 620	1.50	5 40%	303
Interiors	.90		112.395	1.00	2.25%	2.529
Interior Construction			50,578	1 00	2 25%	1 138
Interior Finishes			50,578	1.00	2.25%	1 138
Staircases			11 239	1.00	2.25%	253
Services			218.608	1.00	2,25%	4,919
Electrical			78.676	1.00	2,25%	1.770
Fire Protection			1,124	1.00	2,25%	25
HVAC			96 098	1.00	2,25%	2 162
Plumbina			42,710	1.00	2,25%	.961
Shell			132.626	1.29	2.75%	3.642
Exterior Closure			50.578	1.00	2.25%	1.138
Roofing			14,611	2.00	6.75%	986
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	CRV	FCA Score	CI	Backlog
Superstructure	67,437	1.00	2.25%	1,517
Substructure	39,338	1.00	2.25%	885
Foundations	39,338	1.00	2.25%	885
Williamson Hall				
Gross SF: 31,599 CRV \$/SF: 218	6,901,259	3.46	22.45%	1,549,396
Equipment and Eurnishings	74.447	3.00	18.00%	13.401
Equipment and Furnishings	74.447	3.00	18.00%	13,401
Interiors	1.488.945	2.88	15.47%	230.321
Interior Construction	670.025	3.00	17.75%	118.929
Interior Finishes	670.025	2.67	12.63%	84.591
Staircases	148.894	3.00	18.00%	26.801
Services	3,030,003	3.76	25.40%	769,617
Electrical	1,042,261	3.33	23.96%	249,752
Fire Protection	148.894	5.00	67.00%	99.759
HVAC	1.198.601	3.60	24.46%	293.136
Plumbing	565.799	3.00	18.00%	101.844
Vertical Transportation	74.447	4.00	33.75%	25.126
Shell	1.786.734	3.75	26.72%	477.430
Exterior Closure	670.025	3.00	18.00%	120.605
Roofing	223.342	4.67	62.57%	139.737
Superstructure	893.367	3.50	24.30%	217.088
Substructure	521,131	2.50	11.25%	58,627
Foundations	521.131	2.50	11.25%	58.627
Woodward Field Concessions	- , -			;-
Gross SE: 2 342 CRV \$/SE: 184	431 250	2 71	17 36%	74 855
	97 720	2.0	15.05%	12 000
Interior Construction	20.991	2.80	10.90%	7 170
Interior Construction	39,001	3.00	10.00%	7,179
Services	47,000	2.07	14.25%	0,020
Electrical	74.445	2.91	19.30%	30,207
	74,440	1.90	29.90%	22,209
Rumbing	03,012	1.60	3.02% 22.75%	3,200 10,740
Shall	109 477	4.00	14 04%	12,742
Siteli Exterior Clocuro	34 032	2.33	10.90%	10,401
Exterior Closure	34,032	3.50	JZ.ZI %	10,903
Ruberstructure	10,035	1.00	2.23%	239 7 170
Substructure	03,810	2.50	11.25%	/,1/9
Substructure	37,223	2.50	11.20%	4,100
Woodward Field Pross Poy	57,225	2.50	11.23%	4,100
	1 710 000	1.05	( 700)	44 ( 700
Gross SF: 8,772 CRV \$/SF: 196	1,718,822	1.85	6.79%	116,/82
Equipment and Furnishings	5,975	1.00	2.25%	134
Equipment and Furnishings	5,975	1.00	2.25%	134
Interiors	398,337	1.63	4.50%	17,925
Interior Construction	179,251	1.33	3.00%	5,378
Interior Finishes	179,251	1.67	5.50%	9,859
Staircases	39,834	2.00	6.75%	2,689
Services	697,089	2.21	9.75%	67,981
Electrical	173,276	1.50	4.99%	8,649
Fire Protection	31,867	2.50	8.16%	2,599
HVAC	340,578	2.50	13.66%	46,516
Plumbing	151,368	2.00	6.75%	10,217
Shell	478,004	1.63	5.25%	25,095
Exterior Closure	179,251	1.33	5.15%	9,231
Roofing	59,750	2.00	6.75%	4,033
Superstructure	239,002	1.50	4.95%	11,831

				CRV	FCA Score	CI	Backlog
Substructure	ç			139,418	1.50	4.05%	5,646
Foundatio	ons			139,418	1.50	4.05%	5,646
Woodward Fie	eld Toilets						
Gross SF:	3,540	CRV \$/SF:	195	690,347	1.92	6.03%	41,661
Interiors				139,251	1.80	6.07%	8,450
Interior Co	onstruction			63,296	2.00	6.75%	4,272
Interior Fir	nishes			75,955	1.67	5.50%	4,178
Services				289,473	1.91	5.37%	15,552
Electrical				89,458	2.00	6.75%	6,038
HVAC				135,875	1.80	3.82%	5,184
Plumbing				64,140	2.00	6.75%	4,329
Shell				202,547	2.00	6.75%	13,672
Exterior C	losure			75,955	2.00	6.75%	5,127
Roofing				25,318	2.00	6.75%	1,709
Superstru	cture			101,273	2.00	6.75%	6,836
Substructure	ç			59,076	2.00	6.75%	3,988
Foundatio	ons			59,076	2.00	6.75%	3,988

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pro Cost	oject Project	Cost Running Total	Fiscal Year Complete
2		LArt Building	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 156,1	32.82 \$	156,132.82	2017
<u>7</u> 0		L Cadet Hall Chenev Hall	Services Services	Fire Protection Fire Protection	Fire Protection Sprinkler Systems Fire Protection Sprinkler Systems	\$ 35,2 \$ 179.9	80.84 5 49.91 5	191,413.66 321 363 58	2017
	. 4	L Fifth Street Hall	Services	Fire Protection	Fire Protection Specialties	\$ 3,2	52.72 \$	324,616.29	2017
5	1	Indian Education Center	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 11,6	66.44 \$	336,282.74	2017
5	1	l Isle Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 118,8	68.07 \$	455,150.80	2017
2	1	l Martin Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 190,6	21.14 \$	645,771.94	2017
5	1	l Music Building	Services	Fire Protection	Fire Protection Specialties	\$ 22,4	37.60 \$	668,209.54	2017
5		l One Room School House	Services	Fire Protection	Fire Protection Specialties	\$ \$	11.91 \$ 	668,821.45	2017
<u>.</u> .		L Plant Utilities	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 21,3 5	67.67 Ş	690,189.12	2017
<u>, r</u>		L Plant Utilities	Services Services	Fire Protection Eire Drotection	Special Fire Protection Systems Eire Drotection Specialties	ب م م	ج 22.52 ج ج ج	693,241.65 696 297 17	2017
		L Plant Utilities	Services	Fire Protection	stand-Pipe and Hose Systems	0,5 0,5	52.52 \$	699.346.70	2017
0	- <del></del>	L Radio-TV Building	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 70,3	08.82 \$	769,655.52	2017
5	1	L Red Barn	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 36,3	23.11 \$	805,978.63	2017
2	1	l Tawanka Commons	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 270,8	13.54 \$	1,076,792.16	2017
5	1	L Tawanka Commons	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 38,6	87.65 \$	1,115,479.81	2017
5	1	L Williamson Hall	Services	Fire Protection	Fire Protection Specialties	\$ 14,8	89.45 \$	1,130,369.26	2017
5	1	l Williamson Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 104,2	26.14 \$	1,234,595.41	2017
5	1	l Williamson Hall	Services	Fire Protection	Special Fire Protection Systems	\$ 14,8	89.45 \$	1,249,484.86	2017
5	1	l Williamson Hall	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 14,8	89.45 \$	1,264,374.30	2017
35	17	Pifth Street Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 16,2	63.59 \$	1,280,637.90	2017
5		2 Showalter Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 228,2	07.47 \$	1,508,845.37	2017
5	(1)	8 Fifth Street Hall	Services	Electrical	Electrical Service and Distribution	\$ 86,1	97.03 \$	1,595,042.40	2017
5	(7)	8 Fifth Street Hall	Services	Electrical	Lighting and Branch Wiring	\$ 86,1	97.03 \$	1,681,239.43	2017
5	(1)	8 Martin Hall	Services	Electrical	Special Electrical Systems	\$ 136,1	57.95 \$	1,817,397.38	2017
5	(7)	3 Turnbull Research Lab	Services	Electrical	Communication and Security Systems	\$ 57,1	56.95 \$	1,874,554.33	2017
5	(1)	Woodward Field Concessions	Services	Electrical	Communication and Security Systems	\$ 18,0	79.54 \$	1,892,633.87	2017
5	4	l Cadet Hall	Services	HVAC	Controls and Instrumentation	\$ 15,1	20.36 Ş	1,907,754.23	2017
<u> </u>	4	t Fifth Street Hall	Services	HVAC	Terminal and Package Units	\$ 17,8	89.95 \$	1,925,644.18	2017
<u>, ,</u>	7 7	H Fifth Street Hall	Services	HVAC	Special HVAC Systems and Equipment	د05 م	00.82 \$	1,956,545.00	7102
<u>, ,</u>	V <b>V</b>	Fifth Street Hall I Eith Street Hall	Services	HVAC	Energy Supply Distribution Sustants	۲0/2 د 10/2	وع.59 مع مع م	1,9/2,808.59	7102
		I Fifth Street Hall	Services		Cooling Generating Systems	0'6' ¢	91.00 y	2,005,00018 2,068,763,78	2102
	4	I Fifth Street Hall	Services	HVAC	Controls and Instrumentation	5,01 2,01 2,01 2,01	58.15 \$	2.078.521.93	2017
5	4	Fifth Street Hall	Services	HVAC	Heat Generating Systems	\$ 138,2	40.53 \$	2,216,762.46	2017
5	4	I Plant Utilities	Services	HVAC	Heat Generating Systems	\$ 129,7	32.30 \$	2,346,494.76	2017
5	4	I Plant Utilities	Services	HVAC	Terminal and Package Units	\$ 16,7	88.89 \$	2,363,283.65	2017
5	4	I Plant Utilities	Services	HVAC	Energy Supply	\$ 15,2	62.62 \$	2,378,546.27	2017
2	4	I Plant Utilities	Services	HVAC	Distribution Systems	\$ 74,7	86.85 \$	2,453,333.13	2017
2	Ą	l Plant Utilities	Services	HVAC	Cooling Generating Systems	\$ 15,2	62.62 \$	2,468,595.75	2017
5	4	l Plant Utilities	Services	HVAC	Controls and Instrumentation	\$ 9,1	57.57 \$	2,477,753.32	2017
5	4	l Science Building	Services	HVAC	Controls and Instrumentation	\$ 266,0	01.53 \$	2,743,754.85	2018
<u> </u>	4	I Sutton Hall	Services	HVAC	Controls and Instrumentation	\$ 43,7	54.11 \$	2,787,508.96	2018
<u>, 1</u>	., U	5 Art Building	Services	Plumbing	Plumbing Fixtures	5 301,1 2 01	13.30 5 31 90 6	3,088,622.26	2018 2010
n u			Services	Plumbing Direction	Rain Water Drainage	۲′0 ×	51.00	3,090,724.00 2 1 10 665 76	01UC
n u		o Fitth Street Hall t leith Street Hall	Services Canviras	Plumbing Dlumhing	Plumbing rixtures Domeetic Mater Distribution	درد4 کر 2200 ک	11.70 ÷	3,140,000,041,5 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0102
ז	,		261 AICE2	PI UII IDIII B	עטווופאור אאמרכו שואה אמיניטיו	r, rt r	+ T.V.L	01.04.110.401.C	0107

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
ľ						11 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C	, 2,2,2,2,27 F.C	0100
0			Services	Plumbing	Sanitary waste	ج 22/048.11	ac.czz,ziz,č ¢	8102
ν		b Fitth Street Hall	Shell	Kooting	Koot Coverings	c/.120,021 ک	\$ 3,238,247.31	2018
<u>ں</u>	-	6 Tawanka Commons	Shell	Rooting	Projections	\$ 77,375.30	\$ 3,315,622.61	2018
<u>ю</u>		6 Williamson Hall	Shell	Roofing	Roof Opening	\$ 74,447.24	\$ 3,390,069.85	2018
<u>ں</u>	-	6 Williamson Hall	Shell	Rooting	Roof Coverings	5 119,115.59	5 3,509,185.44	2018
<u>ں</u>		7 Childcare Facility	Shell	Exterior Closure	Exterior Doors	\$ 17,623.94	\$ 3,526,809.39	2018
<u>ں</u>		7 Fifth Street Hall	Shell	Exterior Closure	Exterior Doors	\$ 9,758.15	\$ 3,536,567.54	2018
<u>ں</u>		7 Fifth Street Hall	Shell	Exterior Closure	Exterior Walls	\$ 94,328.83	\$ 3,630,896.37	2018
<u>м</u>		7 Isle Hall	Shell	Exterior Closure	Exterior Windows	\$ 220,754.98	\$ 3,851,651.35	2018
<u>ں</u>		9 Plant Utilities	Interiors	Staircases	Stair Finishes	\$ 4,578.79	\$ 3,856,230.14	2018
_ ۲	1(	0 Plant Utilities	Interiors	Interior Construction	Interior Doors	\$ 35,104.03	\$ 3,891,334.17	2018
5	1	1 Isle Hall	Interiors	Interior Finishes	Floor Finishes	\$ 365,094.78	\$ 4,256,428.95	2018
5	1.	1 Plant Utilities	Interiors	Interior Finishes	Ceiling Finishes	\$ 33,577.77	\$ 4,290,006.73	2018
5	1.	1 Plant Utilities	Interiors	Interior Finishes	Floor Finishes	\$ 65,629.28	\$ 4,355,636.01	2018
5	1	1 Sutton Hall	Interiors	Interior Finishes	Floor Finishes	\$ 313,571.14	\$ 4,669,207.15	2018
5	11	2 Fifth Street Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 11,384.51	\$ 4,680,591.67	2018
<u>ں</u>	1.	2 Greenhouse Boneyard	Special Construction	Special Construction	Integrated Constr. & Special Constr. Systems	\$ 1,846.73	\$ 4,682,438.40	2018
<u>ں</u>	1,	2 Greenhouse Boneyard	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 1,846.73	\$ 4,684,285.13	2018
0	1,	2 Turnbull Research Lab	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 16,810.87	\$ 4,701,096.00	2018
5	1:	3 Fifth Street Hall	Substructure	Foundations	Standard Foundations	\$ 68,307.08	\$ 4,769,403.08	2018
5	1:	3 Indian Education Center	Substructure	Foundations	Standard Foundations	\$ 34,999.32	\$ 4,804,402.40	2018
5	1:	3 Sutton Hall	Substructure	Foundations	Standard Foundations	\$ 306,278.78	\$ 5,110,681.18	2019
4		1 Cadet Hall	Services	Fire Protection	Fire Protection Specialties	\$ 5,040.12	\$ 5,115,721.30	2019
4		1 sie Hall	Services	Fire Protection	Fire Protection Specialties	\$ 16,981.15	\$ 5,132,702.45	2019
<sup>4</sup>		1 Kingston Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 171,181.52	\$ 5,303,883.97	2019
4		1 Martin Hall	Services	Fire Protection	Fire Protection Specialties	\$ 27,231.59	\$	2019
4		1 Music Building	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 22,437.60	\$ 5,353,553.16	2019
4		1 Music Building	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 157,063.21	\$ 5,510,616.37	2019
4		1 Pence Union Building	Services	Fire Protection	Fire Protection Specialties	\$ 80,920.15	\$ 5,591,536.52	2019
4		1 Pence Union Building	Services	Fire Protection	Special Fire Protection Systems	\$ 80,920.15	\$ 5,672,456.67	2019
4		1 President's House	Services	Fire Protection	Fire Protection Specialties	\$ 1,873.90	\$ 5,674,330.57	2019
4		1 Science Building	Services	Fire Protection	Fire Protection Specialties	\$ 88,667.18	\$ 5,762,997.75	2019
4		1 Showalter Hall	Services	Fire Protection	Special Fire Protection Systems	\$ 45,641.50	\$ 5,808,639.25	2019
4		1 Showalter Hall	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 45,641.50	\$ 5,854,280.75	2019
4		1 Surbeck Services	Services	Fire Protection	Fire Protection Specialties	\$ 17,342.01	\$ 5,871,622.76	2019
4		1 University Theater	Services	Fire Protection	Fire Protection Specialties	5 26,308.96	\$ 5,897,931.72	2019
4		2 Communications Center	Services	Vertical Transportation	Elevators and Lifts	\$ 47,717.13	\$ 5,945,648.84	2019
4		2 Isle Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 84,905.76	\$ 6,030,554.60	2019
4		2 Radio-TV Building	Services	Vertical Transportation	Elevators and Lifts	\$ 50,220.58	\$ 6,080,775.18	2019
4		2 Science Building	Services	Vertical Transportation	Elevators and Lifts	\$ 443,335.87	\$ 6,524,111.05	2019
4 •		2 University Theater	Services	Vertical Transportation	Elevators and Lifts	5 131,544.80	\$ 6,655,655.85 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2019
4 -	. (	Z Williamson Hall	Services	Vertical Iransportation	Elevators and Litts	\$ /4,44/.24	5 6,/30,103.09	6102
4		3 Art Building	Services	Electrical	Electrical Service and Distribution	5 591,074.23	\$ 7,321,177.32 \$ 7,321,177.32	2019
4			Services	Electrical	Electrical Service and Distribution	۵۲.202,251 ¢	\$ 1,454,740.5U	6102
4		3 Cadet Hall	Services	Electrical	Lighting and Branch Wiring	5 133,563.18 5 245 563 55	5 7,588,303.68 5 7.568,303.68	2020
4 •	. (	3 Cheney Hall	Services	Electrical	Communication and Security Systems	to 292,415 کے 502,612 کے 502,612 کے	\$ /,9U3,896.33 \$ 0.15 707 10	2020
4 •	. (	S Communications Center	Services	Electrical	Electrical Service and Distribution	۲/.006,262 ک م <del>ح</del> مح مح مح	\$ 8,156,797.10 \$ 9.105.120.66	0202
4 •		3 Indian Education Center	Services	Electrical	Communication and Security Systems	\$ 28,332.79 \$	\$ 8,185,129.88 5 6.55 130 11	2020
4 <		d Isle Hall	Services	Electrical	Lighting and Branch Wiring Fiortricol Comico and Distribution	ج 450,000 53 خ محم 200 53	5 0,055,130.41	0202
7 4		ס וברה בובר	Services	Electrical Electrical	Electrical Service and Distribution Communication and Cocurity Systems		5 0.027,000,6 5	0202
t			JEI VICES	בוברנו ונמו	communication and security systems	00.210,002 ¢	+C.UL0,C1C,C ¢	2020

Score	Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
4	£	8 Martin Hall	Services	Electrical	Electrical Service and Distribution	\$ 721,637.1	3 \$ 10,095,447.67	2021
4	ŝ	8 P.E. Activities Building	Services	Electrical	Communication and Security Systems	\$ 751,241.8	0 \$ 10,846,689.46	2021
4	ςΩ.	8 PE Classroom Building	Services	Electrical	Communication and Security Systems	\$ 267,870.9	9 \$ 11,114,560.45	2021
4	ε	8 Pence Union Building	Services	Electrical	Communication and Security Systems	\$ 1,375,642.5	2 \$ 12,490,202.97	2021
4	ŝ	8 Plant Utilities	Services	Electrical	Special Electrical Systems	\$ 15,262.6	2 \$ 12,505,465.60	2022
4	(11)	I Plant Utilities	Services	Electrical	Lighting and Branch Wiring	\$ 80,891.9	1 \$ 12,586,357.50	2022
4 -	(T) (	8 Plant Utilities	Services	Electrical	Communication and Security Systems	5 51,892.9	2 \$ 12,638,250.42	2022
4 4	n (	s President's House	Services	Electrical	Lighting and Branch Wiring	49,658.4	4 \$ 12,687,908.87	2202
4 4	i M	s Showalter Hall	Services	erectrical Electrical	Special creduction Systems Communication and Security Systems	\$ 775,905.4	6 \$ 13,907,150.20	2022
4	m	l Showalter Hall	Services	Electrical	Lighting and Branch Wiring	\$ 1,209,499.6	1 \$ 15,116,649.81	2023
4	æ	Surplus Sales Building	Services	Electrical	Lighting and Branch Wiring	\$ 113,944.0	6 \$ 15,230,593.87	2023
4	3	8 Surplus Sales Building	Services	Electrical	Electrical Service and Distribution	\$ 113,944.0	6 \$ 15,344,537.93	2023
4	c)	8 Williamson Hall	Services	Electrical	Electrical Service and Distribution	\$ 394,570.3	8 \$ 15,739,108.32	2023
4	4	I Art Building	Services	HVAC	Controls and Instrumentation	\$ 66,914.0	7 \$ 15,806,022.38	2023
4 -	4	I Art Building	Services	HVAC	Special HVAC Systems and Equipment	\$ 211,894.5	3 \$ 16,017,916.91	2023
4 4	4 4	H Art Building	Services	HVAC	lerminal and Package Units Distribution Sustance	ک).2/b/2/b/5./ خ 546 A6A 9	8 \$ 16,140,592.70 5 5 16,627,057 55	2023
4 4	r V	t Cadet Hall	Services		Distribution Systems	5 173 487 9		2023
4	4	t Cadet Hall	Services	HVAC		\$ 25.200.6	0 \$ 16.835.741.08	2023
4	4	Loadet Hall	Services	HVAC	Terminal and Package Units	\$ 27,720.6	6 \$ 16,863,461.74	2023
4	4	1 Central Services Building	Services	HVAC	Controls and Instrumentation	\$ 13,968.6	2 \$ 16,877,430.36	2023
4	4	1 Chemical Storage	Services	HVAC	Controls and Instrumentation	\$ 921.9	2 \$ 16,878,352.28	2023
4	4	t Cheney Hall	Services	HVAC	Terminal and Package Units	\$ 102,103.5	0 \$ 16,980,455.78	2023
4 37	4	t Cheney Hall	Services	HVAC	Controls and Instrumentation	\$ 55,692.8	2 \$ 17,036,148.60	2023
4	4	t Cheney Hall	Services	HVAC	Special HVAC Systems and Equipment	\$ 176,360.5	9 \$ 17,212,509.19	2023
4	4	I Communications Center	Services	HVAC	Controls and Instrumentation	\$ 28,630.2	8 \$ 17,241,139.46	2023
4	4	I Communications Center	Services	HVAC	Terminal and Package Units	\$ 52,488.8	4 \$ 17,293,628.30	2023
4	4	1 Communications Center	Services	HVAC	Distribution Systems	\$ 233,813.9	1 \$ 17,527,442.22	2024
4	4	I Greenhouse Science	Services	HVAC	Cooling Generating Systems	\$ 2,279.5	0 \$ 17,529,721.71	2024
4	4	I Greenhouse Science	Services	HVAC	Special HVAC Systems and Equipment	\$ 4,331.0	5 \$ 17,534,052.76	2024
4	4	I Greenhouse Science	Services	HVAC	Distribution Systems	\$ 11,169.5	4 \$ 17,545,222.30	2024
4 4	7 7	l Greenhouse Science	Services	HVAC	Terminal and Package Units	\$ 2,507.4	5 5 17,547,729.75	2024
- 4	4 <b>v</b>		Services		Distribution Systems Special HVAC Systems and Equipment		17 007 1004,004,004,004 1004 1004 1004 1004 10	2024
4 4	r 7	t Huston Hall	Services	HVAC	Controls and Instrumentation	\$ 38.767.9	8 \$ 18.025.868.15	2024
4	4	l Isle Hall	Services	HVAC	Heat Generating Systems	\$ 721,698.9	7 \$ 18,747,567.13	2024
4	4	t Isle Hall	Services	HVAC	Controls and Instrumentation	\$ 50,943.4	6 \$ 18,798,510.58	2024
4	4	t Isle Hall	Services	HVAC	Terminal and Package Units	\$ 93,396.3	4 \$ 18,891,906.92	2024
4	4	I Jim Thorpe Fieldhouse	Services	HVAC	Controls and Instrumentation	\$ 69,030.2	8 \$ 18,960,937.20	2024
4	4	I Jim Thorpe Fieldhouse	Services	HVAC	Terminal and Package Units	\$ 126,555.5	2 \$ 19,087,492.72	2024
4 -	4	l Jim Thorpe Fieldhouse	Services	HVAC	Distribution Systems	\$ 563,747.2	9 \$ 19,651,240.01	2024
4	4	l John F Kennedy Library	Services	HVAC	Controls and Instrumentation	\$ 238,222.8	5 5 19,889,462.86	2024
4	4	l Kingston Hall	Services	HVAC	Distribution Systems	\$ 599,135.2	7 \$ 20,488,598.14	2025
4	4	l Kingston Hall	Services	HVAC	Terminal and Package Units	\$ 134,499.7	6 \$ 20,623,097.89	2026
4 4	4 4	H Kingston Hall	Services	HVAC	Controls and Instrumentation	5,303.5 5 61 70 5	1 > 20,696,461.40	9702
4 4	4 4	t Music Building	Services Services	HVAC	Controls and instrumentation Controls and Instrumentation	с б7 312 В	7 2 20,778,150.17	2026
4	4	1 Music Building	Services	HVAC	Distribution Systems	\$ 549.721.2	2 \$ 21.395.190.19	2026
4	4	1 Music Building	Services	HVAC	Heat Generating Systems	\$ 953,598.0	7 \$ 22,348,788.26	2026
4	4	I Music Building	Services	HVAC	Terminal and Package Units	\$ 123,406.8	1 \$ 22,472,195.07	2026

Score	System Significance Ran	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Cosi	Project Pr	oject Cost Running Total	Fiscal Year Complete
4		4 P.E. Activities Building	Services	HVAC	Distribution Systems	\$ 1,08	2,671.92 \$	23,554,866.98	2027
4		4 Pavilion d Pavilion	Services	HVAC	Special HVAC Systems and Equipment Controls and Instrumentation	\$ 59 38	6,436.16 \$ 8 348 27 \$	24,151,303.14 24 339 651 41	2027
4		4 Pence Union Building	Services	HVAC	Special HVAC Systems and Equipment	\$ 76	8,741.34 \$	25,108,392.75	2028
4		4 Pence Union Building	Services	HVAC	Terminal and Package Units	\$ 44	5,060.79 \$	25,553,453.54	2028
4 4		4 Pence Union Building	Services	HVAC	Distribution Systems	\$ 1,98	2,543.48 \$	27,535,997.02	2029
4 4		4 Pence Union Building 4 Radio-TV Building	Services Services	HVAC	Controls and Instrumentation Controls and Instrumentation	۰ ۲ ۹	2,700.43 >	24.72/78/7/72 27 808 889 80	9202
4	,	4 Science Building	Services	HVAC	Cooling Generating Systems	\$ 44	3,335.87 \$	28,252,225.67	2029
4		4 Science Building	Services	HVAC	Heat Generating Systems	\$ 3,76	8,354.99 \$	32,020,580.66	2030
4	-	4 Science Building	Services	HVAC	Terminal and Package Units	\$ 48	7,669.46 \$	32,508,250.13	2030
4		4 Science Building	Services	HVAC	Special HVAC Systems and Equipment	\$ 84.	2,338.14 \$	33,350,588.26	2030
4		4 Showalter Hall	Services	HVAC	Controls and Instrumentation	\$ 13	6,924.49 \$	33,487,512.75	2030
4 4		4 Showalter Hall 4 Showalter Hall	Services Services	HVAC HVAC	Energy Supply Distribution Systems	\$ 22 \$ 1,11	8,207.47 5 8,216.61 5	33,715,720.22 34,833,936.83	2030 2030
4		4 Showalter Hall	Services	HVAC	Terminal and Package Units	\$ 25	1,028.22 \$	35,084,965.06	2031
4	,	4 Substation	Services	HVAC	Special HVAC Systems and Equipment	\$	0,947.83 \$	35,095,912.89	2031
4	•	4 Substation	Services	HVAC	Terminal and Package Units	\$	6,338.22 \$	35,102,251.10	2031
4		4 Surplus Sales Building	Services	HVAC	Controls and Instrumentation	\$ 1	2,899.33 \$	35,115,150.43	2031
4		4 Surplus Sales Building	Services	HVAC	Terminal and Package Units	\$	3,648.77 \$	35,138,799.20	2031
4		4 Surplus Sales Building	Services	HVAC	Heat Generating Systems	\$ 18	2,740.48 \$	35,321,539.68	2031
4 4		4 Tawanka Commons	Services	HVAC	Distribution Systems	\$ 94.	7,847.33 \$	36,269,387.01	2031
4 4		4 Turnbull Research Lab 4 Turnbull Research Lab	Services		special mVAC systems and equipment Controls and Instrumentation	n <del>,</del> ∼ √	1,940.04 >	36,301,327,05 36,311,414,17	2031
38	,	4   University Theater	Services	HVAC	Terminal and Package Units	\$ 24.1	4,699.28 \$	36,456,113.45	2031
4	,	4 University Theater	Services	HVAC	Controls and Instrumentation	\$	8,926.88 \$	36,535,040.34	2031
4	,	4 University Theater	Services	HVAC	Distribution Systems	\$ 64	4,569.51 \$	37,179,609.85	2031
4		4 Williamson Hall	Services	HVAC	Terminal and Package Units	\$ 8	1,891.97 \$	37,261,501.81	2031
4		4 Williamson Hall	Services	HVAC	Controls and Instrumentation	\$ 4	4,668.35 \$	37,306,170.16	2031
4		4 Williamson Hall	Services	HVAC	Distribution Systems	\$ 36	4,791.48 \$	37,670,961.64	2032
4		5 Aquatics Building	Services	Plumbing	Sanitary Waste	\$ Ø	4,989.84 \$	37,755,951.48	2032
4		Aquatics Building	Services	Plumbing	Plumbing Fixtures	\$ 13.	4,983.85 \$	37,890,935.33	2032
4		5 Aquatics Building	Services	Plumbing	Special Plumbing Systems	5 G	9,991.63 5	37,960,926.96	2032
4		5 Cadet Hall	Services	Plumbing	Plumbing Fixtures	ت م	8,041.62 5	38,028,968.58	2032
4 4		o Unernical Storage	Services Services	Plumbing Plumbing	Dormesuic Water Distribution Diumhing Eivturas	<b>Λ</b> V	4 148.05 4,44 4	38/033,11/.23 38/037/265/88	2032
4		5 Cheney Hall	Services	Plumbing	Plumbing Fixtures	\$ 25	5 0.617.69 5	38.287.883.57	2032
4		5 Communications Center	Services	Plumbing	Plumbing Fixtures	\$ 12	8,836.24 \$	38,416,719.82	2032
4		5 Greenhouse Boneyard	Services	Plumbing	Plumbing Fixtures	ŝ	4,986.18 \$	38,421,705.99	2032
4		5 Greenhouse Boneyard	Services	Plumbing	Special Plumbing Systems	Ŷ	2,585.42 \$	38,424,291.42	2032
4		5 Greenhouse Science	Services	Plumbing	Special Plumbing Systems	Ŷ	3,191.30 \$	38,427,482.71	2032
4		5 Greenhouse Science	Services	Plumbing	Plumbing Fixtures	\$	6,154.65 \$	38,433,637.36	2032
4	-	5 Greenhouse Science	Services	Plumbing	Domestic Water Distribution	<u>ب</u> ه	6,154.65 \$	38,439,792.01	2032
4		5 Isle Hall	Services	Plumbing	Domestic Water Distribution	\$ 22	9,245.56 \$	38,669,037.57	2032
4		5 Isle Hall	Services	Plumbing	Plumbing Fixtures	5 5 22	9,245.56 5	38,898,283.13	2032
4 <		o Isie Hall El im Thorno Eioldhouro	Services	Plumbing	Samitary waste Diumbing Eisturios	ν 4 1 2	4,339.8U >	39,042,622.93 20 252 750 70	2032
7		d Juni 1110 pe riekunduse 5 [Kingston Hall	Services	Plumbing	Plumbing Fixtures	4 7 7 7 7 7 7 7	5 22 72 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30,683,304,99	2032
4		5 Kingston Hall	Services	Plumbing	Special Plumbing Systems	\$ 17	1,181.52 \$	39,854,576.50	2032
4		5 Music Building	Services	Plumbing	Plumbing Fixtures	\$ 30	2,907.63 \$	40,157,484.13	2033
4		5 P.E. Activities Building	Services	Plumbing	Sanitary Waste	\$ 37	5,620.90	40,533,105.03	2033

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pro Cost	oject Pro	oject Cost Running Total	Fiscal Year Complete
4 4	<u> </u>	P.E. Activities Building Pavilion	Services Services	Plumbing Plumbine	Plumbing Fixtures Plumbing Fixtures	\$ 596,5 \$ 847.5	74.35 \$ 67.22 \$	41,129,679.38 41,977,746.60	2033 2033
4	· · ·	Pavilion	Services	Plumbing	Sanitary Waste	\$ 533.6	53.45 \$	42.510.900.05	2034
4	<u> </u>	Pavilion	Services	Plumbing	Domestic Water Distribution	\$ 847,5	67.22 \$	43,358,467.28	2034
4	5	Plant Utilities	Services	Plumbing	Sanitary Waste	\$ 25,9	46.46 \$	43,384,413.74	2034
4.	1 5 1	Plant Utilities	Services	Plumbing	Plumbing Fixtures	\$ 41,2	\$ 60.00	43,425,622.82	2034
4 4	- <u>-</u>	Plant Utilities	Services	Plumbing	Domestic Water Distribution	5 41,2 5 41,2	2 60.00	43,466,831.91	2034
4 4		keu Barn Science Building	Services	Plumbing	samicary waste Special Plumbing Systems	с 44,1 5 620.6	70.25 \$	43,010,938.79 44,131,608,79	2034
4	2 5	Science Building	Services	Plumbing	Sanitary Waste	\$ 753,6	71.03 \$	44,885,279.82	2034
4	5 5	Showalter Hall	Services	Plumbing	Domestic Water Distribution	\$ 616,1	60.20 \$	45,501,440.02	2035
4	5 5	Showalter Hall	Services	Plumbing	Plumbing Fixtures	\$ 616,1	60.20 \$	46,117,600.23	2035
4	2	Showalter Hall	Services	Plumbing	Rain Water Drainage	\$ 114,1	03.74 \$	46,231,703.96	2035
4	<u>51 F</u>	Showalter Hall	Services	Plumbing	Sanitary Waste	\$ 387,9	52.73 \$	46,619,656.70	2035
4 4	- F	Tawanka Commons Turnbull Research Lab	Services Services	Plumbing	special Plumbing systems Special Plumbing Systems	\$ 23.5 \$	35.21 \$	46,890,470.23 46,914,005,45	2035
4	<u> </u>	Turnbull Research Lab	Services	Plumbing	Plumbing Fixtures	\$ 45.3	89.34 \$	46.959.394.79	2035
4	5 1	Woodward Field Concessions	Services	Plumbing	Plumbing Fixtures	\$ 14,3	57.28 \$	46,973,752.07	2035
4	5	Woodward Field Concessions	Services	Plumbing	Domestic Water Distribution	\$ 14,3	57.28 \$	46,988,109.35	2035
4	5	Woodward Field Concessions	Services	Plumbing	Sanitary Waste	\$ 9,0	39.77 \$	46,997,149.12	2035
4	6 F	Fifth Street Hall	Shell	Roofing	Projections	\$ 6,5	05.44 \$	47,003,654.55	2035
4	90	Greenhouse Boneyard	Shell	Roofing	Roof Coverings	\$ 2,9	54.77 \$	47,006,609.32	2035
4	9	isle Hall	Shell	Roofing	Roof Coverings	\$ 135,8	49.22 \$	47,142,458.55	2035
39	9	Isle Hall Monthin Unit	shell	Rooting	Roof Opening	\$ 84,9 \$	05.76 \$ 57.05 \$	47,227,364.31	2035
9	0	Marun nan	Sileii 21 1:	KUUIIIIB		T'0CT ¢	¢ 05.70	C2.22C,CDC,14	C5U2
4		Martin Hall	Shell	Roofing	Roof Coverings	Ş 217,8	52.73 \$	47,581,374.98	2036
4 <		Martin Hall Dooro Union Building	shell	Rooting Poofing	Projections	۲4,4 ک	03.18 >	41,b35,838.17	2036
7 7		Pence Union Building Dence Union Building	Shell	Roofing	Projections Roof Coverings		40.30 9 6118 5	47,797,070,40 48.445 030 64	2036
7 4	- 9	Science Building	Shell	Roofing	Projections	s 177,3	34.36 \$	48,622,374.00	2036
4	6 5	Science Building	Shell	Roofing	Roof Coverings	\$ 709,3	37.44 \$	49,331,711.44	2036
4	6 5	Science Building	Shell	Roofing	Roof Opening	\$ 443,3	35.87 \$	49,775,047.31	2036
4	9	Tawanka Commons	Shell	Roofing	Roof Coverings	\$ 309,5	01.19 \$	50,084,548.50	2037
4	9	Williamson Hall	Shell	Roofing	Projections	\$ 29,7	78.90 \$	50,114,327.40	2037
4	7 0	Cheney Hall	Shell	Exterior Closure	Exterior Windows	\$ 241,3	35.55 \$	50,355,662.95	2037
4	7	Fifth Street Hall	Shell	Exterior Closure	Exterior Windows	\$ 42,2	85.34 \$	50,397,948.29	2037
4		Greenhouse Boneyard	Shell	Exterior Closure	Exterior Windows	\$ 5,4,8	01.50 \$	50,402,749.79	2037
4 <		Greennouse Boneyard	shell	Exterior Closure Exterior Closure	Exterior walls Exterior Walls	۲,UI خ خ ۸۵2 ۸	11.04 >	50,413,460.83 50 005 014 73	2037
7 4		Jim Thorpe Fieldhouse	Shell	Exterior Closure	Exterior Walls	\$ 667,2	92.71 \$	51,573,206.94	2037
4	7 5	Plant Utilities	Shell	Exterior Closure	Exterior Doors	\$ 9,1	57.57 \$	51,582,364.51	2037
4	7 F	Plant Utilities	Shell	Exterior Closure	Exterior Windows	\$ 39,6	82.82 \$	51,622,047.34	2037
4	7 F	Plant Utilities	Shell	Exterior Closure	Exterior Walls	\$ 88,5	23.22 \$	51,710,570.55	2037
4	7 5	Science Building	Shell	Exterior Closure	Exterior Doors	\$ 266,0	01.53 \$	51,976,572.08	2037
4	5 2	Science Building	Shell	Exterior Closure	Exterior Walls	\$ 2,571,3	48.01 \$	54,547,920.09	2038
4	7 5	Surbeck Services	Shell	Exterior Closure	Exterior Windows	\$ 225,4	46.10 \$	54,773,366.20	2038
4	5 1	Surplus Sales Building	Shell	Exterior Closure	Exterior Windows	5 55,8	97.09 Ş	54,829,263.29	2038
4 4	5 1	Surplus Sales Building	Shell shell	Exterior Closure	Exterior Doors	5 12,8 ¢ 12,6	99.33 S	54,842,162.61 E4 066 056 11	2038
1 <	, <u>,</u> ,	Jauraha Commons	shall	Exterior Closure	Exterior Windows	γ 124,0 ¢ EO3 0		14,700,630.11 FE AGO 70F EA	0202
7 7		I a walika CUTIITULIS Moodward Fiald Concessions	Shell	Exterior Closure Exterior Closure	Exterior Writaows Exterior Walls	6/700 ¢	41 56 ¢	55,409,795.34	9202
T	-					<u> </u>	>	2	1

Score	Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pro Cost	ect Proje	ct Cost Running Total	Fiscal Year Complete
4	×	Fifth Street Hall	Shell	Superstructure	Roof Construction	\$ 78,06	5.24 \$	55,578,702.34	2039
4	∞	Fifth Street Hall	Shell	Superstructure	Floor Construction	\$ 117,09	7.85 \$	55,695,800.19	2039
4	00	liste Hall	Shell	Superstructure	Floor Construction	5 611,32	1.45 Ş	56,307,121.64	2039
4 4	00 00	Martin Hall	Shell	Superstructure	Roof Construction	\$ 653,55 \$	8.17 \$ 0.50 \$	56,960,679.81 57 033 040 40	2039
4 4	υ oc	Plant Utilities	Shell	Superstructure	Floor Construction	5 109.89	¢ 66.0	57.143.831.29	2039
4		Sutton Hall	Shell	Superstructure	Roof Construction	\$ 350,03	2.89 \$	57,493,864.18	2039
4	00	Sutton Hall	Shell	Superstructure	Floor Construction	\$ 525,04	9.31 \$	58,018,913.50	2040
4	∞	Tawanka Commons	Shell	Superstructure	Roof Construction	\$ 928,5C	3.54 \$	58,947,417.04	2040
4	∞	Williamson Hall	Shell	Superstructure	Roof Construction	\$ 357,34	6.77 \$	59,304,763.81	2040
4	6	Fifth Street Hall	Interiors	Staircases	Stair Construction	\$ 27,64	8.11 \$	59,332,411.91	2040
4	<u>თ</u> ი	Fifth Street Hall	Interiors	Staircases	Stair Finishes	\$ 4,87	9.08 \$	59,337,290.99	2040
4 4	თ. თ. 	l Plant Utilities Showalter Hall	Interiors	Staircases	Stair Construction Stair Einishas	5 25,94 ¢ 68.46	6.46 Ş 2.24 ¢	59,363,237.45 50 / 31 600 70	2040
4 4	10	Diowarce rian	Interiors	Junterior Construction	Jan Fritshes Interior Doors	\$ 37.40	6.26 \$	59.469.105.96	2040
4	10	l Fifth Street Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 84,57	0.68 \$	59,553,676.63	2040
4	10	lisie Hall	Interiors	Interior Construction	Specialties	\$ 127,35	8.64 \$	59,681,035.27	2040
4	10	Kingston Hall	Interiors	Interior Construction	Specialties	\$ 183,4C	8.76 \$	59,864,444.03	2040
4	10	Martin Hall	Interiors	Interior Construction	Specialties	\$ 204,23	6.92 \$	60,068,680.95	2041
4	10	PE Classroom Building	Interiors	Interior Construction	Specialties	\$ 118,17	8.37 \$	60,186,859.32	2041
4 .	10	Pence Union Building	Interiors	Interior Construction	Specialties	\$ 606,90	1.07 \$	60,793,760.38	2041
4 4	10	Plant Utilities	Interiors	Interior Construction	Fixed and Moveable Partitions	5 79,36 ¢ 167.64	5.65 Ş	60,873,126.03 61 040 772 92	2041
4 4		i Kozeli Plant i Showalter Hall	Interiors	Interior Construction	Specialities	۲۵/)04 خ خ 3/7 31	0.8U >	61,040,772.83 61 383 084 03	2041
40	10		Interiors	Interior Construction	Specialties	درعد ج \$ 111.67	0.86 \$	61.494.754.90	2041
4	11	Chemical Storage	Interiors	Interior Finishes	Wall Finishes	\$ 3,84	1.34 \$	61,498,596.24	2041
4	11	Cheney Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 204,2C	7.00 \$	61,702,803.24	2041
4	11	Fifth Street Hall	Interiors	Interior Finishes	Wall Finishes	\$ 40,65	8.98 \$	61,743,462.22	2041
4	11	Fifth Street Hall	Interiors	Interior Finishes	Floor Finishes	\$ 69,93	3.44 \$	61,813,395.66	2041
4 4	11	.   Fifth Street Hall   Dlant I Itilities	Interiors Interiors	Interior Finishes Interior Finishes	Ceiling Finishes Wall Finishes	5 35,77 ¢ 38.15	9.90 Ş	61,849,175.56 61 887 332 12	2041
	11	Science Building	Interiors	Interior Einishes	Collina Einichee	¢ 075.23	\$ 00 8	67 867 671 DE	1402
4 4	11	Science building Showalter Hall	Interiors	Interior Finishes	Ceiling Finishes Ceiling Finishes		6.92 3 6.45 \$	67 264 777 49	2042
4	11	Surbeck Services	Interiors	Interior Finishes	Wall Finishes	\$ 216,77	5.10 \$	63,581,502.59	2042
4	11	Surplus Sales Building	Interiors	Interior Finishes	Wall Finishes	\$ 53,74	7.20 \$	63,635,249.79	2042
4	11	Woodward Field Concessions	Interiors	Interior Finishes	Wall Finishes	\$ 13,29	3.78 \$	63,648,543.57	2042
4	12	Greenhouse Boneyard	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 25	4.02 \$	63,649,097.59	2042
4 4	12	Greenhouse Science	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 2,27 \$	9.50 \$	63,651,377.09	2042
4 4	1 6	i Isle Hall Disot I Hilitios	Equipment and Furnishings	Equipment and Furnishings	INIOVEABLE FURNISNINGS (CAPITAL FUNDED ONLY) Moviciable Eurorichings (Capital Europed Only)	14,C2 ¢ 73 h	1./3 >	03,070,848.82 62 601 177 60	2042
4 4	1 1	Surbeck Services	Equipritence and Furnismings Special Construction	Equipment and Furmismings Special Construction	Integrated Constr & Special Constr Systems	ج 4,5/2 ج 86 71	\$ 100 \$ 100	03,001,427.00 63 768 137 64	2042
4	12	Surbeck Services	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 86,71	0.04 \$	63,854,847.68	2042
4	13	Art Building	Substructure	Foundations	Slab on Grade	\$ 312,26	5.65 \$	64,167,113.32	2042
4	13	Communications Center	Substructure	Foundations	Slab on Grade	\$ 133,6C	7.96 \$	64,300,721.28	2042
4	13	Computing and Engineering Sciences Bldg	Substructure	Foundations	Slab on Grade	\$ 824,35	1.17 \$	65,125,072.45	2043
4	13	Fifth Street Hall	Substructure	Foundations	Slab on Grade	\$ 45,53	8.06 \$	65,170,610.51	2043
4 .	13	Indian Education Center	Substructure	Foundations	Slab on Grade	\$ 23,33	2.88 \$	65,193,943.39	2043
4 <	51 C	Martin Hall	Substructure	Foundations	Slab on Grade	5 381,24	2.27 \$ 5 12 \$	65,575,185.66 FF 990 212 00	2043
1 4	13	ا Music Bullaing ا Pence Linion Building	Substructure	Foundations	Siab Off Grade Stah on Grade	2147C ¢	0.45 \$	57 070 194 14	2043
4	13	Plant Utilities	Substructure	Foundations		\$ +2,73	5.35 \$	67,064,929.49	2043

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated I Cost	Project Pr	oject Cost Running Total	Fiscal Year Complete
4	13	3 Plant Utilities	Substructure	Foundations	Standard Foundations	\$ 64	,103.02 \$	67,129,032.51	2043
4	13	3 President's House	Substructure	Foundations	Slab on Grade	\$ 26	,234.65 \$	67,155,267.16	2043
4	1	3 Radio-TV Building	Substructure	Foundations	Slab on Grade	\$ 140	,617.64 \$	67,295,884.80	2043
4 (		3 University Theater	Substructure	Foundations	Slab on Grade	5 368	,325.46 Ş	67,664,210.25	2044
n a		L Cheney Hall I Communications Center	Services Services	FIRE Protection Fire Drotection	FITE Protection Specialities Fire Protection Specialties	ه م م	\$ 77.40C	67,607,317,05 67,607,317,05	2044
n m		L Communications Center	Services	Fire Protection	Fire Protection Sprinkler Systems	, s 90	\$ 803.98	67.759.121.93	2044
ŝ	- <del>-</del> -	L Hazardous Waste Transfer Facility	Services	Fire Protection	Fire Protection Specialties	ŝ	472.66 \$	67,759,594.59	2044
ŝ	1	l Huston Hall	Services	Fire Protection	Fire Protection Specialties	\$ 12	,922.66 \$	67,772,517.25	2044
ŝ	1	1 Indian Education Center	Services	Fire Protection	Fire Protection Specialties	\$	,666.63 \$	67,774,183.88	2044
ŝ	-	l Martin Hall	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 27	,231.59 \$	67,801,415.48	2044
Э	-	P.E. Activities Building	Services	Fire Protection	Fire Protection Specialties	\$ 44	,190.69 \$	67,845,606.17	2044
ŝ	1	P.E. Activities Building	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 309	,334.85 \$	68,154,941.02	2044
m		I P.E. Activities Building	Services	Fire Protection	Special Fire Protection Systems	\$	,190.69 \$	68,199,131.71	2044
m	-	l Pavilion	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 439	,479.30 \$	68,638,611.02	2044
Υ		Science Building	Services	Fire Protection	Stand-Pipe and Hose Systems	\$	,667.18 \$	68,727,278.20	2044
ה ת		L Science Building	Services	Fire Protection Fire Drotection	Special Fire Protection Systems Eire Drotection Sorinkler Systems	د ۲	,000/.18 5	68,815,945.38 60 436 615 62	2044
n u		L Jurence Building	Services	Fire Protection	rite riotectioni opininel ofsteniis Snarial Fira Drotaction Svetame	4 35	687.65 ¢	60,430,013.02	2044
n m		I University Theater	Services	Fire Protection	Ere Protection Sprinkler Systems	5 187	162.73 \$	69.659.466.00	2044
i m		l Woodward Field Press Box	Services	Fire Protection	Fire Protection Specialties	÷ Ś	983.37 \$	69.663.449.37	2044
£	(1)	2 Art Building	Services	Vertical Transportation	Elevators and Lifts	\$ 111	,523.44 \$	69,774,972.80	2044
£	<i>ر</i> م	2 Cheney Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 92	,821.36 \$	69,867,794.17	2044
. 3	2	2 Huston Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 64	,613.30 \$	69,932,407.46	2044
∾ 11		2 John F Kennedy Library	Services	Vertical Transportation	Elevators and Lifts	\$ 397	,038.07 \$	70,329,445.54	2045
ŝ	. 1	2 Music Building	Services	Vertical Transportation	Elevators and Lifts	\$ 112	,188.00 \$	70,441,633.54	2045
ŝ	(1	2 Pence Union Building	Services	Vertical Transportation	Elevators and Lifts	\$ 404	,600.71 \$	70,846,234.25	2045
Э	<i>ر</i> ۷	2 Sutton Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 72	,923.52 \$	70,919,157.77	2045
ŝ		3 Aquatics Building	Services	Electrical	Lighting and Branch Wiring	\$ 264	,968.30 \$	71,184,126.07	2045
ε	(7)	3 Aquatics Building	Services	Electrical	Electrical Service and Distribution	\$ 264	,968.30 \$	71,449,094.36	2045
ŝ		3 Art Building	Services	Electrical	Communication and Security Systems	\$ 379	,179.72 \$	71,828,274.08	2045
ŝ	.0	3 Art Building	Services	Electrical	Lighting and Branch Wiring	\$ 591	,074.23 \$	72,419,348.31	2045
ŝ		Biology Boat Garage	Services	Electrical	Electrical Service and Distribution	\$ 33	,974.47 \$	72,453,322.78	2045
Υ		Biology Boat Garage	Services	Electrical	Lighting and Branch Wiring	Ş S	,974.47 \$	72,487,297.25	2045
n.		3 Biology Storage	Services	Electrical	Electrical Service and Distribution	ې IC	\$ 85.767,	/2,497,594.63	2045
Υ		Biology Storage	Services	Electrical	Lighting and Branch Wiring	\$ 10	,297.38 \$	72,507,892.01	2046
m	(	S Cadet Hall	Services	Electrical	Communication and Security Systems	۰ ۳	,682.04 5	72,593,574.05	2046
n n	., 0	d Central Services Building	Services	Electrical Electrical	Electrical Service and Distribution Lighting and Branch Wiring	57T &	589.48	7 24/0 252 01 252 01	2040
n n	. (1	2 Communications Center	Services	Liectrical Electrical	Lighting and Dranch Wiring Lighting and Branch Wiring	γ TEC		72 003 253 77	2040
ν m	, m	Communications Center	Services	Electrical Flectrical	Lighting and viences withing Communication and Security Systems	بالغ 162	238.24 \$	73.255,492.01	2046
ι ભ	. (11)	3 Greenhouse Boneyard	Services	Electrical	Lighting and Branch Wiring	\$	,787.68 \$	73,265,279.69	2046
З	(f)	3 Greenhouse Science	Services	Electrical	Electrical Service and Distribution	\$ 12	,081.34 \$	73,277,361.03	2046
ε	(7)	3 Greenhouse Science	Services	Electrical	Lighting and Branch Wiring	\$ 12	,081.34 \$	73,289,442.37	2046
£	(1)	3 Grounds Covered Storage	Services	Electrical	Lighting and Branch Wiring	\$ 27	,522.52 \$	73,316,964.89	2046
ε		3 Grounds Covered Storage	Services	Electrical	Electrical Service and Distribution	\$ 27	,522.52 \$	73,344,487.41	2046
ςη i		Huston Hall	Services	Electrical	Electrical Service and Distribution	\$ 342	,450.48 \$	73,686,937.89	2046
m		8 Huston Hall	Services	Electrical	Lighting and Branch Wiring	5 342	,450.48 5	74,029,388.37	2046
יז תי	., (r	lıdian Education Center ניוויה דו-היריים Eialdhouse	Services	Electrical Electrical	Lighting and Branch Wiring ۱ inhting and Branch Wiring	5 44 6 6 6	,165.81 >	74,073,554.18 74,683 371,67	2046
) C		5 JITT TTOUPE FIELUTIOUSE	Services	Electrical Electrical	Lighting and pranci wiring Frattiant Condea and Distribution	ب ب ب	× 24.101,	14,002,221,001 16	7000
0	• ,	s Jim Thorpe Fielanouse	Services	Electrical	Electrical Service and Distribution	200	¢ 67.10/1	0 מדי גפחי צהקי כ ו	7047

Score	System Significance Rank	<	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Proje Cost	ect Proje	ect Cost Running Total	Fiscal Year Complete
m m		3 John F Kennedy Library 3 John F Kennedy Library	Services Services	Electrical Electrical	Communication and Security Systems Electrical Service and Distribution	\$ 1,349,929 \$ 2,104,301	9.56 \$ 1.81 \$	76,643,018.71 78,747,320.53	2047 2047
ς.		3 John F Kennedy Library	Services	Electrical	Lighting and Branch Wiring	\$ 2.104.301	.81 Ś	80.851.622.34	2048
ι m		3 Kingston Hall	Services	Electrical	Lighting and Branch Wiring	\$ 648,042	4.29 \$	81,499,666.63	2048
ε		3 Kingston Hall	Services	Electrical	Electrical Service and Distribution	\$ 648,044	4.29 \$	82,147,710.91	2048
m r		8 Martin Hall	Services	Electrical	Lighting and Branch Wiring	5 721,637 6 721,637	7.13 Ş	82,869,348.04	2049
n m		a Iviarum Hall 3 Monroe Hall	Services	Electrical	Communication and Security Systems	\$ 394.063	3.63 \$	83.726.348.73	2049
m		3 Music Building	Services	Electrical	Lighting and Branch Wiring	\$ 594,596	5.43 \$	84,320,945.16	2049
3		3 Music Building	Services	Electrical	Electrical Service and Distribution	\$ 594,596	5.43 \$	84,915,541.59	2049
°.		3 Music Building	Services	Electrical	Communication and Security Systems	\$ 381,439	9.24 \$	85,296,980.83	2050
3		3 P.E. Activities Building	Services	Electrical	Electrical Service and Distribution	\$ 1,171,053	3.31 \$	86,468,034.14	2050
e i		3 P.E. Activities Building	Services	Electrical	Lighting and Branch Wiring	\$ 1,171,053	3.31 \$	87,639,087.46	2051
ŝ		3 Pavilion	Services	Electrical	Lighting and Branch Wiring	\$ 1,663,743	3.00 \$	89,302,830.46	2051
ε		3 Pavilion	Services	Electrical	Electrical Service and Distribution	\$ 1,663,743	3.00 \$	90,966,573.46	2052
ε		B Pence Union Building	Services	Electrical	Lighting and Branch Wiring	\$ 2,144,383	3.79 \$	93,110,957.25	2053
τη τ		3 Plant Utilities	Services	Electrical	Electrical Service and Distribution	268'08 \$	1.91 5	93,191,849.16	2053
m (	. (	B President's Garage	Services	Electrical	Lighting and Branch Wiring	5 7,440	0.57 \$	93,199,289.73	2053
ν <u>-</u>		d President's Garage	Services	Electrical	Electrical Service and Distribution	× 1,440	\$ 10.U	93,206,/30.30 02 7E6 200 74	2053
о <del>с</del>		a Radio-TV Building	Services	Flectrical	Liecturear Jervice and Jistribution	5 266.169	5 60 6	93,522,557,83	2053
n m		3 Radio-TV Building	Services	Electrical	Communication and Security Systems	\$ 170,749	\$ 66.6	93,693,307.82	2053
ĉ		3 Rozell Plant	Services	Electrical	Lighting and Branch Wiring	\$ 592,352	2.03 \$	94,285,659.85	2053
е 4		3 Rozell Plant	Services	Electrical	Electrical Service and Distribution	\$ 592,352	2.03 \$	94,878,011.88	2053
۳ 2		3 Science Building	Services	Electrical	Electrical Service and Distribution	\$ 2,349,680	J.12 \$	97,227,692.00	2054
3		3 Science Building	Services	Electrical	Lighting and Branch Wiring	\$ 2,349,680	J.12 \$	99,577,372.12	2054
3		3 Science Building	Services	Electrical	Communication and Security Systems	\$ 1,507,342	2.06 \$	101,084,714.18	2055
ς.		3 Surbeck Services	Services	Electrical	Lighting and Branch Wiring	\$ 459,563	3.20 \$	101,544,277.38	2055
ε		3 Surbeck Services	Services	Electrical	Electrical Service and Distribution	\$ 459,563	3.20 \$	102,003,840.57	2055
ς.		3 Tawanka Commons	Services	Electrical	Lighting and Branch Wiring	\$ 1,025,222	2.64 \$	103,029,063.21	2056
ε		3 Tawanka Commons	Services	Electrical	Electrical Service and Distribution	\$ 1,025,222	2.64 \$	104,054,285.85	2056
ς		3 Turnbull Research Lab	Services	Electrical	Electrical Service and Distribution	\$ 89,097	7.59 \$	104,143,383.44	2056
		3 Turnbull Research Lab	Services	Electrical	Lighting and Branch Wiring Lighting and Branch Wiring	20,097 89,097	7.44 \$	104,232,481.03 104 030 668 47	2056
			Services	Electrical	Lightnig and branch winnig Fisserissi fsamiss and Distribution	, 101,100 201,107	· ++ · /	104,929,000.47	2020
n u		3 University Theater 2 I Iniversity Theater	Services	Electrical	Electrical Service and Distribution Communication and Security Systems	41/160 ¢	7.44 >	105.020,020,010 106.070 108	7506
n m		3 Williamson Hall	Services	Electrical	Communication and Security Systems	\$ 253,120	0.64 \$	106,327,228.90	2057
3		3 Williamson Hall	Services	Electrical	Lighting and Branch Wiring	\$ 394,570	J.38 \$	106,721,799.28	2057
ŝ		3 Woodward Field Concessions	Services	Electrical	Lighting and Branch Wiring	\$ 28,182	2.81 \$	106,749,982.09	2057
33		3 Woodward Field Concessions	Services	Electrical	Electrical Service and Distribution	\$ 28,182	2.81 \$	106,778,164.89	2057
С	,	4 Aquatics Building	Services	HVAC	Energy Supply	\$ 49,994	4.02 \$	106,828,158.91	2057
ς.	,	4 Aquatics Building	Services	HVAC	Distribution Systems	\$ 244,970	0.68 \$	107,073,129.60	2057
ŝ	-	4 Aquatics Building	Services	HVAC	Terminal and Package Units	\$ 54,993	3.42 \$	107,128,123.02	2057
ε		4 Art Building	Services	HVAC	Heat Generating Systems	\$ 947,949	9.26 \$	108,076,072.28	2058
ς	-	4 Art Building	Services	HVAC	Energy Supply	\$ 111,52	3.44 Ş	108,187,595.72	2058
m	-	4 Cadet Hall	Services	HVAC	Cooling Generating Systems	\$ 25,200	0.60 \$	108,212,796.32	2058
m r		4 Central Services Building	Services	HVAC	Terminal and Package Units	\$ 25,60 <u>5</u>	9.14 Ş	108,238,405.45	2058
n r		4 Central Services Building	Services		reat Generating Systems	788, 191, 688, 191, 588, 588, 588, 588, 588, 588, 588, 58	۲. ۲ ۲. ۲	108,436,294.24 108 150 575 37	2058
n r		4 Central Services Building مراضعتها معينيمة Building	Services	HVAC	Looling Generating Systems Intertibution Systems		1.03 ÷	108,424,444 12.016,444 10.01	
ιm	. 7	4 Central Services Building	Services	HVAC		\$ 23,281	1.03 \$	108,596,933.37	2058

Score	System Significance Rank	k Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pro Cost	ject Pro	uject Cost Running Total	Fiscal Year Complete
ŝ	7	4 Chemical Storage	Services	HVAC	Cooling Generating Systems	\$ 1,5	36.54 \$	108,598,469.91	2058
æ	,	4 Chemical Storage	Services	HVAC	Distribution Systems	\$ 7,5	29.03 \$	108,605,998.94	2058
ε	-	4 Chemical Storage	Services	HVAC	Heat Generating Systems	\$ 13,0	60.57 \$	108,619,059.51	2058
ŝ		4 Chemical Storage	Services	HVAC	Energy Supply	\$ 1,5	36.54 \$	108,620,596.05	2058
τ <b>ι</b> τ		4 Chemical Storage	Services	HVAC	Terminal and Package Units	5 1,6 6 AFA 0	90.19 \$	108,622,286.24	2058
n (r	. 7	4 Cheney naii 4 Chenev Hall	Services	HVAC	Distribution systems Freerev Sunnly	0,404 2,404 2,20 2,20	24.0/ 2 2136 \$	109,169,932,27	2030
n m	7	4 Cheney Hall	Services	HVAC	Heat Generating Systems	5 788,9	81.60 \$	109,958,913.87	2058
m	7	4 Childcare Facility	Services	HVAC	Special HVAC Systems and Equipment	\$ 55,8I	09.15 \$	110,014,723.03	2059
c	7	4 Childcare Facility	Services	HVAC	Terminal and Package Units	\$ 32,3	10.56 \$	110,047,033.59	2059
С	,	4 Childcare Facility	Services	HVAC	Heat Generating Systems	\$ 249,6	72.54 \$	110,296,706.13	2059
ŝ	,	4 Childcare Facility	Services	HVAC	Energy Supply	\$ 29,3	73.24 \$	110,326,079.37	2059
ε		4 Childcare Facility	Services	HVAC	Controls and Instrumentation	\$ 17,6	23.94 \$	110,343,703.31	2059
ε		4 Communications Center	Services	HVAC	Energy Supply	\$ 47,7	17.13 \$	110,391,420.44	2059
~~ ~		4 Communications Center	Services	HVAC	Heat Generating Systems	\$ 405,5 \$	95.58 \$	110,797,016.02	2059
n u			Services	HVAC		5 T,442,0	14.4/ 2	112,239,030.49	9505
n c		4 Computing and Engineering Sciences Bldg	Services	HVAC	Special HVAC Systems and Equipment	5,955 5,955 5,955	\$ 71.12 \$	112,799,011.60	2060
'n			Services		Controls and Instrumentation	т, т с с		112,800,119.64	2060
'n			Services		reminal and Package Units Social UVAC Systems and Equipment	ب 2, ر 1, ر	¢ 07.00	CU.ICI,2U8,2II	2060
יי ה			Services		Decisi II VAC Joseffi and Equipment Heat Generating Systems	τ, τ	\$ CC LO	112 821 357 06	2000
n a	. 7		Services	HVAC	Cooling Generating Systems	, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	46 73 ¢	112 823 203 79	2060
n m	. 7	4 Greenhouse Science	Services	HVAC	Controls and Instrumentation	\$ 1.3	5 02.70 5	112.824.571.49	2060
i m	7	4 Greenhouse Science	Services	HVAC	Heat Generating Systems	\$ 19.3	75.74 \$	112.843.947.22	2060
- ~ 43	7	4 Hargreaves Hall	Services	HVAC	Controls and Instrumentation	\$ 80,0	32.38 \$	112,923,979.60	2060
c	7	4 Hazardous Waste Transfer Facility	Services	HVAC	Cooling Generating Systems	\$ 2,3	63.30 \$	112,926,342.90	2060
c	7	4 Hazardous Waste Transfer Facility	Services	HVAC	Controls and Instrumentation	\$ 1,4	17.98 \$	112,927,760.87	2060
£	7	4 Hazardous Waste Transfer Facility	Services	HVAC	Heat Generating Systems	\$ 20,0	88.02 \$	112,947,848.89	2060
3	7	4 Hazardous Waste Transfer Facility	Services	HVAC	Special HVAC Systems and Equipment	\$ 4,4	90.26 \$	112,952,339.15	2060
ŝ	,	4 Hazardous Waste Transfer Facility	Services	HVAC	Terminal and Package Units	\$ 2,5	99.63 \$	112,954,938.78	2060
ε		4 Huston Hall	Services	HVAC	Terminal and Package Units	\$ 71,0	74.63 \$	113,026,013.41	2060
e	,	4 Huston Hall	Services	HVAC	Energy Supply	\$ 64,6	13.30 \$	113,090,626.70	2060
ε		4 Huston Hall	Services	HVAC	Heat Generating Systems	\$ 549,2	13.05 \$	113,639,839.75	2060
£		4 Indian Education Center	Services	HVAC	Heat Generating Systems	\$ 70,8	31.96 \$	113,710,671.71	2060
ς (		4 Indian Education Center	Services	HVAC	Terminal and Package Units	5 9,1	66.49 \$	113,719,838.20	2060
n r		4 Indian Education Center	Services	HVAC	Cooling Generating Systems	Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Ϋ́Υ	33.1/ 5	113,/28,1/1.38	2060
n n		4 Indian Education Center A Indian Education Contor	Services		Distribution Systems	φ()4 φ()6	¢ +C.26	113,707,003.92	2060
0 00	. 7	4 Indian Education Center	Services	HVAC	Controls and Instrumentation	5 6,4	\$ 06.66	113.782.336.99	2060
i m	7	4 Isle Hall	Services	HVAC	Energy Supply	\$ 84.9	05.76 Ś	113.867.242.75	2060
c	7	4 Jim Thorpe Fieldhouse	Services	HVAC	Heat Generating Systems	\$ 977,9	29.01 \$	114,845,171.76	2060
3	7	4 Jim Thorpe Fieldhouse	Services	HVAC	Energy Supply	\$ 115,0	50.47 \$	114,960,222.23	2060
3	,	4 John F Kennedy Library	Services	HVAC	Distribution Systems	\$ 1,945,4	86.56 \$	116,905,708.78	2061
ŝ	,	4 John F Kennedy Library	Services	HVAC	Energy Supply	\$ 397,0	38.07 \$	117,302,746.86	2061
ŝ		4 John F Kennedy Library	Services	HVAC	Special HVAC Systems and Equipment	\$ 754,3	72.33 \$	118,057,119.19	2061
ŝ		4 John F Kennedy Library	Services	HVAC	Terminal and Package Units	\$ 436,7	41.89 \$	118,493,861.08	2061
ς η ι		4 Kingston Hall	Services	HVAC	Heat Generating Systems	\$ 1,039,3	16.33 \$	119,533,177.41	2061
m	-	4 Kingston Hall	Services	HVAC	Energy Supply	Ş 122,2	72.51 Ş	119,655,449.92	2061
m d		4 Martin Hall	Services	HVAC	Heat Generating Systems	\$ 1,157,3	42.59 \$	120,812,792.51	2062
'nα		A INarcin Haii וובע היד-ראל א	Services	HVAC	UISTRIBUTION SYSTEMS Transminal Darbard Linits	T'/00 ¢	13.54 5	121,479,900.44 121,670,740,19	2002
ר	-				I FIIIIIIdi dilu ravvage viiito	1/04T ¢	ر) + 1 + 1 - 1	TCT/052/140.12	70.07

Score	System Significance Rank	k Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated I Cost	Project P	roject Cost Running Total	Fiscal Year Complete
°	7	4 Martin Hall	Services	HVAC	Energy Supply	\$ 136	5,157.95 \$	121,765,898.14	2062
ŝ	7	4 Martin Hall	Services	HVAC	Cooling Generating Systems	\$ 136	5,157.95 \$	121,902,056.08	2062
Μ	7	4 Monroe Hall	Services	HVAC	Heat Generating Systems	\$ 985	5,159.04 \$	122,887,215.13	2062
m (	~ ~	4 Monroe Hall	Services	HVAC	Distribution Systems	\$ 567	7,915.19 \$	123,455,130.32	2063
0 0		4 Music Building	Services	HVAC	Energy supply	711 ¢	¢ 188.00 \$	123,56/,318.32	2063
'nĊ	~ ~	4 P.E. Activities Building	Services	HVAC	Heat Generating Systems	5 1,8/8 5	8,104.41 5	125,445,422.74 125,666 276 10	2064
n (r		4 r.e. Activities building 4 P.F. Activities Building	Services	HVAC	Errer gy outploy Controls and Instrumentation	ب ج 133	\$ 80.072 0	125,000,570.13	2064
, m	4	4 Pavilion	Services	HVAC	Terminal and Package Units	\$ 345	5,305.15 \$	126,144,253.42	2064
Ĩ.	4	4 Pavilion	Services	HVAC	Heat Generating Systems	\$ 2,668	3,267.14 \$	128,812,520.56	2065
3	7	4 Pavilion	Services	HVAC	Energy Supply	\$ 313	3,913.77 \$	129,126,434.33	2065
ŝ	7	4 Pavilion	Services	HVAC	Distribution Systems	\$ 1,53£	3,177.47 \$	130,664,611.80	2066
ŝ	7	4 PE Classroom Building	Services	HVAC	Energy Supply	\$ 78	3,785.58 \$	130,743,397.38	2066
£	7	4 Pence Union Building	Services	HVAC	Energy Supply	\$ 404	1,600.71 \$	131,147,998.09	2066
c.	7	4 Pence Union Building	Services	HVAC	Heat Generating Systems	\$ 3,43 <u>9</u>	9,106.16 \$	134,587,104.24	2067
ŝ	7	4 President's House	Services	HVAC	Heat Generating Systems	\$ 7 <u>5</u>	¢ (0640.90	134,666,745.14	2067
<b>ო</b> ი	~	4 Radio-TV Building	Services	HVAC	Terminal and Package Units	s S	5,242.64 \$	134,721,987.78	2067
ŋ (		4 Kaalo-I V Bullaing	Services		Energy supply	۰ ۲	¢ 90.027,0	134,//2,2U8.3/	2007
(17) (	~	4 Radio-TV Building	Services	HVAC	Distribution Systems	Ş 246	5,080.85 5	135,018,289.22	2068
'nĊ	~ ~ ~	4 Kozeli Plant	Services	HVAC	Terminal and Package Units	2127 2	2,940.99 \$	135,141,230.20	2068
n (	~ ~		Services	HVAC	Controls and Instrumentation		< 7/.8c0, /	135,208,288.93	2069
'nĊ	~ ~	4 Kozeli Plant	Services	HVAC	Heat Generating Systems	y 945	< <5.866,6 <5.57,57,57,57,57,57,57,57,57,57,57,57,57,5	136,158,287.48 126.770.052.01	2068
0 m	~ 1	4 Nozeli Plant 4 Rozeli Plant	Services	HVAC	energy suppry Distribution Systems	5 547	6 5 12.94.02 5 1.02 5 1.02 5 1.02 5 1.02 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	136.817.698.22	2068
4		A Science Building	Services	ΗΛΔΓ	Distribution Systems	÷ 2173	0 345 74 ¢	138 990 043 96	2069
1 (1		4 Science Building	Services		Energy Stranty	5/T/2 \$	\$ 335 87 \$	139 433 379 82	6002
,	4	4 Substation	Services	HVAC	Controls and Instrumentation	- v	457.21 \$	139,436,837,03	2069
Υ Π	4	4 Substation	Services	HVAC	Heat Generating Systems	\$ 48	3,977.14 \$	139,485,814.17	2069
ι m	4	4 Surbeck Services	Services	HVAC	Energy Supply	\$ 98	5,710.04 \$	139,572,524.21	2069
ŝ	4	4 Surbeck Services	Services	HVAC	Terminal and Package Units	\$ 36	5,381.04 \$	139,667,905.25	2069
ĉ	7	4 Surbeck Services	Services	HVAC	Special HVAC Systems and Equipment	\$ 164	t,749.07 \$	139,832,654.31	2069
ςΩ (	7	4 Surbeck Services	Services	HVAC	Controls and Instrumentation	\$ 52	2,026.02 \$	139,884,680.34	2069
(11)	~	4 Surplus Sales Building	Services	HVAC	Energy Supply	Ş 21	L,498.88 Ş	139,906,179.22	2069
m	7	4 Surplus Sales Building	Services	HVAC	Distribution Systems	\$ 105	5,344.51 \$	140,011,523.73	2070
י (די)	~ `	4 Surplus Sales Building	Services	HVAC	Cooling Generating Systems	\$ • 51	L,498.88 \$	140,033,022.60	2070
.n (	~ ~	4 Sutton Hall	Services	HVAC	Terminal and Package Units	× 1	),215.87 5	140,113,238.48	2070
יי הי	~ ~		Services		Distribution Systems		¢ 26.97.72	140,/33,U88.39	0/07
η (r		4 Sutton Hall A Sutton Hall	Services		טוגנו וטענוטוו סאגרפוווא בהפרמי גווממוע		\$ C7.C2C'	141,090,413.03 141 163 337 15	0/02
1.00	. 4	4 Sutton Hall	Services	HVAC	Cooling Generating Systems		\$ 22.526.0	141.236.260.66	20702
, m	4	4 Tawanka Commons	Services	HVAC	Controls and Instrumentation	\$ 116	5,062.94 \$	141,352,323.61	2070
ŝ	4	4 Tawanka Commons	Services	HVAC	Terminal and Package Units	\$ 212	2,782.06 \$	141,565,105.66	2070
ĉ	7	4 Tawanka Commons	Services	HVAC	Special HVAC Systems and Equipment	\$ 367	7,532.64 \$	141,932,638.30	2070
ŝ	7	4 Tawanka Commons	Services	HVAC	Heat Generating Systems	\$ 1,644	t,225.02 \$	143,576,863.32	2071
ŝ	4	4 Tawanka Commons	Services	HVAC	Energy Supply	\$ 193	3,438.23 \$	143,770,301.55	2071
ŝ	7	4 Turnbull Research Lab	Services	HVAC	Distribution Systems	\$ 82	2,373.24 \$	143,852,674.79	2071
ςŋ	7	4 Turnbull Research Lab	Services	HVAC	Terminal and Package Units	\$ 18	3,491.95 \$	143,871,166.75	2071
m	7	4 Turnbull Research Lab	Services	HVAC	Energy Supply	\$ 16	5,810.87 \$	143,887,977.61	2071
(17) (	~	4 Turnbull Research Lab	Services	HVAC	Cooling Generating Systems	\$ 16	5,810.87 5	143,904,788.48	2071
'n	~ ~	4 University Ineater	Services	HVAC	Energy Supply Lost Constraint Sustants	ج 131 د	\$ 001 E7 \$	144,U36,333.27 144,C50,124,05	1/07
1	·		Services	HVAC	חפמו טפווושו כעכ צווווש ושוושט חפשר	*** *	с / .с.тло;	то, тот, соо, тач.	T 107

Score	System Significance Rank	k Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Proj Cost	ect Pro	ject Cost Running Total	Fiscal Year Complete
Υ.	7	4 Williamson Hall	Services	HVAC	Energy Supply	\$ 74,44	7.24 \$	144,743,582.09	2071
ε	7	4 Woodward Field Concessions	Services	HVAC	Controls and Instrumentation	\$ 3,19(	0.51 \$	144,746,772.60	2071
ε	7	4 Woodward Field Concessions	Services	HVAC	Energy Supply	\$ 5,31.	7.51 \$	144,752,090.11	2071
ε	7	4 Woodward Field Press Box	Services	HVAC	Energy Supply	\$ 19,91(	6.83 \$	144,772,006.93	2071
ŝ	7	4 Woodward Field Press Box	Services	HVAC	Heat Generating Systems	\$ 169,293	3.02 \$	144,941,299.95	2071
ŝ	4	4 Woodward Field Press Box	Services	HVAC	Cooling Generating Systems	\$ 19,91(	6.83 \$	144,961,216.78	2071
ŝ	7	4 Woodward Field Toilets	Services	HVAC	Controls and Instrumentation	\$ 5,063	3.67 \$	144,966,280.45	2071
ε	7	4 Woodward Field Toilets	Services	HVAC	Energy Supply	\$ 8,43	9.45 \$	144,974,719.89	2071
m		5 Aquatics Building	Services	Plumbing	Rain Water Drainage	\$ 24,990	7.01 Ş	144,999,716.90	2071
ε	<u> </u>	5 Aquatics Building	Services	Plumbing	Domestic Water Distribution	\$ 134,983	3.85 \$	145,134,700.76	2072
r <b>n</b> (		5 Art Building	Services	Plumbing	Special Plumbing Systems	\$ 156,13	2.82 5	145,290,833.58	2072
Ś		5 Art Building	Services	Plumbing	Domestic Water Distribution	\$ 301,110	3.30 \$	145,591,946.88	2072
ŝ		5 Art Building	Services	Plumbing	Rain Water Drainage	\$ 55,76	1.72 \$	145,647,708.60	2072
κn (		5 Art Building	Services	Plumbing	Sanitary Waste	5 189,589	9.86 Ş	145,837,298.46	2072
10		5 Cadet Hall	Services	Plumbing	Domestic Water Distribution	5 68,04	1.62 5	145,905,340.08	2072
τ <b>η</b> ι		5 Cadet Hall	Services	Plumbing	Rain Water Drainage	\$ 12,600	0.30 \$	145,917,940.38	2072
ŝ		5 Cadet Hall	Services	Plumbing	Sanitary Waste	\$ 42,84	1.02 \$	145,960,781.40	2072
ŝ		5 Central Services Building	Services	Plumbing	Domestic Water Distribution	\$ 62,858	8.79 \$	146,023,640.19	2072
e	<u> </u>	5 Central Services Building	Services	Plumbing	Plumbing Fixtures	\$ 62,858	8.79 \$	146,086,498.99	2072
ŝ		5 Central Services Building	Services	Plumbing	Rain Water Drainage	\$ 11,64(	0.52 \$	146,098,139.50	2072
ŝ		5 Central Services Building	Services	Plumbing	Sanitary Waste	\$ 39,57	7.76 \$	146,137,717.26	2072
æ		5 Cheney Hall	Services	Plumbing	Rain Water Drainage	\$ 46,41(	0.68 \$	146,184,127.94	2072
e		5 Cheney Hall	Services	Plumbing	Special Plumbing Systems	\$ 129,949	9.91 \$	146,314,077.86	2072
۳ 2		5 Cheney Hall	Services	Plumbing	Sanitary Waste	\$ 157,790	6.33 \$	146,471,874.18	2072
" 15		5 Cheney Hall	Services	Plumbing	Domestic Water Distribution	\$ 250,61	7.69 \$	146,722,491.87	2072
ŝ		5 Communications Center	Services	Plumbing	Domestic Water Distribution	\$ 128,83(	6.24 \$	146,851,328.12	2072
£		5 Communications Center	Services	Plumbing	Rain Water Drainage	\$ 23,858	8.56 \$	146,875,186.68	2072
ŝ		5 Communications Center	Services	Plumbing	Sanitary Waste	\$ 81,119	9.12 \$	146,956,305.80	2072
ŝ		5 Greenhouse Boneyard	Services	Plumbing	Domestic Water Distribution	\$ 4,98(	6.18 \$	146,961,291.97	2072
ŝ		5 Greenhouse Boneyard	Services	Plumbing	Sanitary Waste	\$ 3,139	9.44 \$	146,964,431.42	2072
ŝ		5 Huston Hall	Services	Plumbing	Sanitary Waste	\$ 109,843	2.61 \$	147,074,274.03	2072
ŝ		5 Huston Hall	Services	Plumbing	Rain Water Drainage	\$ 32,30(	6.65 \$	147,106,580.68	2072
£		5 Huston Hall	Services	Plumbing	Plumbing Fixtures	\$ 174,45!	5.91 \$	147,281,036.59	2072
ŝ		5 Huston Hall	Services	Plumbing	Domestic Water Distribution	\$ 174,45	5.91 \$	147,455,492.51	2072
ε		5 Indian Education Center	Services	Plumbing	Domestic Water Distribution	\$ 22,499	9.56 Ş	147,477,992.07	2072
ŝ		5 Isle Hall	Services	Plumbing	Rain Water Drainage	\$ 42,45;	2.88 \$	147,520,444.95	2073
e	<u> </u>	5 Isle Hall	Services	Plumbing	Special Plumbing Systems	\$ 118,868	8.07 \$	147,639,313.02	2073
ŝ		5 Jim Thorpe Fieldhouse	Services	Plumbing	Sanitary Waste	\$ 195,58!	5.81 \$	147,834,898.83	2073
Ś		5 Jim Thorpe Fieldhouse	Services	Plumbing	Domestic Water Distribution	\$ 310,630	6.28 \$	148,145,535.11	2073
τ <b>η</b> ι		5 John F Kennedy Library	Services	Plumbing	Plumbing Fixtures	\$ 1,072,00	2.85 \$	149,217,537.96	2073
τ <b>η</b> ι		5 John F Kennedy Library	Services	Plumbing	Special Plumbing Systems	\$ 555,85	3.33 \$	149,773,391.29	2073
m		5 John F Kennedy Library	Services	Plumbing	Rain Water Drainage	\$ 198,51	9.04 \$	149,971,910.33	2073
ŝ		5 John F Kennedy Library	Services	Plumbing	Domestic Water Distribution	\$ 1,072,003	2.85 \$	151,043,913.18	2074
τ <b>η</b> (	<u>~</u>	5 John F Kennedy Library	Services	Plumbing	Sanitary Waste	5 674,96 <sup>4</sup>	4.78 5	151,718,877.96	2074
τ <b>η</b> ι		5 Kingston Hall	Services	Plumbing	Domestic Water Distribution	\$ 330,13	5.78 \$	152,049,013.74	2074
m		5 Kingston Hall	Services	Plumbing	Rain Water Drainage	5 61,130	6.25 \$	152,110,149.99	2074
Ϋ́		5 Kingston Hall	Services	Plumbing	Sanitary Waste	\$ 207,86	3.28 \$	152,318,013.27	2074
ε		5 Martin Hall	Services	Plumbing	Sanitary Waste	\$ 231,468	8.53 \$	152,549,481.80	2075
т) (	<u></u>	5 Martin Hall	Services	Plumbing	Rain Water Drainage	\$ 68,073	8.97 5	152,617,560.77	2075
n r	~	5 Martin Hall	Services	Plumbing	Plumbing Fixtures	5 367,620	6.48 5	152,985,187.24	20/02
'n		5 Martin Hall	Services	Plumbing	Domestic Water Distribution	1791/95 5	6.48 5	153,352,813.72	C/ N7

Score	Significance Ran	k Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Runnin Total	Fiscal Year Complete
3		5 Music Building	Services	Plumbing	Domestic Water Distribution	\$ 302,907.63	3 \$ 153,655,721.35	2075
с,	-	5 Music Building	Services	Plumbing	Rain Water Drainage	\$ 56,094.00	) \$ 153,711,815.35	2075
с Г		5 Music Building	Services	Plumbing	Sanitary Waste	\$ 190,719.62	2 \$ 153,902,534.97	2075
33	-	5 P.E. Activities Building	Services	Plumbing	Rain Water Drainage	\$ 110,476.73	3 \$ 154,013,011.70	2075
m	-	5 P.E. Activities Building	Services	Plumbing	Domestic Water Distribution	\$ 596,574.35	5 \$ 154,609,586.05	2075
m		5 Pavilion	Services	Plumbing	Rain Water Drainage	5 156,956.85	9 \$ 154,766,542.93	2075
γ		5 PE Classroom Building	Services	Plumbing	Plumbing Fixtures	0.12/,212 خ خ	7 3 154,979,264.00	5/07 520C
n r	-		Services	Plumbing		59,392.72		9/07
		b PE Classroom Bullding	Services	Plumbing	Sanitary Waste Domostic Motor Distribution	2435.45 2435.45	27.262,261,661 ¢ ¢	9/07
n m		o PE Classroom Building 5 Pence Union Building	services Services	Plumbing	Domestic Water Distribution	\$ 1.092.421.9	7 \$ 156.457.735.33	2076
m		5 Pence Union Building	Services	Plumbing	Plumbing Fixtures	\$ 1.092.421.97	7 \$ 157.550.157.30	2077
ŝ		5 Pence Union Building	Services	Plumbing	Rain Water Drainage	\$ 202,300.36	5 \$ 157,752,457.66	2077
ŝ		5 Pence Union Building	Services	Plumbing	Special Plumbing Systems	\$ 566,441.03	3 \$ 158,318,898.68	2077
ŝ	-	5 Pence Union Building	Services	Plumbing	Sanitary Waste	\$ 687,821.26	5 \$ 159,006,719.94	2077
ς.	,	5 President's House	Services	Plumbing	Domestic Water Distribution	\$ 25,297.7(	) \$ 159,032,017.64	2077
m		5 President's House	Services	Plumbing	Sanitary Waste	\$ 15,928.18	3 \$ 159,047,945.82	2077
m	-	5 Radio-TV Building	Services	Plumbing	Rain Water Drainage	\$ 25,110.29	) \$ 159,073,056.11	2077
ω		5 Radio-TV Building	Services	Plumbing	Plumbing Fixtures	\$ 135,595.58	3 \$ 159,208,651.69	2077
m		5 Red Barn	Services	Plumbing	Domestic Water Distribution	\$ 70,051.73	l \$ 159,278,703.40	2077
m		5 Red Barn	Services	Plumbing	Plumbing Fixtures	\$ 70,051.73	1 \$ 159,348,755.11	2077
m		5 Rozell Plant	Services	Plumbing	Special Plumbing Systems	\$ 156,470.35	5 5 159,505,225.46	2077
m		5 Rozell Plant	Services	Plumbing	Sanitary Waste	5 189,999.77	2 \$ 159,695,225.18 2 159,695,225.18	2077
4		S Kozell Plant	Services	Plumbing	Kain Water Urainage	,2.288,cc خ	7 2 159,/51,10/.45	7/07
m 7		5 Science Building	Services	Plumbing	Plumbing Fixtures	5 1,197,006.90	) \$ 160,948,114.35	2078
m r		5 Science Building	Services	Plumbing	Rain Water Drainage	5 221,667.9	5 161,169,782.28 5 152.257 780.15	2078
τı		5 Science Building	Services	Plumbing	Domestic water Distribution	5 I, I97, UUb.9(	J \$ 162,366,789.18	2078
m o		5 Surbeck Services	Services	Plumbing	Domestic Water Distribution	\$ 234,117.1	1 \$ 162,600,906.25	2079
m r		5 Surbeck Services	Services	Plumbing	Plumbing Fixtures	\$ 234,117.12	1 5 162,835,023.40	2079
m (		5 Surbeck Services	Services	Plumbing	Rain Water Drainage	5 43,355.0	2 5 162,878,378.41	2079
m r		5 Surbeck Services	Services	Plumbing	Sanitary Waste	5 147,407.07	7 5 163,025,785.45	2079
νr		o Surpius Sales Building	Services	Plumbing	Sanitary Waste	30,548.JL		6/07
n n	-	o ourplus sales building	Services Services	Plumbing	Rain Water Urainage Diumbing Eisturge	γ TU,/49.44	+ ¢ 163,0/3,063.0/	6/07 02/02
	1	5 Surnius Sales Building	Services	Plumbing	Domestic Water Distribution	\$ 58.046.95	5 163.189.176.98	6702
		5 Tawanka Commons	Services	Plumbing	Domestic Water Distribution	\$ 522,283.2 <sup>1</sup>	5 \$ 163,711,460.23	2079
3		5 Tawanka Commons	Services	Plumbing	Rain Water Drainage	\$ 96,719.12	2 \$ 163,808,179.34	2079
33		5 Tawanka Commons	Services	Plumbing	Sanitary Waste	\$ 328,845.03	2 \$ 164,137,024.36	2079
3	-	5 Tawanka Commons	Services	Plumbing	Plumbing Fixtures	\$ 522,283.25	5 \$ 164,659,307.61	2079
ς.		5 Turnbull Research Lab	Services	Plumbing	Sanitary Waste	\$ 28,578.47	7 \$ 164,687,886.09	2079
m		5 Turnbull Research Lab	Services	Plumbing	Domestic Water Distribution	\$ 45,389.34	t \$ 164,733,275.42	2079
ŝ		5 University Theater	Services	Plumbing	Sanitary Waste	\$ 223,626.17	7 \$ 164,956,901.60	2079
m		5 University Theater	Services	Plumbing	Plumbing Fixtures	\$ 355,170.97	7 \$ 165,312,072.57	2080
m		5 University Theater	Services	Plumbing	Rain Water Drainage	\$ 65,772.40	0 \$ 165,377,844.97	2080
m	-	5 University Theater	Services	Plumbing	Domestic Water Distribution	\$ 355,170.97	7 \$ 165,733,015.95	2080
m	-	5 Williamson Hall	Services	Plumbing	Rain Water Drainage	\$ 37,223.62	2 \$ 165,770,239.57	2080
m r		5 Williamson Hall	Services	Plumbing	Sanitary Waste	\$ 126,560.33 \$	2 5 165,896,799.89 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2080
n r		Williamson Hall	Services	Plumbing	Plumbing Fixtures	× 201,001.5t	7 1105,097,807.45	7080
<u>n</u> n			Services chall	Plumbing Poofing	Domestic Water Distribution	35.700,102 ¢	U.CI8/862/001 ج 0 10.CI8/862/001 خ 3	70802
n m		o biology Storage	Shell	Roofing	r of coverings	\$ 3,108.64	t \$ 166,302,700.81	2080
	_			D		•	· ·	_

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pr Cost	oject Pro	ject Cost Running Total	Fiscal Year Complete
m	9	5 Cheney Hall	Shell	Roofing	Roof Coverings	\$ 148,5	14.19 \$	166,451,215.00	2080
æ	9	5 Cheney Hall	Shell	Roofing	Roof Opening	\$ 92,8	21.36 \$	166,544,036.36	2080
£	9	5 Huston Hall	Shell	Roofing	Projections	\$ 25,8	45.32 \$	166,569,881.69	2080
3	9	5 Huston Hall	Shell	Roofing	Roof Coverings	\$ 103,3	81.28 \$	166,673,262.97	2080
ε	9	5 Isle Hall	Shell	Roofing	Projections	\$ 33,9	62.31 \$	166,707,225.28	2080
93	9	5 Jim Thorpe Fieldhouse	Shell	Roofing	Roof Opening	\$ 115,C	50.47 \$	166,822,275.74	2080
ε	9	Jim Thorpe Fieldhouse	Shell	Roofing	Roof Coverings	\$ 184,C	80.76 \$	167,006,356.50	2080
m	Ę	John F Kennedy Library	Shell	Rooting	Root Opening	5 397,0	38.07 \$	167,403,394.58	2080
ŝ	ę	5 John F Kennedy Library	Shell	Roofing	Roof Coverings	\$ 635,2	\$ 96.09	168,038,655.54	2081
ς τη	e	5 Pavilion	Shell	Roofing	Roof Opening	\$ 313,9	13.77 \$	168,352,569.31	2081
m	e	5 Pavilion	Shell	Roofing	Roof Coverings	\$ 502,2	62.07 \$	168,854,831.38	2081
ŝ	9	5 Showalter Hall	Shell	Roofing	Projections	\$ 91,2	83.00 \$	168,946,114.38	2081
ς τη	e	5 Showalter Hall	Shell	Roofing	Roof Coverings	\$ 365,1	31.98 \$	169,311,246.36	2081
οn ι	υ (	Showalter Hall	Shell	Rooting	Roof Opening	\$ 228,2	07.47 \$	169,539,453.83	2081
n i	، <u>ن</u>	Tawanka Commons	Shell	Rooting	Roof Opening	5 193,4	38.23 5	169,732,892.06	2081
m		University Recreation Center	Shell	Roofing	Roof Coverings	Ş 92,8	18.80 \$	169,825,710.86	2081
00 O		Aquatics Building	Shell	Exterior Closure	Exterior Doors Exterior Mindours	5 29,9 6 170 0	96.41 Ş	169,855,707.27 160 005 601 72	2081
n			311611 61-11			c/C7T ¢	04.40	C / TED (COC)EDT	1902
τι c	~ ٢	Aquatics Building	Shell	Exterior Closure	Exterior Walls	5 289,9 5 646 9	65.3U \$	1/0/2/20/2/03	2802
			Shall	Exterior Closure	Exterior Windows Exterior Mindows	5,040,6 5,020,5	6 10 05 ¢	171 212 A52,432.37	2002
			Sholl		Exterior Variations			171 770 267 00	2002
'n	- ٢	/ Art Bullding	Shell	Exterior Closure	EXTERIOR WOORS	2,00 ¢ 2,00 5	70.61 ¢	171 216 EA7 ED	2002
0 0	- ٢		Sholl	Exterior Closure		۲٬/۵ ۶	¢ 10.67	92.14C,01C,171	2002
47	- ٢		Shell			0 0 0 0 0 0	40.T/ 4	0/.020,030.1/1	2002
n r 7	- ٢		Shell		EXTERIOR WINDUWS	7 2 2 2 2	¢ cc.1c	L/ L/325,443.3U	2002
'n	- ٢	biology storage	Shell	Exterior Closure		2/11 ¢	CE 74 C	171 227 070 07	2002
0 0	- ٢		Shell			т(т с с 1 с 1	5 50 0C	10.610,166,111	2002
ν o	- ٢		shell	Exterior Closure	Exterior Doors Exterior Mindours	L,CL ¢ 2 2 2 5	21.50 > 21.56 >	1/1,353,000.23	2002
0 0			Shall	Exterior Closure Exterior Closure	Exterior Writdows Exterior Malls	ביכט לאון לאון לאון לאון לאון לאון לאון לאון	\$ <u>77</u> 53	171 56A 685 77	2002
		/ Control Services Building	Shall	Exterior Closure	Exterior Windows Exterior Mindows	т′о+т ¢	¢ /+.co	171 675 715 Q6	2002
n (r		Central Services Bunding	Shall	Exterior Closure Exterior Closure	Exterior Williauxs Exterior Malls	5 00,5 135 C	\$ 00 00	171 760 245 G5	2062
	. ~	7 Central Services Building	Shell	Exterior Closure	Exterior Doors	\$ 13.0	68.62 \$	171,774,214,57	2002
i m	2	Cheney Hall	Shell	Exterior Closure	Exterior Doors	5 55,6	92.82 \$	171,829,907.39	2082
æ	2	Communications Center	Shell	Exterior Closure	Exterior Walls	\$ 276,7	59.33 \$	172,106,666.71	2082
ŝ	7	Communications Center	Shell	Exterior Closure	Exterior Doors	\$ 28,6	30.28 \$	172,135,296.99	2082
£	2	Communications Center	Shell	Exterior Closure	Exterior Windows	\$ 124,C	64.53 \$	172,259,361.52	2082
æ	2	7 Greenhouse Boneyard	Shell	Exterior Closure	Exterior Doors	\$ 1,1	08.04 \$	172,260,469.56	2082
£	2	7 Grounds Covered Storage	Shell	Exterior Closure	Exterior Doors	\$ 3,1	15.76 \$	172,263,585.32	2082
æ	2	7 Huston Hall	Shell	Exterior Closure	Exterior Doors	\$ 38,7	67.98 \$	172,302,353.30	2082
3	7	7 Huston Hall	Shell	Exterior Closure	Exterior Windows	\$ 167,9	94.58 \$	172,470,347.88	2082
£	4	7 Isle Hall	Shell	Exterior Closure	Exterior Doors	\$ 20'5	43.46 \$	172,521,291.33	2083
3	2	7 Jim Thorpe Fieldhouse	Shell	Exterior Closure	Exterior Windows	\$ 299,1	31.23 \$	172,820,422.56	2083
ŝ	2	7 Jim Thorpe Fieldhouse	Shell	Exterior Closure	Exterior Doors	\$ 69,0	30.28 \$	172,889,452.85	2083
ŝ	2	7 Kingston Hall	Shell	Exterior Closure	Exterior Walls	\$ 709,1	80.53 \$	173,598,633.37	2083
93	2	7 Kingston Hall	Shell	Exterior Closure	Exterior Doors	\$ 73,3	63.51 \$	173,671,996.88	2083
ŝ	2	7 Kingston Hall	Shell	Exterior Closure	Exterior Windows	\$ 317,9	08.53 \$	173,989,905.41	2083
ŝ	2	7 Martin Hall	Shell	Exterior Closure	Exterior Doors	\$ 81,6	94.77 \$	174,071,600.18	2083
ε	د	7 Martin Hall	Shell	Exterior Closure	Exterior Walls	\$ 789,7	16.09 \$	174,861,316.27	2083
ε	د	7 Martin Hall	Shell	Exterior Closure	Exterior Windows	\$ 354,0	10.68 \$	175,215,326.95	2083
33	2	7 Monroe Hall	Shell	Exterior Closure	Exterior Walls	\$ 672,2	26.14 \$	175,887,553.09	2083

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
ĉ		7 Music Building	Shell	Exterior Closure	Exterior Windows	\$ 291,688.82	\$ 176,179,241.91	2083
ŝ	~	7 Music Building	Shell	Exterior Closure	Exterior Walls	\$ 650,690.42	\$ 176,829,932.33	2083
3	C .	7 Music Building	Shell	Exterior Closure	Exterior Doors	\$ 67,312.80	\$ 176,897,245.14	2083
ŝ		7 One Room School House	Shell	Exterior Closure	Exterior Walls	\$ 17,745.28	\$ 176,914,990.42	2083
ε		7 P.E. Activities Building	Shell	Exterior Closure	Exterior Doors	\$ 132,572.08	\$ 177,047,562.50	2083
ω		7 P.E. Activities Building	Shell	Exterior Closure	Exterior Walls	\$ 1,281,530.02	\$ 178,329,092.52	2084
с		7 P.E. Activities Building	Shell	Exterior Closure	Exterior Windows	\$ 574,479.00	\$ 178,903,571.52	2084
ŝ		7 Pavilion	Shell	Exterior Closure	Exterior Walls	\$ 1,820,699.86	\$ 180,724,271.38	2085
ŝ		7 Pavilion	Shell	Exterior Closure	Exterior Doors	\$ 188,348.27	\$ 180,912,619.65	2085
.03		7 PE Classroom Building	Shell	Exterior Closure	Exterior Windows	\$ 204,842.51	\$ 181,117,462.16	2085
ε	. ~	7 PE Classroom Building	Shell	Exterior Closure	Exterior Doors	\$ 47,271.35	\$ 181,164,733.51	2085
ε		7 Pence Union Building	Shell	Exterior Closure	Exterior Walls	\$ 2,346,684.11	\$ 183,511,417.62	2086
ε		Pence Union Building	Shell	Exterior Closure	Exterior Doors	\$ 242,760.43	\$ 183,754,178.05	2086
m		7 Pence Union Building	Shell	Exterior Closure	Exterior Windows	\$ 1,051,961.89	\$ 184,806,139.94 \$	2086
m r	- r	/ President's Garage	Shell	Exterior Closure	Exterior Doors	\$ 842.33 6 7 55000	5 184,806,982.27 5 184,810,532.27	2086
<u>, u</u>	• F	/ President's Garage	Shell	Exterior Closure Exterior Closure	Exterior Willigues Exterior Malls	دں.000,c د ۲۵۵۵/۵	¢ 18/81877/88	2060
ח ר		7 President's Bouge	Shell	Exterior Closure	Exterior Walls	\$ 54.343.20	\$ 184.873.118.08	2030
Ē		7 President's House	Shell	Exterior Closure	Exterior Doors	\$ 5,621.71	\$ 184,878,739.79	2086
ŝ		7 Radio-TV Building	Shell	Exterior Closure	Exterior Walls	\$ 291,279.37	\$ 185,170,019.16	2087
3	1	7 Radio-TV Building	Shell	Exterior Closure	Exterior Doors	\$ 30,132.35	\$ 185,200,151.51	2087
ŝ		7 Radio-TV Building	Shell	Exterior Closure	Exterior Windows	\$ 130,573.52	\$ 185,330,725.03	2087
ŝ	~	7 Red Barn	Shell	Exterior Closure	Exterior Walls	\$ 150,481.44	\$ 185,481,206.47	2087
۲ 3	<u>.</u>	7 Science Building	Shell	Exterior Closure	Exterior Windows	\$ 1,152,673.30	\$ 186,633,879.78	2087
я 8	-	7 Showalter Hall	Shell	Exterior Closure	Exterior Walls	\$ 1,323,603.33	\$ 187,957,483.10	2088
ε		7 Surbeck Services	Shell	Exterior Closure	Exterior Doors	\$ 52,026.02	\$ 188,009,509.13	2088
ε		7 Surbeck Services	Shell	Exterior Closure	Exterior Walls	\$ 502,918.21	\$ 188,512,427.33	2088
ς		7 Sutton Hall	Shell	Exterior Closure	Exterior Walls	\$ 422,956.40	\$ 188,935,383.73	2088
ς ι		7 University Theater	Shell	Exterior Closure	Exterior Doors	\$ 78,926.88	\$ 189,014,310.61	2088
m		7 University Theater	Shell	Exterior Closure	Exterior Walls	\$ 762,959.83	\$ 189,777,270.44	2088
ε		7 University Theater	Shell	Exterior Closure	Exterior Windows	\$ 342,016.49	\$ 190,119,286.93	2089
m	~	7 Williamson Hall	Shell	Exterior Closure	Exterior Walls	\$ 431,794.00	\$ 190,551,080.93	2089
m		7 Williamson Hall	Shell	Exterior Closure	Exterior Windows	\$ 193,562.84	\$ 190,744,643.77	2089
τι <u>π</u>	~ r	/ Williamson Hall	Shell	Exterior Closure	Exterior Doors	خ 44,668.35 خ 2100 E1	\$ 190,789,312.11 \$ 100,702,502,62	2089
η η	- 0	/ WOOWAIN FIELD COLICESSIOLIS	Shell	Subarstructura	Exterior DOOIS Roof Construction	το.υστ.ο 2025 03	¢ 190801 82855	2002
n m	. 00	8 Biology Storage	Shell	Superstructure	Floor Construction	\$ 13.988.89	\$ 190.815.817.44	2089
m		8 Cadet Hall	Shell	Superstructure	Roof Construction	\$ 120,962.88	\$ 190,936,780.32	2089
ЭЭ	3	8 Cadet Hall	Shell	Superstructure	Floor Construction	\$ 181,444.31	\$ 191,118,224.63	2089
ŝ	30	8 Childcare Facility	Shell	Superstructure	Floor Construction	\$ 211,487.32	\$ 191,329,711.95	2089
ŝ	3	8 Greenhouse Boneyard	Shell	Superstructure	Roof Construction	\$ 8,864.31	\$ 191,338,576.26	2089
ε	30	8 Huston Hall	Shell	Superstructure	Roof Construction	\$ 310,143.84	\$ 191,648,720.10	2089
ŝ	3	8 Huston Hall	Shell	Superstructure	Floor Construction	\$ 465,215.73	\$ 192,113,935.83	2089
ŝ	~	8 Isle Hall	Shell	Superstructure	Roof Construction	\$ 407,547.65	\$ 192,521,483.49	2090
m	~ ~	8 Martin Hall	Shell	Superstructure	Floor Construction	\$ 980,337.20	\$ 193,501,820.69	2090
'n	~	8 One Koom School House	Shell	Superstructure	Floor Construction	\$ 22,028.63	\$ 193,523,849.32	0607
m	~	8 Pence Union Building	Shell	Superstructure	Floor Construction	\$ 2,913,125.06	\$ 196,436,974.37	2091
m r	~ 0	8 Pence Union Building	Shell	Superstructure	Roof Construction	\$ 1,942,083.47 \$	\$ 198,379,057.85 \$ 108,385 766 48	2092
υď	5 04	8 President's Garage 8 Dracidant's Garaga	Sheil	Supersuructure Superstructure	ROOT COTISTI ACTION Floor Construction	دט.סכז,ט خ 10 107 95	40.000,000,000 ξ 2 108 305 001 42	2002
ιm		8 President's House	Shell	Superstructure	Floor Construction	\$ 67,460.52	\$ 198,463,364.95	2092
	_		_	-	_		-	-

c	System			- - - -		Estimated Project	Project Cost Running	Fiscal Year
score	Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Cost	Total	Complete
3	~	3 President's House	Shell	Superstructure	Roof Construction	\$ 44,973.68	\$ 198,508,338.63	2092
8	~	3 Red Barn	Shell	Superstructure	Roof Construction	\$ 124,536.37	\$ 198,632,875.00	2092
<del>.</del>	~ `	8 Red Barn	Shell	Superstructure	Floor Construction	\$ 186,804.55	\$ 198,819,679.55	2092
£	~	3 Senior Hall	Shell	Superstructure	Floor Construction	\$ 892,586.57	\$ 199,712,266.12	2092
<del></del>	~ (	Showalter Hall	Shell	Superstructure	Floor Construction	\$ 1,643,093.76 \$	\$ 201,355,359.88 \$ 202,150,257,70	2093
n c		S Sriowalter Hall	Shell	superstructure		ς 1,095,393.50 γ	\$ 202,57,000 \$	2003
v) c		s Surplus Sales Building	Shell	superstructure	Roof Construction	ج 103,194.62 د 151 701 02	202,533,950.40	2094
n o		s surplus sales building	Shell	superstructure		5 I54,/91.93	5 2U2,/U8,/42.33	2094
vi c		8 Williamson Hall	Shell	superstructure		5 536,U2U.13	5 203,244,752.45 5 303 370 385 51	2094
<u> </u>		s wooawara riela concessions a Art Building	Interiore	ouperstructure Stairrases	KOOI CONSURUCHON Stair Einichae	CU.42C,CZ ¢	1C.002/U/2/202 ¢	2034
<u> </u>	. 0	Discounting Discount Hall	Interiors	staircases Staircases	Stair Finishes	5 7.560.18	\$ 203,311,303,72 \$	76UC
n m	. 01	Cadet Hall	Interiors	Staircases	Stair Construction	\$ 42,841.02	\$ 203,354,144.75	2094
3	01	Communications Center	Interiors	Staircases	Stair Finishes	\$ 14,315.14	\$ 203,368,459.88	2094
3	51	Indian Education Center	Interiors	Staircases	Stair Construction	\$ 14,166.39	\$ 203,382,626.28	2094
С.	51	9 Isle Hall	Interiors	Staircases	Stair Finishes	\$ 25,471.73	\$ 203,408,098.01	2094
e.	51	9 Isle Hall	Interiors	Staircases	Stair Construction	\$ 144,339.80	\$ 203,552,437.81	2094
τ.	5,	9 Martin Hall	Interiors	Staircases	Stair Finishes	\$ 40,847.39	\$ 203,593,285.19	2094
e.	5,	9 Martin Hall	Interiors	Staircases	Stair Construction	\$ 231,468.53	\$ 203,824,753.72	2094
Ċ.	5	Music Building	Interiors	Staircases	Stair Finishes	\$ 33,656.40	\$ 203,858,410.12	2094
	51	Pence Union Building	Interiors	Staircases	Stair Construction	\$ 687,821.26	\$ 204,546,231.38	2094
e	51	Pence Union Building	Interiors	Staircases	Stair Finishes	\$ 121,380.22	\$ 204,667,611.60	2094
3	5,	9 Radio-TV Building	Interiors	Staircases	Stair Finishes	\$ 15,066.18	\$ 204,682,677.78	2094
<del>ر</del>	51	3 Showalter Hall	Interiors	Staircases	Stair Construction	\$ 387,952.73	\$ 205,070,630.51	2095
.9	51	J Tawanka Commons	Interiors	Staircases	Stair Construction	\$ 328,845.02	\$ 205,399,475.53	2095
τ. Γ	5	J Tawanka Commons	Interiors	Staircases	Stair Finishes	\$ 58,031.47	\$ 205,457,507.00	2095
τ.	5,	University Theater	Interiors	Staircases	Stair Finishes	\$ 39,463.44	\$ 205,496,970.44	2095
ε	5,	9 Williamson Hall	Interiors	Staircases	Stair Finishes	\$ 22,334.17	\$ 205,519,304.61	2095
Ω		9 Williamson Hall	Interiors	Staircases	Stair Construction	\$ 126,560.32	\$ 205,645,864.93	2095
œ	1(	Aquatics Building	Interiors	nterior Construction	Specialties	\$ 74,991.03	\$ 205,720,855.96	2095
ε	1(	0 Art Building	Interiors	nterior Construction	Specialties	\$ 167,285.16	\$ 205,888,141.12	2095
e.	1(	0 Art Building	Interiors	nterior Construction	Interior Doors	\$ 256,503.92	\$ 206,144,645.03	2095
	1(	0 Cadet Hall	Interiors	nterior Construction	Specialties	\$ 37,800.90	\$ 206,182,445.93	2095
S	1(	D Cadet Hall	Interiors	nterior Construction	Interior Doors	\$ 57,961.38	\$ 206,240,407.31	2095
m	1(	Cadet Hall	Interiors	nterior Construction	Fixed and Moveable Partitions	\$ 131,043.12	\$ 206,371,450.43	2095
m	1(	Central Services Building	Interiors	nterior Construction	Fixed and Moveable Partitions	\$ 121,061.38	\$ 206,492,511.81	2095
<u> </u>	1	) Cheney Hall	Interiors	nterior Construction	Specialties	\$ 139,232.04	\$ 206,631,743.85	2095
m	1(	) Cheney Hall	Interiors	nterior Construction	Fixed and Moveable Partitions	\$ 482,671.10	\$ 207,114,414.95	2095
-	1, 1,	Cheney Hall	Interiors	nterior Construction	Interior Doors	5 213,489.14 5 100 740 20	5 207,327,904.09	2095
n	лт <sup>-</sup>		lilleriors			ς 109,749.39	201,451,103 ¢	CEU2
m d	1	) Huston Hall	Interiors	nterior Construction	Interior Doors	\$ 148,610.59	\$ 207,586,264.07	2096
n u	H	Huston Hall	Interiors		Specialities	5 96,919.95	\$ 207,683,184.02	9607
<u>, n</u>	H	Huston Hall	Interiors	nterior Construction	Fixed and Moveable Partitions	5 335,989.16	\$ 208,019,1/3.18	9602
n n	H C		Interiors			× 195,283.25 مورد 195,283.25	\$ 208,214,450.43	9602
<u>v</u> c	T	J ISIE Hall Jim Thorno Fioldhouro	Interiors	atorior Construction	Fixed and ivioveable Partitions	441,509.96	208,620,600 ¢	9602
n d	H	Jum I norpe Flelanouse	Interiors		Interior Doors	ې 204,b10.U8 ۲۵۲ ۲۵۲ ۲۵	\$ 208,920,582.48	9602
n n	IC IC	J John F Renneαγ Library 1 Martin Hall	Interiors	nterior Construction nterior Construction	specialities Interior Doors	II./ککرکک کې 20 کا ۲۶ ک	209,516,139.59 خ خ 200,829 ع07 87	2096
n r	UT T						10.202/222/202.6	0602
<u>v</u> c	T	J Marcin Hall	Interiors	atorior Construction	Fixed and Noveable Partitions	\$ /U8,U21.35	210,537,324.23 ¢	1602
<u> </u>	i F	ן Music Building אוס ב- אר+וייו+ומב Building	Interiors	nterior Construction	Interior Doors Intervier Doors		+0.000,007,012 ¢	7000
2	1	J P.E. ACUVIUES DUIIUIIIS		תופרוטו כטואנוטנוטניי		1211000 C	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1007

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
ŝ	10	P.E. Activities Building	Interiors	Interior Construction	Specialties	\$ 331,430.18	3 \$ 211,634,979.78	2097
m	10	l Pavilion	Interiors	Interior Construction	Interior Doors	\$ 722,001.6	9 \$ 212,356,981.47	2097
m	10	Pavilion	Interiors	Interior Construction	Specialties	\$ 470,870.6	5 \$ 212,827,852.13	2098
m m	10	PE Classroom Building Pence Union Building	Interiors Interiors	Interior Construction Interior Construction	Interior Doors Interior Doors	\$ 181,206.83 \$ 930.581.66	3 5 213,009,058.96 5 \$ 213,939,640,62	2098
n m	10	Pence Union Building	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 2,103,923.7	9 \$ 216,043,564.40	2099
ŝ	10	President's Garage	Interiors	Interior Construction	Interior Doors	\$ 3,228.9	3 \$ 216,046,793.33	2099
3	10	Radio-TV Building	Interiors	Interior Construction	Specialties	\$ 75,330.8	7 \$ 216,122,124.20	2099
e.	10	Radio-TV Building	Interiors	Interior Construction	Interior Doors	\$ 115,507.3	4 \$ 216,237,631.55	2099
ε	10	Science Building	Interiors	Interior Construction	Specialties	\$ 665,003.8(	0 \$ 216,902,635.35	2099
m	10	Science Building	Interiors	Interior Construction	Interior Doors	\$ 1,019,672.5	2 \$ 217,922,307.87	2100
m	10	Science Building	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 2,305,346.6	1 \$ 220,227,654.47	2101
m r	10	Showalter Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 1,186,678.9	l \$ 221,414,333.38	2101
m n	10	) Showalter Hall	Interiors	Interior Construction	Interior Doors	5 524,877.20 5 120.065.01	) \$ 221,939,210.58	1012
n n		I Surbeck Services	Interiors	Interior Construction Interior Construction	specialities Interior Doors	0.200,051 ¢		1016
n <del>r</del>		l Surplus Sales Building	Interiors	Interior Construction	Fixed and Moveable Partitions	5 111 794 18	3 5 227,206,706.72 3 5 227,380,507,90	1012
	10	Sutton Hall	Interiors	Interior Construction	Specialties	\$ 109,385.28	3 \$ 222,489,888.17	2101
3	10	University Theater	Interiors	Interior Construction	Specialties	\$ 197,317.20	0 \$ 222,687,205.37	2102
3	10	University Theater	Interiors	Interior Construction	Interior Doors	\$ 302,553.0	t \$ 222,989,758.41	2102
ς.	10	Williamson Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 387,125.6	7 \$ 223,376,884.09	2102
ŝ	10	Woodward Field Concessions	Interiors	Interior Construction	Interior Doors	\$ 12,230.28	3 \$ 223,389,114.36	2102
m	10	Woodward Field Concessions	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 27,651.00	5 \$ 223,416,765.42	2102
س 5	11	Art Building	Interiors	Interior Finishes	Wall Finishes	\$ 278,808.6	1 \$ 223,695,574.03	2102
ω 0	11	Biology Storage	Interiors	Interior Finishes	Floor Finishes	\$ 8,354.4	3 \$ 223,703,928.51	2102
m (	11	Biology Storage	Interiors	Interior Finishes	Ceiling Finishes	\$ 4,274.3	3 \$ 223,708,202.89	2102
n r	11	. Cadet Hall	Interiors	Interior Finishes	Ceiling Finishes	5 55,441.3 5 108 262 5	2 5 223,/63,644.21	2012
n n	1 5	Ladet Hall	Interiors	Interior Finishes Interior Einishes	Floor Finishes Wall Einishes	5.202,302.502.50 52,001 52	3 \$ 223,872,006.79	2012
n <del>r</del>		Central Services Building	Interiors	Interior Finishes	Waii Finishes Wall Finishes	5 58,202,50	5 773 993 710 88	2102
	11	Chenev Hall	Interiors	Interior Finishes	Wall Finishes	\$ 232.053.4	1 \$ 224.225.264.29	2102
	11	Childcare Facility	Interiors	Interior Finishes	Floor Finishes	\$ 126,304.9	3 \$ 224,351,569.22	2102
ĉ	11	Communications Center	Interiors	Interior Finishes	Wall Finishes	\$ 119,292.8	2 \$ 224,470,862.04	2102
ŝ	11	. Huston Hall	Interiors	Interior Finishes	Floor Finishes	\$ 277,837.20	0 \$ 224,748,699.24	2102
m	11	Huston Hall	Interiors	Interior Finishes	Wall Finishes	\$ 161,533.2	5 \$ 224,910,232.49	2102
m	11	Indian Education Center	Interiors	Interior Finishes	Wall Finishes	5 20,832.9	3 \$ 224,931,065.42	2102
		, Isle Hall Lick Holl	Interiors	Interior Finishes	Celling Finishes	5 186,/92.6	225,11/,858.09 کے 12 12 22 20 22 20 20 E0	2103
n <del>r</del>		libie maii Iohn F Kennedy Library	Interiors	Interior Finishes	Waii Finishes Wall Finishes	\$ 992 595 2	5 226,322,122,30	2103
	11	Kingston Hall	Interiors	Interior Finishes	Wall Finishes	\$ 305.681.28	3 \$ 226.628.398.99	2103
3	11	Martin Hall	Interiors	Interior Finishes	Wall Finishes	\$ 340,394.8	3 \$ 226,968,793.87	2103
ŝ	11	. Martin Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 299,547.49	9 \$ 227,268,341.36	2103
£	11	. Martin Hall	Interiors	Interior Finishes	Floor Finishes	\$ 585,479.2	l \$ 227,853,820.57	2104
m	11	Music Building	Interiors	Interior Finishes	Wall Finishes	\$ 280,470.0	2 \$ 228,134,290.59	2104
m	11	One Room School House	Interiors	Interior Finishes	Wall Finishes	\$ 7,648.8	3 \$ 228,141,939.42	2104
m	11	P.E. Activities Building	Interiors	Interior Finishes	Wall Finishes	5 552,383.6	5 \$ 228,694,323.07	2104
m r	11	Pavilion	Interiors	Interior Finishes	Ceiling Finishes	5 690,610.3	1 5 229,384,933.38	2104
n n	1 -	Pavilion العطرية المراقعة الم	Interiors	Interior HINISNES	Floor Finisnes ۱۸۸۰-۱۱ Finishos	5 I,549,829.23	ל   א לא לא לא אין אין אין אין אין אין אין אין אין אי	501C
י ת	11	Penre Union Building	Interiors	Interior Finishes	Wall Finishes Wall Finishes	\$ 1.011.501.8	232.531.048.94	2106
ι Π	- 11	Pence Union Building	Interiors	Interior Finishes	Ceiling Finishes	\$ 890,121.5	3 \$ 233,421,170.52	2106

	Significance Rank					Cost		Total	CONTRACTO
	3 11	Pence Union Building	Interiors	Interior Finishes	Floor Finishes	\$ 1,739;	783.15 \$	235,160,953.68	2107
	. 11	President's Garage	Interiors	Interior Finishes	Floor Finishes	، ور د	36.69 \$	235,166,990.37	2107
	11	President S Garage Dadio_TV Buildiog	Interiors	nterior Finishes starior Einishes	Celling Finisties Wall Einishas	γ 3,1 γ	\$ 90.04 \$ 90.05	235,1/U/U/8.9U	2012
	3 11	Red Barn	Interiors	interior Finishes	Ceiling Finishes	\$ 27,0	79.17 \$	235,352,709.53	2107
	3 11	Red Barn	Interiors	Interior Finishes	Floor Finishes	\$ 111,	563.83 \$	235,464,273.37	2107
	3 11	Rozell Plant	Interiors	Interior Finishes	Wall Finishes	\$ 279,	111.34 \$	235,743,684.71	2107
	3 11	Science Building	Interiors	Interior Finishes	Wall Finishes	\$ 1,108,3 \$	339.71 \$	236,852,024.42	2107
	11	science building Showalter Hall	Interiors	nterior Finishes nterior Finishes	riuur rinisnes Wall Finishes	- τ,9U0,1 570 - 5	544.34 2 518 70 5	236,726,306.745	2108
	3 11	Showalter Hall	Interiors	nterior Finishes	Floor Finishes	\$ 981.	292.19 \$	240,310,179.64	2109
	3 11	Surplus Sales Building	Interiors	interior Finishes	Floor Finishes	\$ 92,	145.19 \$	240,402,624.83	2109
	3 11	Surplus Sales Building	Interiors	interior Finishes	Ceiling Finishes	\$ 47,	297.54 \$	240,449,922.36	2109
	3	Williamson Hall	Interiors	Interior Finishes	Wall Finishes	\$ 186,	[18.11 \$	240,636,040.47	2109
	3 12	Williamson naii Art Building	Interiors Equipment and Furnishings	Equipment and Furnishings	Celling Finisnes Moveable Furnishings (Capital Funded Only)	\$ 103, \$ 33,4	57.03 \$	240,/99,824.40 240.833.281.44	2109
	3 12	Art Building	Special Construction	Special Construction	Integrated Constr. & Special Constr. Systems	\$ 111,	523.44 \$	240,944,804.88	2109
	3 12	Art Building	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 111,	523.44 \$	241,056,328.31	2109
	3 12	Cadet Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 7,	560.18 \$	241,063,888.49	2109
	3 12	Cadet Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 17,(	540.42 \$	241,081,528.92	2109
	3 12	Central Services Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 6,9	984.31 \$	241,088,513.23	2109
	3 12	Communications Center	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 33,	101.99 \$	241,121,915.22	2109
	2 IZ	Communications Center	Equipment and Furnishings	Equipment and Furnishings	Noveable Furnishings (capital Funded Unly)	5 14.	\$ 97.218	241,136,230.35 741 242 246 4E	2100
51	3 12	computing and Engineering sciences blug Hiiston Hall	Equipment and Furnishings Fouinment and Furnishings	Equipment and Furnishings Equipment and Furnishings	rixea rurnisrings ana equipment Moveable Furnishings (Canital Funded Only)	2007 5	\$ 00 283	241,342,318.13 241 361 702 14	2109
I	3 12	Kingston Hall	Equipment and Furnishings	Tauioment and Furnishings	Fixed Furnishings and Equipment	\$ 85.1	\$ 90.76	241.447.292.89	2109
	3 12	Kingston Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 36,0	581.75 \$	241,483,974.65	2109
	3 12	Martin Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 40,	347.39 \$	241,524,822.03	2109
	3 12	Monroe Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 81,:	l30.75 \$	241,605,952.78	2109
	3 12	Music Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 33,0	556.40 \$	241,639,609.18	2109
	3 12	P.E. Activities Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 66,	286.04 \$	241,705,895.22	2109
	3 12	Pavilion	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 219,	739.65 \$	241,925,634.87	2109
	21 IZ	PE Classroom Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	5 23,0	ζ /d.čξ0 γ /r. γου	241,949,270.54	2109
	3 12	Pence Union Builaing Radio-TV Building	Equipment and Furnishings Fouinment and Furnishings	Equipment and Furnishings Fourinment and Furnishings	Moveable Furnishings (capital Funded Only) Moveable Furnishings (Canital Funded Only)	5, 15, 15, 15, 15, 15, 15, 15, 15, 15, 1	80.22 >	242,070,500.76 242,085,716,94	2109
	3 12	Science Building	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 310,3	335.12 \$	242,396,052.06	2109
	3 12	Science Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 133,0	00.76 \$	242,529,052.82	2110
	3 12	Showalter Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 68,	162.24 \$	242,597,515.07	2110
	3 12	Surbeck Services	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 26,0	013.01 \$	242,623,528.08	2110
	3 12	Surplus Sales Building	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	s v	149.66 Ş	242,629,977.74	2110
	3	Turnbull Research Lab	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Unly)	5 5 7 7 7	)43.26 5	242,635,021.00	0112
	3 12	l urnbuli Kesearcri Lab I Inivarsity Theater	Special Construction Foundant and Furnishings	special construction Finitioment and Furnishings	ותנפגדמניט באפנימי אין אינייא אינייא אינייא איניייא אואיעפאוף דוירייגאוישג (Capital Funded Only)	יחד ל 30 ז	5 10.01 5	742,691 295.31	2110
	3	University Theater	Eauipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 92,0	81.36 \$	242,783,376.67	2110
	3 12	Williamson Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 22,	34.17 \$	242,805,710.85	2110
	3 12	Williamson Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 52,:	l13.07 \$	242,857,823.92	2110
	3 13	Biology Boat Garage	Substructure	Foundations	Slab on Grade	\$ 17,9	948.78 \$	242,875,772.69	2110
	3 13	Biology Storage	Substructure	Foundations	Standard Foundations	\$ . (%)	160.19 \$	242,883,932.88	2110
	. 13	Biology Storage	Substructure	Foundations	Slab on Grade	5 2 2 2 2 2	140.13 5	242,889,373.01	2110
	CT 13	Cadet Hall רבע אילי ריקון באוויט אילי ריקון באוויט אילי באוויס בער באוויס בער באוויס בער באוויס בער באוויס בער באוויס בער ב	Substructure	Foundations	Siab on שרמפ ניייילטייל בייוילאיייה	(n) v	\$ 201.00	242,929,924.02 242,920,224	0116
	3 13	cauet nau Childcare Facility	Substructure	Foundations	Standard Foundations	\$ 123,	د 242.54 ¢ 367.60 \$	243,189,144.81	2110

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pro Cost	ject Proj	ect Cost Running Total	Fiscal Year Complete
ŝ	13	Childcare Facility	Substructure	Foundations	Slab on Grade	\$ 82,24	15.07 \$	243,271,389.89	2110
ς τ	13	Huston Hall	Substructure	Foundations	Slab on Grade	\$ 180,91	7.24 \$	243,452,307.13	2110
ŝ	13	Isle Hall	Substructure	Foundations	Standard Foundations	\$ 356,6C	04.19 Ş	243,808,911.32	2110
<b>с</b> , и	13	Isle Hall lim Thoma Eicldhousa	Substructure	Foundations	Slab on Grade start on Grade	\$ 237,73 ¢ 237,73	86.14 Ş	244,046,647.46 244,268 788 78	2110
n m	13	Monroe Hall	Substructure	Foundations	Standard Foundations	5 486.78	5 97.46 S	244.855.573.24	2110
i m	13	Monroe Hall	Substructure	Foundations	Slab on Grade	\$ 324,52	2.99 \$	245,180,096.22	2111
Э.	13	President's Garage	Substructure	Foundations	Slab on Grade	\$ 3,93	\$ \$	245,184,027.09	2111
æ	13	President's House	Substructure	Foundations	Standard Foundations	\$ 39,35	\$1.97 \$	245,223,379.06	2111
ŝ	13	Red Barn	Substructure	Foundations	Slab on Grade	\$ 72,64	16.22 \$	245,296,025.28	2111
ε	13	Red Barn	Substructure	Foundations	Standard Foundations	\$ 108,96	59.32 \$	245,404,994.60	2111
n n	13	Senior Hall Survius Salos Building	Substructure	Foundations	Standard Foundations stab on Grado	5 520,67 6 20,67	75.52 Ş	245,925,670.12 245.085 866 08	21112
n m	13	Surplus Sales Building Surplus Sales Building	Substructure	Foundations	siab on Grade Standard Foundations	5T/09 \$	5 29 \$	245,985,800.98 246.076.162.28	21112
n m	13	Williamson Hall	Substructure	Foundations	Slab on Grade	\$ 208,45	5.29 \$	246,284,614.56	2111
æ	13	Woodward Field Concessions	Substructure	Foundations	Slab on Grade	\$ 14,85	39.03 \$	246,299,503.60	2111
2	, н	Aquatics Building	Services	Fire Protection	Fire Protection Specialties	\$ 9,95	)8.80 \$	246,309,502.40	2111
2	1	Art Building	Services	Fire Protection	Fire Protection Specialties	\$ 22,30	)4.69 \$	246,331,807.09	2111
2	1	Chemical Storage	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 2,15	51.15 \$	246,333,958.24	2111
2	त <sup>,</sup>	Childcare Facility	Services	Fire Protection	Fire Protection Specialties	\$ 5,87	74.65 \$	246,339,832.89	2111
2 0		Childcare Facility	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 41,12 \$	2.54 Ş	246,380,955.43	2111
2 0		Computing and Engineering Sciences Bldg Computing and Engineering Sciences Bldg	Services	Fire Protection Fire Protection	Fire Protection Sprinkler Systems Fire Protection Specialties	\$ 412,17 \$ 58.85	\$ 62.5	246,793,131.01 246 852 013 24	1112
1 0	+	companing and engineering occures and Hargreaves Hall	Services	Fire Protection	Fire Protection Specialties	\$ 26.67	7.46 \$	246.878.690.70	2111
- ∼ 52		Hargreaves Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 186,74	12.22 \$	247,065,432.92	2111
2	T.	Huston Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 90,45	8.62 \$	247,155,891.54	2111
2	<del>,</del>	Huston Hall	Services	Fire Protection	Special Fire Protection Systems	\$ 12,92	2.66 \$	247,168,814.20	2111
2	н. Т	Jim Thorpe Fieldhouse	Services	Fire Protection	Fire Protection Specialties	\$ 23,01	.0.10 \$	247,191,824.30	2111
2	T	John F Kennedy Library	Services	Fire Protection	Fire Protection Specialties	\$ 79,40	17.62 \$	247,271,231.92	2111
2		John F Kennedy Library	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 555,85	i3.33 \$	247,827,085.25	2112
2	<del>,</del>	John F Kennedy Library	Services	Fire Protection	Special Fire Protection Systems	\$ 79,40	)7.62 \$	247,906,492.87	2112
2 0		Monroe Hall	Services	Fire Protection	Special Fire Protection Systems	\$ 23,18	80.21 \$	247,929,673.08	2112
77		Monroe Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	5 162,26	01.49 5	248,091,934.58	2112
7 0	+ +	Pavilioli Dence Union Building	Services	Fire Protection	Fire Protection Specialities Fire Protection Sprinkler Systems	5 566 47	× 0/.7	246,134,71,158 36	2112
1 0	1	Radio-TV Building	Services	Fire Protection	Fire Protection Specialties	\$ 10,04	14.12 \$	248,731,202.48	2112
2	- -	Red Barn	Services	Fire Protection	Fire Protection Specialties	\$ 5,18	39.02 \$	248,736,391.49	2112
2	1	Rozell Plant	Services	Fire Protection	Fire Protection Specialties	\$ 22,35	;2.91 \$	248,758,744.40	2112
2	Ч	Rozell Plant	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 156,47	'0.35 \$	248,915,214.75	2112
2	-	Senior Hall	Services	Fire Protection	Fire Protection Specialties	\$ 24,75	)4.07 \$	248,940,008.83	2112
2	-	Senior Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 173,55	8.51 \$	249,113,567.34	2112
5 0	<del>.</del>	Showalter Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 319,49	0.48 \$	249,433,057.82	2112
2 0		Showalter Hall	Services	Fire Protection	Fire Protection Specialties	5 45,64	11.50 5	249,478,699.32	2112
7 7	<del>.</del>	Substation	Services	Fire Protection	Fire Protection Specialties	5 1,15 6 121 20	2.40 Ş	249,479,851.72 240.601 245 78	2112
4 6	+ +	Surphie Salas Building	Services	Fire Protection	Fire Fruceution Sprinker Systems Fire Drotection Specialties	2C/TZT ¢	4.00 2	243,001,243.70 240 605 545 55	2112
2 1	1	Sutton Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 102.09	2.93 \$	249.707.638.48	2112
2	F	Sutton Hall	Services	Fire Protection	Fire Protection Specialties	\$ 14,58	34.70 \$	249,722,223.19	2112
2	1	Tawanka Commons	Services	Fire Protection	Fire Protection Specialties	\$ 38,68	87.65 \$	249,760,910.84	2112
2	1	University Recreation Center	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 81,21	.6.45 \$	249,842,127.29	2112
0 0		University Recreation Center	Services	Fire Protection	Fire Protection Specialties	\$ 11,60 27,86	02.35 \$	249,853,729.64	2112
7	-	Woodward Field Press Box	Services	Fire Protection	Fire Protection Sprinkler Systems	22'17 5	<   dc.55	249,881,613.19	7117

Score	Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Proj Cost	iect Proje	ct Cost Running Total	Fiscal Year Complete
2		2 Computing and Engineering Sciences Bldg	Services	Vertical Transportation	Elevators and Lifts	\$ 294,41	1.12 \$	250,176,024.31	2113
2		2 Kingston Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 122,27	2.51 \$	250,298,296.82	2113
2		2 Monroe Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 115,90	1.06 \$	250,414,197.88	2113
2		2 Senior Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 123,97	0.36 \$	250,538,168.24	2113
7 0		2 Lawanka Commons 2 Carnenter Storage	Services	Vertical Transportation Electrical	Elevators and Litts Fleetrical Service and Distribution	5 193,43 د 32 02	8.23 > 1.87 >	250,/31,606.47 250 765 538 37	2113
2		S Carpenter Storage	Services	Electrical	Lighting and Branch Wiring	\$ 33.93	1.87 S	250.799.470.21	2113
2		3 Chemical Storage	Services	Electrical	Lighting and Branch Wiring	\$ 8,14	3.65 \$	250,807,613.86	2113
2		3 Chemical Storage	Services	Electrical	Electrical Service and Distribution	\$ 8,14	3.65 \$	250,815,757.51	2113
2		3 Chemical Storage	Services	Electrical	<b>Communication and Security Systems</b>	\$ 5,22	4.23 \$	250,820,981.73	2113
2		3 Cheney Hall	Services	Electrical	Electrical Service and Distribution	\$ 491,95	.3.22 \$	251,312,934.96	2113
2		3 Cheney Hall	Services	Electrical	Lighting and Branch Wiring	\$ 491,95	3.22 \$	251,804,888.18	2113
2		3 Childcare Facility	Services	Electrical	Communication and Security Systems	\$ 99,86	9.02 \$	251,904,757.20	2113
7 6		Childcare Facility	Services	Electrical	Electrical Service and Distribution	5 15,67 2 155,67	8.17 \$	252,060,435.37 252,216,413 E4	2113
2		o cumucare racumy 3 Computing and Engineering Sciences Bldg	Services	electrical	Lighting and Branch Wiring Lighting and Branch Wiring	4/9/201 ¢ \$ 560.37 \$	8.94 S	253.776.492.47	2113
2		3 Computing and Engineering Sciences Bldg	Services	Electrical	Electrical Service and Distribution	\$ 1.560.37	8.94 \$	255.336.871.41	2115
2		3 Electric Storage	Services	Electrical	Lighting and Branch Wiring	\$ 15,08	0.83 \$	255,351,952.24	2115
2		3 Electric Storage	Services	Electrical	Electrical Service and Distribution	\$ 15,08	0.83 \$	255,367,033.07	2115
2		3 Hazardous Waste Transfer Facility	Services	Electrical	Electrical Service and Distribution	\$ 12,52	5.47 \$	255,379,558.54	2115
2	,	B Hazardous Waste Transfer Facility	Services	Electrical	Lighting and Branch Wiring	\$ 12,52	5.47 \$	255,392,084.01	2115
5		3 Indian Education Center	Services	Electrical	Electrical Service and Distribution	\$ 44,16	5.81 \$	255,436,249.82	2115
2		3 Jim Thorpe Fieldhouse	Services	Electrical	Communication and Security Systems	\$ 391,17	1.62 \$	255,827,421.44	2115
~ 5		3 Monroe Hall	Services	Electrical	Lighting and Branch Wiring	\$ 614,27	5.62 \$	256,441,697.07	2115
<sup>~~</sup>		8 Monroe Hall	Services	Electrical	Electrical Service and Distribution	\$ 614,27	5.62 \$	257,055,972.69	2115
7		3 One Room School House	Services	Electrical	Electrical Service and Distribution	\$ 16,21	5.52 \$	257,072,188.21	2115
2		3 One Room School House	Services	Electrical	Lighting and Branch Wiring	\$ 16,21	5.52 \$	257,088,403.73	2115
0 0		B PE Classroom Building	Services	Electrical	Electrical Service and Distribution	\$ 417,56	3.57 Ş	257,505,967.30	2116
0		B Pence Union Building	Services	Electrical	Electrical Service and Distribution	\$ 2,144,38	3.79 Ş	259,650,351.09	2116
		Practice Field Toilets	Services	Electrical	Electrical Service and Distribution	5 12,34 6	1.71 Ş	259,662,692.79	2116
		2 Practice Field Tollets	Services	electrical	Lighting and Branch Wiring Communication and Sociuity Surfame	× 12,34 د 21 05	¢ 1/.1.	259,070,034.50 05.050 05	9112
10		a President S House 3 Radio-TV Building	Services Services	electrical Floctrical	Communative and Distribution	ү Э.1,03 С. 766 16	4 00 0	233,700,030.00 759 973 059 95	2115
2		3 Red Barn	Services	Electrical	Lighting and Branch Wiring	\$ 137.50	8.91 5	260.110.568.85	2117
2		3 Red Barn	Services	Electrical	Electrical Service and Distribution	\$ 137,50	8.91 \$	260,248,077.76	2117
2		3 Senior Hall	Services	Electrical	Lighting and Branch Wiring	\$ 657,04	.2.91 \$	260,905,120.67	2117
2	,	3 Senior Hall	Services	Electrical	Electrical Service and Distribution	\$ 657,04	.2.91 \$	261,562,163.58	2117
2		3 Showalter Hall	Services	Electrical	Special Electrical Systems	\$ 228,20	7.47 \$	261,790,371.06	2117
2		3 Showalter Hall	Services	Electrical	Electrical Service and Distribution	\$ 1,209,49	9.61 \$	262,999,870.67	2118
2		3 Solid Waste Transfer Station	Services	Electrical	Lighting and Branch Wiring	\$ 10,22	6.69 Ş	263,010,097.36	2118
7		Solid Waste Transfer Station	Services	Electrical	Electrical Service and Distribution	\$ 10,22	6.69 \$	263,020,324.05	2118
		S Substation	Services	Electrical	Lighting and Branch Wiring	\$ 30,53	8.68	263,050,862.73	2118
V r		s substation	Services	electrical	Electrical Service and Distribution	5C(UE 40 E0	8.08 \$	263,U81,4U1.42	8112 8116
10		a Survius Sales Ruilding	Services	erecu ica Floctrical	Communication and Security Systems	ес'ет с 23 00	6 20 5	203,100,332.27	2118
2		8 Sutton Hall	Services	Electrical	Lighting and Branch Wiring	\$ 386.49	4.65 \$	263,560.583.11	2118
2		3 Sutton Hall	Services	Electrical	Electrical Service and Distribution	\$ 386,49	4.65 \$	263,947,077.76	2118
2		3 Woodward Field Press Box	Services	Electrical	Electrical Service and Distribution	\$ 105,55	9.18 \$	264,052,636.94	2118
2		3 Woodward Field Toilets	Services	Electrical	Electrical Service and Distribution	\$ 44,72	9.07 \$	264,097,366.01	2118
2		8 Woodward Field Toilets	Services	Electrical	Lighting and Branch Wiring	\$ 44,72	9.07 \$	264,142,095.08	2118
N 7		4 Aquatics Building	Services	HVAC	Heat Generating Systems	\$ 424,94	9.16 Ş	264,567,044.24	2118
v	-	4 Aquatics Building	Services	HVAC	Special HVAC Systems and Equipment	5 34,30	8.b3 >	264,662,032.88	QTT7

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated F Cost	Project Pr	oject Cost Running Total	Fiscal Year Complete
2	7	1 Aquatics Building	Services	HVAC	Cooling Generating Systems	\$ 49	,994.02 \$	264,712,026.89	2118
2	7	1 Aquatics Building	Services	HVAC	Controls and Instrumentation	\$ 29	,996.41 \$	264,742,023.30	2118
2	4	1 Childcare Facility	Services	HVAC	Distribution Systems	\$ 143	,928.87 \$	264,885,952.17	2118
2	7	4 Computing and Engineering Sciences Bldg	Services	HVAC	Energy Supply	\$ 294	,411.12 \$	265,180,363.29	2119
7 7	~	1 Computing and Engineering Sciences Bldg	Services	HVAC	Heat Generating Systems	5 2,502	,494.58 5	267,682,857.87	2120
7 7		4 Computing and Engineering Sciences Bldg Committing and Engineering Sciences Bldg	Services	HVAC	Lerminal and Package Units	\$ 323 \$	\$ 57.248,	268,006,/10.11	0212
7 0		ו להחומים להחומים המשפח וואיז להחומים ברופה לא היה וואיז להחומים וואיז היה היה היה היה היה היה היה היה היה ה	Services	HVAC	Controls and Instrumentation Cooling Generation Sustems		,040.08 612.20 ¢	87.0C5,581,802	0212
7	. 7	+ nuscon nan 1 Isle Hall	Services		coomig denerating systems Distribution Systems	ې 04 خ 416	\$ 05.610(	268 664 008 29	2120
2	4	1 John F Kennedv Librarv	Services	HVAC	Heat Generating Systems	\$ 3.374	823.74 \$	272.038.832.03	2121
2	4	1 Monroe Hall	Services	HVAC	Terminal and Package Units	\$ 127	,491.17 \$	272,166,323.20	2121
2	7	4 Monroe Hall	Services	HVAC	Controls and Instrumentation	\$	,540.64 \$	272,235,863.84	2121
2	7	1 Monroe Hall	Services	HVAC	Energy Supply	\$ 115	,901.06 \$	272,351,764.90	2121
2	Y.	1 One Room School House	Services	HVAC	Terminal and Package Units	\$ \$	,365.49 \$	272,355,130.39	2121
2	7	4 One Room School House	Services	HVAC	Heat Generating Systems	\$ 26	,006.02 \$	272,381,136.41	2121
2	7	4 One Room School House	Services	HVAC	Energy Supply	¢	,059.53 \$	272,384,195.94	2121
2	7	1 One Room School House	Services	HVAC	Controls and Instrumentation	\$ 1	,835.72 \$	272,386,031.66	2121
2	7	1 One Room School House	Services	HVAC	Cooling Generating Systems	Ş.	,059.53 \$	272,389,091.19	2121
2	~ `	1 One Room School House	Services	HVAC	Distribution Systems	\$ 14	,991.71 \$	272,404,082.90	2121
2	~ `	1 P.E. Activities Building	Services	HVAC	Special HVAC Systems and Equipment	\$ 419	,811.56 Ş	272,823,894.45	2122
7	~	1 P.E. Activities Building	Services	HVAC	Terminal and Package Units	Ş 243	,048.80 5	273,066,943.26	2122
2	~ `	1 President's House	Services	HVAC	Distribution Systems	\$ 45	,910.63 \$	273,112,853.89	2122
7	-	t President's House	Services	HVAC	Cooling Generating Systems	איע 1	369.52 \$	2/3,122,223.41	2122
~ 7 5	~	1 President's House	Services	HVAC	Controls and Instrumentation	<u></u>	,621.71 Ş	273,127,845.12	2122
4	7	1 President's House	Services	HVAC	Energy Supply	\$ ·	,369.52 5	273,137,214.64	2122
2	~	1 President's House	Services	HVAC	Special HVAC Systems and Equipment	Ş 17	,802.08 \$	273,155,016.72	2122
5	7	1 President's House	Services	HVAC	Terminal and Package Units	\$	,306.47 \$	273,165,323.19	2122
2	7	1 Red Barn	Services	HVAC	Controls and Instrumentation	\$ 15	,567.05 \$	273,180,890.23	2122
2	~ `	1 Red Barn	Services	HVAC	Cooling Generating Systems	\$ 25	,945.08 \$	273,206,835.31	2122
0	~	1 Red Barn	Services	HVAC	Distribution Systems	\$ 127	,130.87 5	273,333,966.18	2122
7	7	1 Red Barn	Services	HVAC	Terminal and Package Units	5 28	,539.58 5	273,362,505.77	2122
0		1 Red Barn	Services	HVAC	Heat Generating Systems	\$ 220	,533.16 \$	273,583,038.92	2122
7	~	1 Red Barn	Services	HVAC	Energy Supply	\$ 25	,945.08 Ş	273,608,984.00	2122
2 2	~ ~	1 Senior Hall	Services	HVAC	Distribution Systems	5 607	,454.76 Ş	274,216,438.76	2122
7 7	-	4 Senior Hall	Services	HVAC	lerminal and Package Units	5 130	307.40 \$	2/4,352,8Ub.1b	2717
ч <del>с</del>		+ Senior Hall	Services	HVAC	Reat Generating Systems Controls and Instrumontation	сс∩'т ¢	γ 40.03 γ γγ γος	27.400,004,012	2712
1 0	. 4	1 Senior Hall	Services			در 122	970.36 S	275 604 906 83	2123
2	4	1 Solid Waste Transfer Station	Services	HVAC	Terminal and Package Units	\$	122.52 \$	275,607,029.35	2123
2	4	1 Solid Waste Transfer Station	Services	HVAC	Heat Generating Systems	\$ 16	,401.29 \$	275,623,430.64	2123
2	7	1 Solid Waste Transfer Station	Services	HVAC	Special HVAC Systems and Equipment	\$	,666.17 \$	275,627,096.81	2123
2	7	1 Solid Waste Transfer Station	Services	HVAC	Controls and Instrumentation	\$ 1	,157.74 \$	275,628,254.55	2123
2	7	1 Solid Waste Transfer Station	Services	HVAC	Cooling Generating Systems	\$ 1	,929.56 \$	275,630,184.11	2123
2	7	1 Surbeck Services	Services	HVAC	Heat Generating Systems	\$ 737	,035.33 \$	276,367,219.45	2123
2	7	1 Surbeck Services	Services	HVAC	Distribution Systems	\$ 424	,879.18 \$	276,792,098.62	2123
5	7	1 Surbeck Services	Services	HVAC	Cooling Generating Systems	\$ 80	,710.04 \$	276,878,808.66	2123
2	~	1 University Recreation Center	Services	HVAC	Terminal and Package Units	\$ 63	,812.92 \$	276,942,621.58	2123
2	~ `	1 University Recreation Center	Services	HVAC	Heat Generating Systems	\$ 493	,099.87 \$	277,435,721.46	2123
2 2	~ ~	1 University Recreation Center	Services	HVAC	Distribution Systems	5 284	,257.56 5	277,719,979.02	2124
7 0	~ ~	University Recreation Center	Services	HVAC	Cooling Generating Systems	۵ ۲ ۲	د د/.LTU, ۲ عر ۲۰۰۹	11.UEE,111,112	7124
4 <u>c</u>		4 University Recreation Center	Services	HVAC	Controls and instrumentauon בממנים HVAC Svetame and Equinment	γ γ		20.161,218,112 20.020777	7124
1		+ חנוות אות הביויביו	ספועורבא	IVAC	Special in VAL Systems and Equipment	077 6	~   7C.222(	+T.U2U,C2C,112	4777

Score	System Significance Ran	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pr Cost	oject Pr	oject Cost Running Total	Fiscal Year Complete
2		4 Woodward Field Press Box	Services	HVAC	Terminal and Package Units	\$ 21,	908.51 \$	277,944,928.65	2124
2		4 Woodward Field Press Box	Services	HVAC	Distribution Systems	\$ 97,	592.44 \$	278,042,521.09	2124
2		4 Woodward Field Press Box	Services	HVAC	Controls and Instrumentation	\$ 11,	950.10 \$	278,054,471.19	2124
2		5 Childcare Facility	Services	Plumbing	Domestic Water Distribution	\$ 79,	307.75 \$	278,133,778.93	2124
2	-	5 Childcare Facility	Services	Plumbing	Rain Water Drainage	\$ 14,	686.62 \$	278,148,465.55	2124
2		5 Childcare Facility	Services	Plumbing	Sanitary Waste	\$ 49,	934.51 \$	278,198,400.06	2124
2 7		5 Childcare Facility	Services	Plumbing	Plumbing Fixtures	5 79,	307.75 5	278,277,707.81	2124
7 7		Computing and Engineering Sciences Bldg Commuting and Engineering Sciences Bldg	Services	Plumbing	Domestic Water Distribution Diumbing Eisturge	(94) \$		2/9/0/2/61/.8/ 770 967 577 07	7124 7174
4 0		J Computing and Engineering Sciences Bldg	Services	Plumbing	riumbing rixures Rain Water Drainage	, 747 S	\$ 910.010	280 014 733 48	2124
2		Computing and Engineering Sciences Bldg	Services	Plumbing	Sanitary Waste	\$ 500.	498.94 \$	280.515.232.42	2125
2		5 Computing and Engineering Sciences Bldg	Services	Plumbing	Special Plumbing Systems	\$ 412,	175.59 \$	280,927,408.00	2125
2		5 Hazardous Waste Transfer Facility	Services	Plumbing	Domestic Water Distribution	\$ 6,	380.90 \$	280,933,788.90	2125
2		5 Hazardous Waste Transfer Facility	Services	Plumbing	Plumbing Fixtures	\$ 6,	380.90 \$	280,940,169.80	2125
2		5 Hazardous Waste Transfer Facility	Services	Plumbing	Sanitary Waste	\$ 4,	017.60 \$	280,944,187.41	2125
2		5 Indian Education Center	Services	Plumbing	Sanitary Waste	\$ 14,	166.39 \$	280,958,353.80	2125
2		5 Indian Education Center	Services	Plumbing	Rain Water Drainage	\$ 4,	166.59 \$	280,962,520.39	2125
2	-	5 Indian Education Center	Services	Plumbing	Plumbing Fixtures	\$ 22,	499.56 \$	280,985,019.95	2125
2	. '	5 Monroe Hall	Services	Plumbing	Plumbing Fixtures	\$ 312,	932.88 \$	281,297,952.83	2125
2	-	5 Monroe Hall	Services	Plumbing	Rain Water Drainage	\$ 57,	950.53 \$	281,355,903.36	2125
5	-	5 Monroe Hall	Services	Plumbing	Domestic Water Distribution	\$ 312,	932.88 \$	281,668,836.23	2125
2		5 Monroe Hall	Services	Plumbing	Sanitary Waste	\$ 197,	031.82 \$	281,865,868.05	2125
2	- '	5 One Room School House	Services	Plumbing	Sanitary Waste	\$ S	201.20 \$	281,871,069.26	2125
2 5		5 One Room School House	Services	Plumbing	Domestic Water Distribution	\$ 8,	260.74 \$	281,879,329.99	2125
∾ 55	-	5 One Room School House	Services	Plumbing	Plumbing Fixtures	\$	260.74 \$	281,887,590.73	2125
2	-	5 President's House	Services	Plumbing	Plumbing Fixtures	\$ 25,	297.70 \$	281,912,888.43	2125
2	-	5 Radio-TV Building	Services	Plumbing	Sanitary Waste	\$ 85,	375.00 \$	281,998,263.42	2125
2	-	5 Radio-TV Building	Services	Plumbing	Domestic Water Distribution	\$ 135,	595.58 \$	282,133,859.00	2125
2	-	5 Rozell Plant	Services	Plumbing	Domestic Water Distribution	\$ 301,	764.25 \$	282,435,623.25	2125
2	-	5 Rozell Plant	Services	Plumbing	Plumbing Fixtures	\$ 301,	764.25 \$	282,737,387.50	2126
2		5 Senior Hall	Services	Plumbing	Plumbing Fixtures	\$ 334,	719.99 \$	283,072,107.49	2126
5	-	5 Senior Hall	Services	Plumbing	Sanitary Waste	\$ 210,	749.63 \$	283,282,857.12	2126
2	-	5 Senior Hall	Services	Plumbing	Rain Water Drainage	\$ 61,	985.18 \$	283,344,842.30	2126
7	-	5 Senior Hall	Services	Plumbing	Domestic Water Distribution	\$ 334,	719.99 \$	283,679,562.29	2126
5	-	5 Solid Waste Transfer Station	Services	Plumbing	Plumbing Fixtures	\$	209.82 \$	283,684,772.11	2126
2		5 Solid Waste Transfer Station	Services	Plumbing	Sanitary Waste	Ś.	280.26 Ş	283,688,052.37	2126
7		5 Solid Waste Transfer Station	Services	Plumbing	Domestic Water Distribution	\$ \$	209.82 Ş	283,693,262.19	2126
7 7		5 Sutton Hall	Services	Plumbing	Plumbing Fixtures	5 196,	893.51 Ş	283,890,155.70	2126
7 7		5 Sutton Hall	Services	Plumbing	Sanitary Waste	\$ 123, 6	309.99 2011	284,014,125.69	2126
7			Services	Plumoing	Domestic water Distribution	401 ×	¢ 10.598	284,211,019.19	2126
7 7		5 Sutton Hall	Services	Plumbing	Kain Water Drainage	5 36,	461.76 \$	284,247,480.95	2126
7 7		University Recreation Center	Services	Plumbing	Special Plumbing Systems	× 81,	216.45 × 216.45	284,328,697.40	2126
ч <del>с</del>			Services	Plumbing		γ 20,	4 27.70	264,42/,31/.30	9212 0712
7 7		o University Recreation Center	Services	Plumping	Rain Water Urainage Diumbing Eisturge	(62 ¢	< /8.c00	284,456,323.26 284,420,523.26	9717
4 <del>-</del>		Duilly and the control of the contro	Convices		Promostic Mater Distribution	00T ¢	¢ c/.Tc	701 760 505 71	9616
1 0	-	5 [University Recreation Center	Services	Plumbing	Sanitary Waste	5 98.	619.98 S	284,868,206,69	2126
5		5 Woodward Field Press Box	Services	Plumbing	Domestic Water Distribution	\$ 53.	775.43 \$	284.921.982.12	2126
2		5 Woodward Field Press Box	Services	Plumbing	Plumbing Fixtures	\$ 53,	775.43 \$	284,975,757.55	2126
2		5 Woodward Field Press Box	Services	Plumbing	Rain Water Drainage	\$ 6	958.41 \$	284,985,715.96	2126
2		5 Woodward Field Press Box	Services	Plumbing	Sanitary Waste	\$ 33,	858.61 \$	285,019,574.57	2127
2		5 Woodward Field Toilets	Services	Plumbing	Rain Water Drainage	\$ 4,	219.72 \$	285,023,794.29	2127

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Proje Cost	ict Projec	ct Cost Running Total	Fiscal Year Complete
2	5	Woodward Field Toilets	Services	Plumbing	Sanitary Waste	\$ 14,347	.06 \$ 2	285,038,141.35	2127
2	2	Woodward Field Toilets	Services	Plumbing	Plumbing Fixtures	\$ 22,786	.51 \$ 2	285,060,927.86	2127
2	2	Woodward Field Toilets	Services	Plumbing	Domestic Water Distribution	\$ 22,786	i.51 \$ 2	285,083,714.37	2127
2	6	Aquatics Building	Shell	Roofing	Projections	\$ 19,997	.61 \$ 2	285,103,711.98	2127
2	9	Aquatics Building	Shell	Roofing	Roof Coverings	\$ 79,990	1.43 \$ 2	285,183,702.42	2127
2	9	Aquatics Building	Shell	Roofing	Roof Opening	\$ 49,994	02 \$ 2	285,233,696.43	2127
2	9	Art Building	Shell	Roofing	Roof Coverings	\$ 178,437	.51 \$ 2	285,412,133.95	2127
2	9	Art Building	Shell	Roofing	Projections	\$ 44,609	.38 \$ 2	285,456,743.33	2127
2	9	Art Building	Shell	Roofing	Roof Opening	\$ 111,523	44 \$ 2	285,568,266.77	2127
2	9	Biology Boat Garage	Shell	Roofing	Roof Coverings	\$ 10,256	.44 \$ 2	285,578,523.21	2127
2	9	Biology Boat Garage	Shell	Roofing	Projections	\$ 2,564	.11 \$ 2	285,581,087.32	2127
2	9	Cadet Hall	Shell	Roofing	Roof Opening	\$ 25,200	1.60 \$ 2	285,606,287.92	2127
5	9	Cadet Hall	Shell	Roofing	Roof Coverings	\$ 40,320	.96 \$ 2	285,646,608.88	2127
0 0	0	Cadet Hall	Shell	Roofing	Projections	\$ 10,080 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.24 \$ 2	285,656,689.12	2127
2 1	0	Carpenter Storage	Shell	Rooting	Projections	5 2,560 5 10.23	1.90 \$ 2 5 \$ 0 5 \$ 2	285,659,250.02	72127
N C		Carpenter storage	Shell	Rooning Poofiee		ج IU,243 ف		00.547,600,632	/717 2017
ч r		Central Services building	shell	Rooting Boofing	Root Opening	182,62 ¢ د	2 ¢ 50	285,092,//4.03	7212
7 1		Central Services Building Central Services Building	shell	Boofing	Rool Coverings Proiections	ج 21,249 د 21,249	4 00. 7 7 11	265,730,024.29	7212
1 0		Certual Services burianing Chemical Storage	shell	Roofing	Projections	210'e ¢	4 T T T T T T T T T T T T T T T T T T T	85 730 051 37	7212
10		Criennical Storage Chemical Storage	Shell	Roofing	Projections Roof Coverines	410 ¢	46 \$ 20.	25.105,55742 409 78	7127
1 0		Chemical Storage	Shell	Roofing	Roof Onening	γ <sup>2,130</sup> γ		85 743 946 37	7127
7 1	9	Cheney Hall	Shell	Roofing	Projections	\$ 37.128	55 \$ \$	85.781.074.86	2127
. 2	9	Childcare Facility	Shell	Roofing	Projections	\$ 11.749	30 5 2	85.792.824.16	2127
56	9	Childcare Facility	Shell	Roofing	Roof Coverings	\$ 46,997	19 \$ 2	85.839.821.35	2127
5	9	Childcare Facility	Shell	Roofing	Roof Opening	\$ 29,373	.24 \$ 2	285,869,194.58	2127
- 7	9	Communications Center	Shell	Roofing	Projections	\$ 19,086	.85 S 2	285,888,281.44	2127
7	9	Communications Center	Shell	Roofing	Roof Opening	\$ 47,717	.13 \$ 2	285,935,998.56	2127
2	9	Communications Center	Shell	Roofing	Roof Coverings	\$ 76,347	.41 \$ 2	286,012,345.97	2127
2	9	Electric Storage	Shell	Roofing	Projections	\$ 1,138	.18 \$ 2	286,013,484.14	2127
2	9	Electric Storage	Shell	Roofing	Roof Coverings	\$ 4,552	70 \$ 2	286,018,036.85	2127
2	9	Greenhouse Science	Shell	Roofing	Roof Coverings	\$ 3,647	.20 \$ 2	286,021,684.05	2127
2	9	Greenhouse Science	Shell	Roofing	Projections	\$ 911	.80 \$ 2	286,022,595.85	2127
2	9	Grounds Covered Storage	Shell	Roofing	Roof Coverings	\$ 8,308	:.68 \$ 2	286,030,904.53	2127
2	9	Grounds Covered Storage	Shell	Roofing	Projections	\$ 2,077	.17 \$ 2	286,032,981.70	2127
2	9	Hazardous Waste Transfer Facility	Shell	Roofing	Roof Coverings	\$ 3,781	27 \$ 2	286,036,762.97	2127
5	9	Hazardous Waste Transfer Facility	Shell	Roofing	Projections	\$ 945	.32 \$ 2	286,037,708.29	2127
7 1	9	Huston Hall	Shell	Roofing	Roof Opening	\$ 64,613	30 \$ 2	286,102,321.59	2127
7 1		Indian Education Center	Shell	Kooting	Projections	5 3,333 6	7 × 17.	286,105,654.86	7212
7 1		Indian Education Center	Shell	KooTing	Root Opening	\$ 8,333 6	× 1	286,113,988.03	7212
ч r		lingian Equication Center	shell	Rooting Boofing		5 T2,333		280,127,321.11 206 172 241 20	7212
7 0		Jim i norpe Fleianouse John E Kannadvi Lihrarvi	Shell	Roofing	Projections	40,020 ¢ 158.815	2 ¢ 61.1	286,227,156,50	7212
10		Joint Neinteay Library Kingston Hall	Shell	Roofing	Projections		- v - v - v	200122,120.24	7212
10		kingston Hall	Shell	Roofing	Projections Boof Onening		2 X 12	286 503 338 05	7177
10	9	Kingston Hall	Shell	Roofing	Roof Coverines	\$ 195.636	2 2 2 20	286.698.974.07	2127
	9	Monroe Hall	Shell	Roofing	Roof Opening	\$ 115,901		26,814,875,13	2127
- 7	9	Monroe Hall	Shell	Roofing	Roof Coverings	\$ 185.441	71 \$ 2	87.000.316.84	2127
- 7	9	Monroe Hall	Shell	Roofing	Projections	\$ 46,360	.43 \$ 2	287,046,677.27	2127
7	9	Music Building	Shell	Roofing	Projections	\$ 44,875	.20 \$ 2	287,091,552.47	2127
2	9	Music Building	Shell	Roofing	Roof Coverings	\$ 179,500	.82 \$ 2	287,271,053.29	2127
2	6	Music Building	Shell	Roofing	Roof Opening	\$ 112,188	:00 \$ 2	287,383,241.30	2127

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Runnii Total	g Fiscal Year Complete
2	)	6 P.E. Activities Building	Shell	Roofing	Projections	\$ 88,381.3	9 \$ 287,471,622.6	3 2127
2	Ļ	6 P.E. Activities Building	Shell	Roofing	Roof Coverings	\$ 353,525.5	5 \$ 287,825,148.2	3 2128
2	Ļ	6 P.E. Activities Building	Shell	Roofing	Roof Opening	\$ 220,953.4	5 \$ 288,046,101.6	9 2128
2	ţ	6 Pavilion	Shell	Roofing	Projections	\$ 125,565.5	2 \$ 288,171,667.2	2128
0 0	_ `	6 PE Classroom Building	Shell	Roofing	Projections	\$ 31,514.2	3 5 288,203,181.4	1 2128
77	- 1	b PE Classroom Building	Shell	Rooting Booting	Roof Coverings	5 126,056.9 5 404 500 7	3 5 288,329,238.3	2128
7 0		o Perce Origin buriaring 6 Radio-TV Burilding	Shell	Roofing	Roof Coverings	\$ 404,000.7	0.650,657,602 ¢ 1	2120
- 2		6 Radio-TV Building	Shell	Roofing	Projections	\$ 20.088.2	3 5 288.834.280.2	2128
2	,	6 Radio-TV Building	Shell	Roofing	Roof Opening	\$ 50,220.5	3 \$ 288,884,500.8	2128
2	)	6 Red Barn	Shell	Roofing	Roof Opening	\$ 25,945.0	3 \$ 288,910,445.9	2128
2	Ļ	6 Red Barn	Shell	Roofing	Roof Coverings	\$ 41,512.1	2 \$ 288,951,958.C	t 2128
2	ţ	6 Red Barn	Shell	Roofing	Projections	\$ 10,378.0	3 \$ 288,962,336.0	7 2128
2		6 Rozell Plant	Shell	Roofing	Projections	\$ 44,705.8	2 \$ 289,007,041.8	2128
0 0	2	6 Rozell Plant	Shell	Roofing	Roof Coverings	\$ 178,823.2 \$	5 5 289,185,865.1 5 289,185,865.1	2128
7 7			Shell	Rooting Boofing		C.P0//111 < <	3.629,797,89,297,600 3.629,797,200,500	3212 9676
7 0		o Senior Hall 6 Senior Hall	Shell	Roofing	rou Opening Projections	ς Δ0 588 1	2 289,421,000.U	4 2120
7 1		6 Senior Hall	Shell	Roofing	Roof Coverings	\$ 198.352.5	5 289.669.540.7	2128
2	Ļ	6 Solid Waste Transfer Station	Shell	Roofing	Roof Coverings	\$ 3,087.3	) \$ 289,672,628.C	3 2128
2	)	6 Solid Waste Transfer Station	Shell	Roofing	Roof Opening	\$ 1,929.5	5 \$ 289,674,557.6	t 2128
2	Ļ	6 Sutton Hall	Shell	Roofing	Roof Coverings	\$ 116,677.6	t \$ 289,791,235.2	3 2128
2	ŗ	6 Sutton Hall	Shell	Roofing	Roof Opening	\$ 72,923.5	2 \$ 289,864,158.8	2128
5	f.	6 University Recreation Center	Shell	Roofing	Roof Coverings	\$ 92,818.8	) \$ 289,956,977.6	2128
∼ 57	-	6 University Theater	Shell	Roofing	Projections	\$ 52,617.9	2 \$ 290,009,595.5	2129
2	)	6 University Theater	Shell	Roofing	Roof Opening	\$ 131,544.8	0 \$ 290,141,140.3	2129
2	-	6 University Theater	Shell	Roofing	Roof Coverings	\$ 210,471.6	9 \$ 290,351,612.0	2129
2	_	6 Visitor Center	Shell	Roofing	Roof Opening	\$ 5,619.7	t \$ 290,357,231.7	2129
2	-	6 Visitor Center	Shell	Roofing	Roof Coverings	\$ 8,991.5	9 \$ 290,366,223.3	5 2129
2		6 Woodward Field Press Box	Shell	Roofing	Projections	\$ 7,966.7	3 \$ 290,374,190.0	2129
5 0	_ `	6 Woodward Field Press Box	Shell	Roofing	Roof Coverings	\$ 31,866.9	2 \$ 290,406,057.0	2129
2 0	_ (	0 Woodward Field Press Box	Shell	Rooting	Root Opening	5 19,916.8	3 5 290,425,973.8	2129
7 0	- `	b Woodward Field Tollets	Shell	Kooting	Koot Coverings	1.503,51 خ م	2 290,439,476.5	4 2129
7 6	_ 1	b Wooawara Field Toilets 6 Woodward Field Toilets	Shell	Roofing	koor Opening Droiertions	φ φ,459.4 φ 375.7	2 290,447,910.3 2 5 290,451,292	9212
1 0		Z Carbenter Storage	Shell	Exterior Closure	Exterior Walls	37.132.9	5 290.488.425.1	2129
2		7 Carpenter Storage	Shell	Exterior Closure	Exterior Doors	\$ 3,841.3	1 \$ 290,492,266.5	2129
2		7 Chemical Storage	Shell	Exterior Closure	Exterior Windows	\$ 3,995.0	0 \$ 290,496,261.5	2129
2		7 Chemical Storage	Shell	Exterior Closure	Exterior Walls	\$ 8,911.9	2 \$ 290,505,173.4	2129
2		7 Chemical Storage	Shell	Exterior Closure	Exterior Doors	\$ 921.9	2 \$ 290,506,095.3	t 2129
2		7 Cheney Hall	Shell	Exterior Closure	Exterior Walls	\$ 538,363.8	9 \$ 291,044,459.2	t 2129
2		7 Childcare Facility	Shell	Exterior Closure	Exterior Windows	\$ 76,370.4	2 \$ 291,120,829.6	5 2129
2		7 Childcare Facility	Shell	Exterior Closure	Exterior Walls	\$ 170,364.7	3 \$ 291,291,194.4	5 2129
2		7 Electric Storage	Shell	Exterior Closure	Exterior Walls	\$ 16,503.5	5 \$ 291,307,698.0	2129
7 (	i i	/ Electric Storage	Shell	Exterior Closure	Exterior Doors	5 1,707.2 5 E 026 7	291,309,405.2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2129
7 6		/ Greenhouse Science	Shell	Exterior Closure	Exterior Windows Exterior Malls	7.076/C 5 5/07/0		9212
10		/ Greenhouse Science	Shell	Exterior Closure	Exterior Vans Exterior Doors	\$ 1.367.7	7 041 379 970 7	2129
- 7		7 Grounds Covered Storage	Shell	Exterior Closure	Exterior Windows	\$ 13,501.6	1 \$ 291,343,422.3	2129
2		7 Grounds Covered Storage	Shell	Exterior Closure	Exterior Walls	\$ 30,118.9	3 \$ 291,373,541.3	t 2129
2		7 Hargreaves Hall	Shell	Exterior Closure	Exterior Walls	\$ 773,646.2	3 \$ 292,147,187.6	2129
2		7 Hazardous Waste Transfer Facility	Shell	Exterior Closure	Exterior Walls	\$ 13,707.1	2 \$ 292,160,894.7	t 2129

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
5	7	Hazardous Waste Transfer Facility	Shell	Exterior Closure	Exterior Doors	\$ 1,417.9	\$ 292,162,312.72	2129
0 0		Huston Hall	Shell	Exterior Closure	Exterior Walls	\$ 374,757.1	292,537,069.84	2130
	7	Indian Education Center	Shell	Exterior Closure	Exterior Windows	5 21,666.2	5 292,558,736.09	2130
(1) (		Indian Education Center	Shell	Exterior Closure	Exterior Walls	\$ 48,332.40 \$	) \$ 292,607,068.49	2130
7 7		John F Kennedy Library	Shell	Exterior Closure	Exterior Windows	0.092.299.0	5 293.644.367.43	2130
- 7		John F Kennedy Library	Shell	Exterior Closure	Exterior Doors	\$ 238,222.8	5 293,882,590.28	2130
2	7	John F Kennedy Library	Shell	Exterior Closure	Exterior Walls	\$ 2,302,820.8	\$ 296,185,411.09	2131
2	7	Monroe Hall	Shell	Exterior Closure	Exterior Windows	\$ 301,342.7	/ \$ 296,486,753.86	2131
2	7	Monroe Hall	Shell	Exterior Closure	Exterior Doors	\$ 69,540.6	t \$ 296,556,294.50	2131
2	7	Pavilion	Shell	Exterior Closure	Exterior Windows	\$ 816,175.8	t \$ 297,372,470.34	2131
2	7	PE Classroom Building	Shell	Exterior Closure	Exterior Walls	\$ 456,956.3	\$ 297,829,426.69	2132
2	7	President's House	Shell	Exterior Closure	Exterior Windows	\$ 24,360.7	\$ 297,853,787.43	2132
2	7	Red Barn	Shell	Exterior Closure	Exterior Doors	\$ 15,567.0	\$ 297,869,354.48	2132
2	7	Red Barn	Shell	Exterior Closure	Exterior Windows	\$ 67,457.20	) \$ 297,936,811.68	2132
2	7	Rozell Plant	Shell	Exterior Closure	Exterior Windows	\$ 290,587.8(	) \$ 298,227,399.48	2132
2	7	Rozell Plant	Shell	Exterior Closure	Exterior Walls	\$ 648,234.2	\$ \$ 298,875,633.76	2132
2	7	Rozell Plant	Shell	Exterior Closure	Exterior Doors	\$ 67,058.7;	\$ 298,942,692.48	2132
2	7	Senior Hall	Shell	Exterior Closure	Exterior Doors	\$ 74,382.2	\$ 299,017,074.70	2132
2	7	Senior Hall	Shell	Exterior Closure	Exterior Walls	\$ 719,028.0	\$ 299,736,102.78	2132
2	7	Senior Hall	Shell	Exterior Closure	Exterior Windows	\$ 322,322.9	\$ 300,058,425.73	2133
2	7	Showalter Hall	Shell	Exterior Closure	Exterior Windows	\$ 593,339.4	\$ 300,651,765.18	2133
2	7	Solid Waste Transfer Station	Shell	Exterior Closure	Exterior Doors	\$ 1,157.7 <sup>,</sup>	t \$ 300,652,922.92	2133
,	7	Solid Waste Transfer Station	Shell	Exterior Closure	Exterior Windows	\$ 5,016.8 <sup>.</sup>	7 \$ 300,657,939.79	2133
~ 58	7	Solid Waste Transfer Station	Shell	Exterior Closure	Exterior Walls	\$ 11,191.4	/ \$ 300,669,131.26	2133
2	7	Sutton Hall	Shell	Exterior Closure	Exterior Doors	\$ 43,754.1	\$ 300,712,885.37	2133
2	7	Sutton Hall	Shell	Exterior Closure	Exterior Windows	\$ 189,601.1	\$ 300,902,486.52	2133
2	7	Tawanka Commons	Shell	Exterior Closure	Exterior Walls	\$ 1,121,941.7	\$ 302,024,428.26	2133
2	7	Tawanka Commons	Shell	Exterior Closure	Exterior Doors	\$ 116,062.9	l \$ 302,140,491.20	2133
2	7	Turnbull Research Lab	Shell	Exterior Closure	Exterior Windows	\$ 43,708.2	\$ 302,184,199.45	2133
2	7	Turnbull Research Lab	Shell	Exterior Closure	Exterior Walls	\$ 97,503.0	\$ 302,281,702.47	2133
2	7	Turnbull Research Lab	Shell	Exterior Closure	Exterior Doors	\$ 10,086.5	\$ 302,291,788.99	2133
2	7	Woodward Field Press Box	Shell	Exterior Closure	Exterior Walls	\$ 115,517.5	) \$ 302,407,306.58	2133
2	7	Woodward Field Toilets	Shell	Exterior Closure	Exterior Walls	\$ 48,948.80	) \$ 302,456,255.37	2133
2	7	Woodward Field Toilets	Shell	Exterior Closure	Exterior Doors	\$ 5,063.6	/ \$ 302,461,319.04	2133
2	2	Woodward Field Toilets	Shell	Exterior Closure	Exterior Windows	\$ 21,942.5(	5 302,483,261.61	2133
2	8	Aquatics Building	Shell	Superstructure	Roof Construction	\$ 239,971.29	) \$ 302,723,232.90	2134
2	8	Aquatics Building	Shell	Superstructure	Floor Construction	\$ 359,956.93	5 303,083,189.82	2134
	00	Art Building	Shell	Superstructure	Floor Construction	\$ 802,968.7	\$ 303,886,158.56	2134
7	8	Art Building	Shell	Superstructure	Roof Construction	\$ 535,312.5	5 304,421,471.08	2134
10	00	Biology Boat Garage	Shell	Superstructure	Roof Construction	\$ 30,769.3	\$ 304,452,240.41	2134
	20 0	Biology Boat Garage	Shell	Superstructure	Floor Construction	\$ 46,153.9	) \$ 304,498,394.40	2134
2	20	Carpenter Storage	Shell	Superstructure	Floor Construction	\$ 46,096.1	304,544,490.53	2134
	20 0	Carpenter Storage	Shell	Superstructure	Roof Construction	\$ 30,730.7	5 304,575,221.28	2134
7 (	να	Central Services Building	Shell	Superstructure	Roof Construction	5 III,/48.9	5 304,686,970.24	2134
7 1	× c	Central Services Building	Shell	superstructure	Floor Construction	5 Ib/,b23.44	1 304,854,593.68	2134
<b>v</b> r	x c	Chemical storage	Shell	superstructure				2134
9 r	0 0		Shell	superstructure				2134 2135
7 1	0 0	спепеу пан Срелем нап	Shell	Superstructure Superstructure	Ploof Construction	13 CTC 000 ¢		2612
10	5 <del>0</del>	Criency nan Childrara Facility	Shell	Superstructure	Roof Construction			2135
10	) <u>«</u>	Cimucal e racincy Communications Center	Shell	ouperstructure Sunerstructure	Floor Construction	5 343.563.30	$\begin{vmatrix} 5 & 306.471.443.31 \end{vmatrix}$	2135
1	, ·							

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
2		3 Communications Center	Shell	Superstructure	Roof Construction	\$ 229,042.21	\$ 306,700,485.52	2135
2	~	Blectric Storage	Shell	Superstructure	Roof Construction	\$ 13,658.11	\$ 306,714,143.64	2135
2	~	3 Electric Storage	Shell	Superstructure	Floor Construction	\$ 20,487.17	\$ 306,734,630.80	2135
5		3 Greenhouse Science	Shell	Superstructure	Floor Construction	\$ 16,412.39	\$ 306,751,043.19	2135
	_ 0	Greenhouse Science	shell	Superstructure	Roof Construction	5 10,941.55 5 74 075 05	5 306,761,984.78 5 305 785 010 84	2135 2135
7 0		s Grounds Covered Storage	Shell	superstructure	Floor Construction	20.026,42 ¢	\$ 306,780,910.64	2135
2		8 Hazardous Waste Transfer Facility	Shell	Superstructure	Roof Construction	\$ 11.343.82	\$ 306.835.643.74	2135
2	~	Hazardous Waste Transfer Facility	Shell	Superstructure	Floor Construction	\$ 17,015.73	\$ 306,852,659.47	2135
2		3 Indian Education Center	Shell	Superstructure	Roof Construction	\$ 39,999.23	\$ 306,892,658.69	2135
2	~	Indian Education Center	Shell	Superstructure	Floor Construction	\$ 59,998.84	\$ 306,952,657.53	2135
2		3 Jim Thorpe Fieldhouse	Shell	Superstructure	Roof Construction	\$ 552,242.26	\$ 307,504,899.79	2136
2		3 Jim Thorpe Fieldhouse	Shell	Superstructure	Floor Construction	\$ 828,363.35	\$ 308,333,263.14	2136
0 0		3 John F Kennedy Library	Shell	Superstructure	Floor Construction	\$ 2,858,674.07 5 1 001 702 91	5 311,191,937.22	2137
7		s Jonn F Renneuy Library 3 Kingston Hall	Shell	superstructure Sunerstructure	Roof Construction Roof Construction	20.207,006,1 ¢	\$ 313,09/,720.03	2138
2			Shell	Superstructure	Floor Construction	\$ 880.362.02	\$ 314.564.990.10	2138
2	~	8 Monroe Hall	Shell	Superstructure	Floor Construction	\$ 834,487.61	\$ 315,399,477.71	2139
2	~	8 Monroe Hall	Shell	Superstructure	Roof Construction	\$ 556,325.11	\$ 315,955,802.82	2139
2		3 Music Building	Shell	Superstructure	Floor Construction	\$ 807,753.61	\$ 316,763,556.43	2139
2	~	3 Music Building	Shell	Superstructure	Roof Construction	\$ 538,502.44	\$ 317,302,058.87	2139
2		3 One Room School House	Shell	Superstructure	Roof Construction	\$ 14,685.75	\$ 317,316,744.62	2139
2		3 P.E. Activities Building	Shell	Superstructure	Floor Construction	\$ 1,590,864.83	\$ 318,907,609.45	2140
5		3 P.E. Activities Building	Shell	Superstructure	Roof Construction	\$ 1,060,576.61	\$ 319,968,186.06	2140
		3 Pavilion	Shell	Superstructure	Roof Construction	\$ 1,506,786.15	\$ 321,474,972.20	2141
2		3 Pavilion	Shell	Superstructure	Floor Construction	\$ 2,260,179.10	\$ 323,735,151.31	2142
2		3 PE Classroom Building	Shell	Superstructure	Floor Construction	\$ 567,256.15	\$ 324,302,407.46	2142
2		8 PE Classroom Building	Shell	Superstructure	Roof Construction	\$ 378,170.75	\$ 324,680,578.24	2142
2		3 Radio-TV Building	Shell	Superstructure	Roof Construction	\$ 241,058.80	\$ 324,921,637.04	2142
2		8 Radio-TV Building	Shell	Superstructure	Floor Construction	\$ 361,588.18	\$ 325,283,225.23	2143
2		3 Rozell Plant	Shell	Superstructure	Roof Construction	\$ 536,469.77	\$ 325,819,695.00	2143
0 0		8 Rozell Plant	Shell	Superstructure	Floor Construction	\$ 804,704.61 \$	\$ 326,624,399.61	2143
7 7	- •		Shell	Superstructure	Koor Construction	5 2,128,012.25	\$ 328,/52,411.84	2143
7 0		s Science Bullaing Scarior Hall	shell	superstructure	Ploor Construction	5,192,018.18 6 505 057 7/	5 331,944,430.02 5 227 520 /87 76	2143
2		3 Solid Waste Transfer Station	Shell	Superstructure	Roof Construction	\$ 9.261.91	\$ 332.548.749.67	2143
2	~	8 Solid Waste Transfer Station	Shell	Superstructure	Floor Construction	\$ 13,892.86	\$ 332,562,642.53	2143
2		3 Surbeck Services	Shell	Superstructure	Floor Construction	\$ 624,312.25	\$ 333,186,954.78	2143
2		3 Surbeck Services	Shell	Superstructure	Roof Construction	\$ 416,208.19	\$ 333,603,162.96	2143
2		3 Tawanka Commons	Shell	Superstructure	Floor Construction	\$ 1,392,755.24	\$ 334,995,918.20	2143
2		3 Turnbull Research Lab	Shell	Superstructure	Floor Construction	\$ 121,038.23	\$ 335,116,956.43	2143
2		3 Turnbull Research Lab	Shell	Superstructure	Roof Construction	\$ 80,692.16	\$ 335,197,648.59	2143
2		3 University Theater	Shell	Superstructure	Floor Construction	\$ 947,122.53	\$ 336,144,771.12	2143
2		University Theater	Shell	Superstructure	Roof Construction	\$ 631,415.05	\$ 336,776,186.17	2143
	_	8 Woodward Field Concessions	Shell	Superstructure	Floor Construction	5 38,286.08	5 336,814,472.25	2143
	_	Woodward Field Press Box	Shell	Superstructure	Floor Construction	5 143,401.14 5 105.02	5 336,957,873.39	2143
7 0		s wooawara riela Tollets Moodward Eield Tollets	shell	superstructure	Roor Construction	5.90c,04 ¢	\$ 330,996,382.74	2143
10		a Arriatics Building	Interiors	oupersuluciule Stairrases	rioui consulacioni Stair Finishes	\$ 14 998 21	2 337 074 140.06	2143
2		Aquatics Building	Interiors	Staircases	Stair Construction	\$ 84.989.84	\$ 337.159.134.80	2143
2	51	9 Art Building	Interiors	Staircases	Stair Construction	\$ 189,589.86	\$ 337,348,724.66	2143
2		Carpenter Storage	Interiors	Staircases	Stair Finishes	\$ 1,920.67	\$ 337,350,645.33	2143

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
2	01	Carpenter Storage	Interiors	Staircases	Stair Construction	\$ 10,883.83	\$ 337,361,529.14	2143
2	01	Central Services Building	Interiors	Staircases	Stair Finishes	\$ 6,984.33	\$ 337,368,513.45	2143
2	01	Central Services Building	Interiors	Staircases	Stair Construction	\$ 39,577.76	\$ 337,408,091.21	2143
5	01	) Cheney Hall	Interiors	Staircases	Stair Finishes	\$ 27,846.43	\$ 337,435,937.62	2143
0		Cheney Hall	Interiors	Staircases	Stair Construction	\$ 157,796.3	5 337,593,733.95	2144
2 0		J Communications Center D Commuting and Engineering Sciences Bldg	Interiors	Staircases	Stair Construction stair Einishee	5 81,119.12 ¢ 88 272 3/	5 337,674,853.07 5 327763 176 40	2144
10	0	a Hiiston Hall	Interiors	Staircases Staircases	Stair Finishes Stair Einishes	5 10 383 90	07/1/02/1/03/103/103/103/103/103/103/103/103/10	2144
2	, 01	Huston Hall	Interiors	Staircases	Stair Construction	\$ 109,842.62	\$ 337,892,403.01	2144
2	. 01	Indian Education Center	Interiors	Staircases	Stair Finishes	\$ 2,499.9	\$ 337,894,902.96	2144
2	5	Jim Thorpe Fieldhouse	Interiors	Staircases	Stair Finishes	\$ 34,515.14	\$ 337,929,418.10	2144
2	01	Jim Thorpe Fieldhouse	Interiors	Staircases	Stair Construction	\$ 195,585.83	\$ 338,125,003.91	2144
2	01	John F Kennedy Library	Interiors	Staircases	Stair Construction	\$ 674,964.78	\$ 338,799,968.69	2144
2	01	John F Kennedy Library	Interiors	Staircases	Stair Finishes	\$ 119,111.43	\$ 338,919,080.12	2144
2	51	Kingston Hall	Interiors	Staircases	Stair Construction	\$ 207,863.28	\$ 339,126,943.39	2144
7		Kingston Hall	Interiors	Staircases	Stair Finishes	\$ 36,681.7	\$ 339,163,625.14	2144
0 0		Music Building	Interiors	Staircases	Stair Construction	\$ 190,719.62	: \$ 339,354,344.76 5 230,350,500,50	2144
		P.E. Activities Building	Interiors	Staircases	Stair Finishes	5 66,286.0	5 339,420,630.80	2144
		P.E. Activities Building	Interiors	Staircases	Stair Construction	5 375,620.90 5 04 174 17	5 339,796,251.70	2144
1 C		a Pavillon	Interiors	Staircases Staircases	Stair Filisites Stair Construction	γ	2 240 424 070 79 29	2144 2145
1 0	, 0	a DF Classroom Building	Interiors	Staircases	Stair Construction	γ 133 035 Λ0	5 340 558 014 78	2145
2	, 01	PE Classroom Building	Interiors	Staircases	Stair Finishes	\$ 23.635.67	\$ 340.581.650.45	2145
2	5	President's House	Interiors	Staircases	Stair Finishes	\$ 2,810.86	\$ 340,584,461.31	2145
5 00	01	President's House	Interiors	Staircases	Stair Construction	\$ 15,928.18	\$ 340,600,389.49	2145
2	01	Radio-TV Building	Interiors	Staircases	Stair Construction	\$ 85,375.00	\$ 340,685,764.49	2145
2	51	B Rozell Plant	Interiors	Staircases	Stair Finishes	\$ 33,529.30	\$ 340,719,293.85	2145
2	01	B Rozell Plant	Interiors	Staircases	Stair Construction	\$ 189,999.77	\$ 340,909,293.57	2145
2	51	Science Building	Interiors	Staircases	Stair Finishes	\$ 133,000.76	\$ 341,042,294.33	2145
2	01	Science Building	Interiors	Staircases	Stair Construction	\$ 753,671.03	\$ 341,795,965.36	2145
2	51	Senior Hall	Interiors	Staircases	Stair Construction	\$ 210,749.63	\$ 342,006,714.99	2145
2	51	3 Senior Hall	Interiors	Staircases	Stair Finishes	\$ 37,191.13	\$ 342,043,906.10	2145
2	51	9 Sutton Hall	Interiors	Staircases	Stair Construction	\$ 123,969.99	\$ 342,167,876.09	2145
2 0		Sutton Hall	Interiors	Staircases	Stair Finishes	\$ 21,877.06	5 342,189,753.14	2145
		University Theater	Interiors	Staircases	Stair Construction	\$ 223,626.1	5 342,413,379.32	2145
7 r		Woodward Fleid Press Box	Interiors	Staircases	Stair Finisnes Stair Construction	10.076/0 20.00000	342,419,354.37 5 247 AE2 217 07	2145
4	. 1	Aquiatics Building	Interiors	Junterior Construction		5 114 986.7	5 347 568 199 22	2145
2	10	Aquatics Building	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 259,968.90	\$ 342,828,168.12	2146
2	10	Art Building	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 579,921.93	\$ 343,408,090.02	2146
2	10	Carpenter Storage	Interiors	Interior Construction	Interior Doors	\$ 14,725.15	\$ 343,422,815.18	2146
2	10	Carpenter Storage	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 33,291.65	\$ 343,456,106.82	2146
2	1(	Central Services Building	Interiors	Interior Construction	Interior Doors	\$ 53,546.38	\$ 343,509,653.20	2146
2	1(	) Chemical Storage	Interiors	Interior Construction	Interior Doors	\$ 3,534.04	\$ 343,513,187.24	2146
0 0	1	Chemical Storage	Interiors	Interior Construction	Fixed and Moveable Partitions	5 7,990.00	1 \$ 343,521,177.23	2146
7 7	H		Interiors		Fixed and Moveable Partitions	5 I52,/40.8	5 343,6/3,918.08	2146
v r	JI V		Interiors	Interior Construction	Interior Doors		5 343,/41,4/b.53	2146
7 0		d Crimacare Facinity Communications Contar	Interiors	Interior Construction	specialities Eived and Moveable Dartitions		243,702,050.39	2140
1 0		Communications Center	Interiors Interiors	Interior Construction	rized and ivioveable randous Shariattias	у 240,123.00 С 71 575 60	\$ 344,033,003.43	2140
4		) Electric Storage	Interiors Interiors	Interior Construction	opecialities Interior Doors	2.0.6.16.11.1 ¢	\$ 344,100,241.14 \$ 344,111,785,65	2140
2	10	Grounds Covered Storage	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 27,003.23	\$ 344,138,788.88	2146

Score	Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Runnir Total	g Fiscal Year Complete
2	10	Hazardous Waste Transfer Facility	Interiors	Interior Construction	Interior Doors	\$ 5,435.5	8 \$ 344,144,224.4	5 2146
2	10	Hazardous Waste Transfer Facility	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 12,289.1	4 \$ 344,156,513.6	2146
2	10	Hazardous Waste Transfer Facility	Interiors	Interior Construction	Specialties	\$ 3,544.9	4 \$ 344,160,058.5	1 2146
2	10	Indian Education Center	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 43,332.4	9 \$ 344,203,391.0	1 2146
2	10	Indian Education Center	Interiors	Interior Construction	Interior Doors	5 19,166.3	0 \$ 344,222,557.3	3 2146
7	10	Indian Education Center	Interiors	Interior Construction	Specialties	\$ 12,499.7	6 \$ 344,235,057.0	2146
2 0	10	Lim Thorpe Fieldhouse Licha E Kanaady Lihrary	Interiors	Interior Construction Interior Construction	Fixed and Moveable Partitions Eived and Moveable Dartitions	5 598,262.4 5 5 7 064 598 0	0 \$ 344,833,319.5 7 \$ 346,897,917,6	2146
2	10	John F Kennedy Library	Interiors	Interior Construction	Interior Doors	\$ 913.187.5	9 \$ 347.811.105.2	2148
2	10	Kingston Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 635,817.0	6 \$ 348,446,922.2	2148
2	10	Kingston Hall	Interiors	Interior Construction	Interior Doors	\$ 281,226.7	7 \$ 348,728,149.0	1 2148
2	10	Monroe Hall	Interiors	Interior Construction	Specialties	\$ 173,851.5	9 \$ 348,902,000.6	3 2148
2	10	Monroe Hall	Interiors	Interior Construction	Interior Doors	\$ 266,572.4	4 \$ 349,168,573.0	3 2148
2	10	Monroe Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 602,685.5	4 \$ 349,771,258.6	1 2148
7 0	10	Music Building	Interiors	Interior Construction	Fixed and Moveable Partitions	5 583,377.6	5 \$ 350,354,636.2	2149
<u>ч</u> с		Inviusic Buriaing	Interiors	Interior Construction	specialities Fixed and Monochlo Doctifiant	ς 1149 ΩΕΟ C	7.016/770/065 ¢ 1 7.016/720/065 ¢ 1	2149
л г 1		P.E. Acuviues bunding	Interiors	Interior Construction	Fixed and Moveable Partitions	с 1,627 250. С 1,627 251 6		2149
7 0	OT T	DE Classroom Building	Interiors Interiors	Interior Construction	Fixed and Moveable Partitions		0 2 353 713 04,227 9	7 2150
2	10	President's Garage	Interiors	Interior Construction	Fixed and Moveable Partitions	5 7.300.1	8 \$ 353.721.213.1	2150
5	10	President's House	Interiors	Interior Construction	Interior Doors	\$ 21,549.8	9 \$ 353,742,763.0	2150
2	10	President's House	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 48,721.4	9 \$ 353,791,484.5	1 2150
2	10	Radio-TV Building	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 261,147.0	4 \$ 354,052,631.5	3 2150
2	10	Red Barn	Interiors	Interior Construction	Specialties	\$ 38,917.6	1 \$ 354,091,549.1	9 2150
61	10	Red Barn	Interiors	Interior Construction	Interior Doors	\$ 59,673.6	8 \$ 354,151,222.8	7 2150
2	10	Red Barn	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 134,914.4	0 \$ 354,286,137.2	7 2150
2	10	Rozell Plant	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 581,175.5	9 \$ 354,867,312.8	5 2150
2	10	Rozell Plant	Interiors	Interior Construction	Interior Doors	\$ 257,058.4	3 \$ 355,124,371.2	9 2151
2	10	Senior Hall	Interiors	Interior Construction	Specialties	\$ 185,955.5	4 \$ 355,310,326.8	3 2151
2	10	Senior Hall	Interiors	Interior Construction	Interior Doors	\$ 285,131.8	3 \$ 355,595,458.6	7 2151
2	10	Senior Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 644,645.9	0 \$ 356,240,104.5	5 2151
2	10	Solid Waste Transfer Station	Interiors	Interior Construction	Interior Doors	\$ 4,438.0	0 \$ 356,244,542.5	2151
2	10	Surbeck Services	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 450,892.2	1 \$ 356,695,434.7	7 2151
7	10	Surplus Sales Building	Interiors	Interior Construction	Interior Doors	\$ 49,447.4	2 \$ 356,744,882.1	2151
2 0	10		Interiors	Interior Construction	Interior Doors	5 167,724.0	9 5 356,912,606.2	9 2151
7 0	10		Interiors	Interior Construction	Fixed and Moveable Partitions	5 379,202.3 5 200,1573	1.808/192/25 خ 1. 1. عدم 105 - 25 - 25 - 25 - 25 - 25 - 25 - 25 -	2151
1 0	01	Tawanka Commons	Interiors Interiors	Interior Construction	apeciances Interior Doors		4 5 358 076 873 8	2152
5	10	Tawanka Commons	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 1,005,878.8	5 \$ 359,032,752.7	2152
2	10	Turnbull Research Lab	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 87,416.5	1 \$ 359,120,169.2	3 2152
2	10	Turnbull Research Lab	Interiors	Interior Construction	Interior Doors	\$ 38,664.9	9 \$ 359,158,834.2	3 2152
2	10	Turnbull Research Lab	Interiors	Interior Construction	Specialties	\$ 25,216.3	0 \$ 359,184,050.5	2 2152
2	10	University Theater	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 684,032.9	8 \$ 359,868,083.5	1 2152
2	10	Williamson Hall	Interiors	Interior Construction	Interior Doors	\$ 171,228.6	6 \$ 360,039,312.1	7 2153
2	10	Woodward Field Press Box	Interiors	Interior Construction	Specialties	\$ 29,875.2	4 \$ 360,069,187.4	2153
2	10	Woodward Field Toilets	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 43,885.1	3 \$ 360,113,072.5	2153
7	10	Woodward Field Toilets	Interiors	Interior Construction	Interior Doors	\$ 19,410.7	3 \$ 360,132,483.2	2153
7 1	1 5	Aquatics Building	Interiors	Interior Finishes	Ceiling Finishes rianation		4 5 360,242,470.1	2123
1 0	11	Aquatics building مدیمیندی Duilding	Interiors	Interior Finisnes	Floor Finisnes	۲.4.2/4/2/4.2 ۲.4.2/25		CCT7
10	1 1	Aquatics building Art Building	Interiors	Interior Finishes Interior Finishes	Wall Finisries Cailing Finishes	۲.24,703.0 کلج ع51 5	+	1515
10	11	Art Building	Interiors	Interior Finishes	Floor Finishes	\$ 479,550.8	1 \$ 361,307,331.8	2153

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	t Project Cost Ru Total	nning Fiscal Year Complete
2	11	L Carpenter Storage	Interiors	Interior Finishes	Floor Finishes	\$ 27,529.6	33 \$ 361,334,86	1.45 215
2	11	L Carpenter Storage	Interiors	Interior Finishes	Ceiling Finishes	\$ 14,084.9	3 \$ 361,348,94	6.38 215
2	11	L Central Services Building	Interiors	Interior Finishes	Ceiling Finishes	5 51,218.2	7 \$ 361,400,10	4.66 215
2 0	111	l Central Services Building רוביה היבים Storrage	Interiors Interiors	Interior Finishes Interior Finishes	Floor Finishes Ceiling Finishes	\$ 100,108.4 \$ 330.3	15 \$ 361,500,27 18 \$ 361,500,27	3.10 215 3.49 215
1	11	L Chemical Storage	Interiors	Interior Finishes	Floor Finishes	\$ 6,607.1	1 \$ 361,510,26	0.60 215
2	11	L Cheney Hall	Interiors	Interior Finishes	Floor Finishes	\$ 399,131.8	8 \$ 361,909,35	2.48 2.15
2	11	L Childcare Facility	Interiors	Interior Finishes	Ceiling Finishes	\$ 64,621.1	3 \$ 361,974,03	3.60 215
2	11	L Communications Center	Interiors	Interior Finishes	Ceiling Finishes	\$ 104,977.6	8 \$ 362,078,99	1.28 215
2	11	Communications Center	Interiors	Interior Finishes	Floor Finishes	\$ 205,183.6	5 \$ 362,284,1	4.93 215
7 0	11	Computing and Engineering Sciences Bldg	Interiors	Interior Finishes	Wall Finishes	\$ 736,027.8	32 \$ 363,020,20	2.75 2.15
7 0	1 1	L computing and Engineering sciences blug I Flectric Storage	Interiors	Interior Finishes Interior Finishes	Floor Finishes Floor Finishes	5.102,C02,L ¢	10 2 304,280,1, 10 5 364 798 40	C12 C12 C12 C12
5	11	L Electric Storage	Interiors	Interior Finishes	Ceiling Finishes	\$ 6,259.9	7 \$ 364,304,66	5.99 215
2	1	l Greenhouse Science	Interiors	Interior Finishes	Floor Finishes	\$ 9,801.8	34 \$ 364,314,46	7.83 215
2	11	l Greenhouse Science	Interiors	Interior Finishes	Ceiling Finishes	\$ 5,014.9	0 \$ 364,319,48	2.73 215
2	11	L Grounds Covered Storage	Interiors	Interior Finishes	Ceiling Finishes	\$ 11,424.4	14 \$ 364,330,90	7.17 215
2	11	l Grounds Covered Storage	Interiors	Interior Finishes	Floor Finishes	\$ 22,329.5	5 364,353,23	6.76 215
2	11	L Hazardous Waste Transfer Facility	Interiors	Interior Finishes	Ceiling Finishes	\$ 5,199.2	5 \$ 364,358,43	6.01 215
2	11	L Hazardous Waste Transfer Facility	Interiors	Interior Finishes	Floor Finishes	\$ 10,162.1	7 \$ 364,368,59	8.18 215
2	11	l Huston Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 142,149.2	6 \$ 364,510,7 <sup>4</sup>	7.44 215
2	1	Indian Education Center	Interiors	Interior Finishes	Ceiling Finishes	\$ 18,332.9	38 \$ 364,529,08	0.42 215
2	11	I Indian Education Center	Interiors	Interior Finishes	Floor Finishes	\$ 35,832.6	34 \$ 364,564,9	3.06 215
6	11	l Jim Thorpe Fieldhouse	Interiors	Interior Finishes	Wall Finishes	\$ 287,626.1	8 \$ 364,852,53	9.24 2.15
52	11	l Jim Thorpe Fieldhouse	Interiors	Interior Finishes	Ceiling Finishes	\$ 253,111.0	3 \$ 365,105,65	0.27 215
2	11	l Jim Thorpe Fieldhouse	Interiors	Interior Finishes	Floor Finishes	\$ 494,717.0	)4 \$ 365,600,3(	7.31 215
2	11	l John F Kennedy Library	Interiors	Interior Finishes	Ceiling Finishes	\$ 873,483.7	8 \$ 366,473,85	1.09 215
2	11	l John F Kennedy Library	Interiors	Interior Finishes	Floor Finishes	\$ 1,707,263.8	31 \$ 368,181,13	4.91 215
2	11	l Kingston Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 268,999.5	32 \$ 368,450,1	4.42 215
2	11	l Kingston Hall	Interiors	Interior Finishes	Floor Finishes	\$ 525,771.8 \$	368,975,88 368,975,88	6.23 215
2	11	Monroe Hall	Interiors	Interior Finishes	Wall Finishes	5 289,752.6	6 \$ 369,265,6	8.89 215
2	11	Music Building	Interiors	Interior Finishes	Ceiling Finishes	5 246,813.6	1 5 369,512,45	2.50 2.15
7 (					ridor finisries	482,408.4	4 2 309,994,00 2 5 370,000	0.94 U.94 Z12
2 0	1 1	L P.E. Activities Building	Interiors Interiors	Interior Finishes Interior Finishes	Cennig rinishes Floor Finishes		1 2 37 0,400,90 1 2 371 431 0	217 CC.0
2	- 11	L PE Classroom Building	Interiors	Interior Finishes	Ceiling Finishes	\$ 173.328.2	7 \$ 371.604.38	6.73 2.15
2	11	L PE Classroom Building	Interiors	Interior Finishes	Floor Finishes	\$ 338,778.0	0 \$ 371,943,10	4.73 215
2	11	L PE Classroom Building	Interiors	Interior Finishes	Wall Finishes	\$ 196,963.9	95 \$ 372,140,12	8.68 215
2	11	l President's House	Interiors	Interior Finishes	Wall Finishes	\$ 23,423.7	'9 \$ 372,163,55	2.48 2.15
2	11	l President's House	Interiors	Interior Finishes	Ceiling Finishes	\$ 20,612.9	94 \$ 372,184,16	5.41 215
2	11	l President's House	Interiors	Interior Finishes	Floor Finishes	\$ 40,288.9	3 \$ 372,224,45	4.34 215
2	11	L Radio-TV Building	Interiors	Interior Finishes	Floor Finishes	\$ 215,948.5	32,440,40	2.86 2.15
2	1	l Radio-TV Building	Interiors	Interior Finishes	Ceiling Finishes	\$ 110,485.2	8 \$ 372,550,88	8.14 215
2	11	L Red Barn	Interiors	Interior Finishes	Wall Finishes	\$ 64,862.6	39 \$ 372,615,75	0.83 215
2	11	l Rozell Plant	Interiors	Interior Finishes	Ceiling Finishes	\$ 245,881.9	7 \$ 372,861,6	2.81 2.15
7 4	a (	l Rozell Plant	Interiors	Interior Finishes	Floor Finishes	2./8d,089 ?	2 5 373,342,2	0.32 0.32 215 
7			Interiors	Interior Finishes	Ceiling Finishes	5 2/2/34.8 5 520 577 5	80 \$ 3/3,614,95 8 5 274,148,05	21.2 21.3
7 r			Interiors	Interior Finishes	FIOOF FINISNES	2.2.10,253,07.2.3 2.30,005 5	0 2 3/4,148,0	C12 60.1
7 0	1 5	L Senior Hall Leolid Wheth Transfor Chation	Interiors	Interior Finishes Interior Finishes	Wall Finishes Elocat Elocations	2.626,605 ¢	1, 3/4,45/5 2 5 3/4,45/5	212 00.5
1 0	1 -	L Jourd Waste Hauster Station	Interiors Interiors	Interior Finishes	Colling Finishes	2,757,0 ¢	12 2 374,400,27 14 5 374,470,40	212 CT7 CT7 212
2	11	Substation	Interiors	Interior Finishes	Floor Finishes	\$ 24,776.6	57 \$ 374,495,2	2.44 2.44

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
2	11	1 Substation	Interiors	Interior Finishes	Ceiling Finishes	\$ 12,676.4	\$ 374,507,948.88	2158
2	11	I Surbeck Services	Interiors	Interior Finishes	Floor Finishes	\$ 372,853.1	\$ 374,880,802.05	2158
2	11	I Surbeck Services	Interiors	Interior Finishes	Ceiling Finishes	\$ 190,762.0	\$ 375,071,564.13	2159
2	11	l Sutton Hall	Interiors	Interior Finishes	Wall Finishes	\$ 182,308.8	) \$ 375,253,872.93	2159
5	11	I Sutton Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 160,431.7	l \$ 375,414,304.68	2159
2 1	11	Tawanka Commons	Interiors	Interior Finishes	Wall Finishes	\$ 483,595.6	) \$ 375,897,900.27	2159
7 1			Interiors	Interior Finishes	Floor Finishes	\$ 831,784.4	1 5 3/6//29/684./1	2150
7 6		L Tawanka Commons 1 Turnhull Research Lab	Interiors	Interior Finishes Interior Einishes	Celling Fillisties Wall Einishas	1.40C(C24 ¢	20.042,001,175 ¢	6612
10	1 5	L Turnbull Research Lab	Interiors Interiors	Interior Finishes	Vair mistres Ceiling Finishes	5 36 983 9	277 734 759 90	2159
7 1	11	I Turnbull Research Lab	Interiors	Interior Finishes	Floor Finishes	5 72.286.7	5 377.306.546.63	2159
- 1	11	I University Recreation Center	Interiors	Interior Finishes	Wall Finishes	\$ 145,029.3	3 377,451,576.00	2159
2	11	I University Theater	Interiors	Interior Finishes	Wall Finishes	\$ 328,862.0	\$ 377,780,438.01	2160
2	11	1 University Theater	Interiors	Interior Finishes	Floor Finishes	\$ 565,642.6	/ \$ 378,346,080.68	2160
2	11	I University Theater	Interiors	Interior Finishes	Ceiling Finishes	\$ 289,398.5	\$ 378,635,479.24	2160
2	11	l Williamson Hall	Interiors	Interior Finishes	Floor Finishes	\$ 320,123.1	5 378,955,602.40	2160
2	11	l Woodward Field Concessions	Interiors	Interior Finishes	Floor Finishes	\$ 22,865.3	\$ 378,978,467.69	2160
2	11	l Woodward Field Concessions	Interiors	Interior Finishes	Ceiling Finishes	\$ 11,698.5	\$ 378,990,166.22	2160
2	11	l Woodward Field Press Box	Interiors	Interior Finishes	Ceiling Finishes	\$ 43,817.0	\$ 379,033,983.23	2160
2	11	Woodward Field Press Box	Interiors	Interior Finishes	Floor Finishes	\$ 85,642.3	\$ 379,119,625.59	2160
2	11	l Woodward Field Toilets	Interiors	Interior Finishes	Ceiling Finishes	\$ 18,566.7	) \$ 379,138,192.37	2160
2	11	l Woodward Field Toilets	Interiors	Interior Finishes	Floor Finishes	\$ 36,289.6	\$ 379,174,482.00	2160
2	12	2 Art Building	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 78,066.4	\$ 379,252,548.41	2160
~ 6	12	2 Cheney Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 27,846.4	- \$ 379,280,394.82	2160
~ 53	12	2 Childcare Facility	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 8,811.9	/ \$ 379,289,206.79	2160
2	12	2 Greenhouse Science	Special Construction	Special Construction	Integrated Constr. & Special Constr. Systems	\$ 2,279.5	) \$ 379,291,486.29	2160
2	12	2 Huston Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 45,229.3	\$ 379,336,715.60	2160
2	12	2 Indian Education Center	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 2,499.9	\$ 379,339,215.55	2160
2	12	2 Isle Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$	\$ 379,398,649.59	2160
2	12	2 John F Kennedy Library	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 277,926.6	r \$ 379,676,576.25	2160
2	12	2 John F Kennedy Library	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 119,111.4	\$ 379,795,687.68	2160
2	12	2 Martin Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 95,310.5	/ \$ 379,890,998.25	2160
2	12	2 Monroe Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 34,770.3	\$ 379,925,768.57	2160
2	12	2 Music Building	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 78,531.6	. \$ 380,004,300.17	2161
2	12	2 Rozell Plant	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 33,529.3	5 380,037,829.53	2161
2	12	2 Rozell Plant	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 111,764.5	\$ 380,149,594.07	2161
2	12	2 Rozell Plant	Special Construction	Special Construction	Integrated Constr. & Special Constr. Systems	\$ 111,764.5	\$ 380,261,358.60	2161
2	12	2 Senior Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 86,779.2	5 380,348,137.85	2161
5	12	2 Showalter Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 159,745.2	t \$ 380,507,883.09	2161
7	12	2 Sutton Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 21,877.0	5 380,529,760.15	2161
20	<u>,</u> 1	2 Tawanka Commons	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 58,031.4	8 380,587,791.62	2161
2	12	2 Tawanka Commons	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 135,406.7	5 380,723,198.39	2161
2	12	2 Visitor Center	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 3,933.8	5 380,727,132.21	2161
2 0	а 1	Aquatics Building	Substructure	Foundations	Standard Foundations	\$ 209,974.8	3 380,937,107.09	2161
2.0	E C	3 Aquatics Building	Substructure	Foundations	Slab on Grade	5 139,983.2	5 381,077,090.34	1917
7 1	1	3 Art Building	Substructure	Foundations	Standard Foundations	5 468,398.4	5 381,545,488.79	1917
7 (	1 S	Biology Boat Garage	Substructure	Foundations	Standard Foundations	5 26,923.1	ce.114/2/c/182 5 6	1917
2 1	1	8 Carpenter Storage	Substructure	Foundations	Slab on Grade	5 17,926.2	5 381,590,338.22	2161
7 1	i f	s Carpenter Storage	Substructure	Foundations	Standard Foundations	5 20,889.4	- \$ 381,017,227.03	1917
7 1	- F			Foundations		9.081,co <	281,682,414.53 581,682,414.53	71017
чr	11 1 1	S Central Services Building المنافعة الم	Substructure	Foundations	Standard Foundations	5 91,78U.3	5 381,/80,194.8/	1916 TQT7
V	Ĥ	s Chemical Storage	Substructure	Foundations		c.2Uc,4 ¢	- \$ 301,104,471.11	1017

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pr Cost	oject Pro	oject Cost Running Total	Fiscal Year Complete
2	13	Chemical Storage	Substructure	Foundations	Standard Foundations	\$ 6,4	153.46 \$	381,790,950.63	2161
2	13	Cheney Hall	Substructure	Foundations	Slab on Grade	\$ 259,8	399.83 \$	382,050,850.46	2161
2	13	Cheney Hall	Substructure	Foundations	Standard Foundations	\$ 389,8	349.72 \$	382,440,700.18	2161
2	13	Communications Center	Substructure	Foundations	Standard Foundations	\$ 200,4	111.93 \$	382,641,112.11	2162
2 0	13	Electric Storage	Substructure	Foundations	Slab on Grade	S 2 2	967.23 Ş	382,649,079.34	2162
7 0	13	Electric Storage Greenhouse Bonevard	Substructure Substructure	Foundations	Standard Foundations Standard Foundations	2/TT &	Co.Uct     Co.	382,001,U3U.19 387 668 786 46	2012
- 7	13 (	Greenhouse Science	Substructure	Foundations	Station Grade	\$ 6.9	382.60 \$	382.675.169.06	2162
5	13	Greenhouse Science	Substructure	Foundations	Standard Foundations	\$ 16	573.89 \$	382,684,742.95	2162
2	13	Grounds Covered Storage	Substructure	Foundations	Standard Foundations	\$ 21,8	310.30 \$	382,706,553.25	2162
2	13	Grounds Covered Storage	Substructure	Foundations	Slab on Grade	\$ 14,5	540.20 \$	382,721,093.45	2162
2	13	Hargreaves Hall	Substructure	Foundations	Slab on Grade	\$ 373,4	184.44 \$	383,094,577.88	2162
2	13	Hargreaves Hall	Substructure	Foundations	Standard Foundations	\$ 560,2	26.63 \$	383,654,804.51	2162
0 0	13	Hazardous Waste Transfer Facility	Substructure	Foundations	Standard Foundations	\$ 5,0 0,0 0,0	925.84 \$	383,664,730.35	2162
7 6	13	Hazardous Waste Transfer Facility	Substructure	Foundations	Slab on Grade st-rodard Equadations	5 0,t 5 271 3	01/.23 \$	383,0/1,34/.58 202007 CT	2012
7 6	C [	nustori naii Iim Thorne Fialdhouse	Substructure Substructure	Foundations	Standard Foundations Standard Foundations	с́т/7 с	¢ co.c./	303,342,723.43 384 475 935 40	2012
1 0	1.61	John F Kennedv Librarv	Substructure	Foundations	Stab on Grade	5 1111.1 5	206.67 \$	385,537,642,07	2163
5	13.	John F Kennedy Library	Substructure	Foundations	Standard Foundations	\$ 1,667,5	559.93 \$	387,205,202.00	2163
2	13	Kingston Hall	Substructure	Foundations	Slab on Grade	\$ 342,3	363.03 \$	387,547,565.03	2164
2	13	Kingston Hall	Substructure	Foundations	Standard Foundations	\$ 513,5	544.53 \$	388,061,109.56	2164
2	13	Martin Hall	Substructure	Foundations	Standard Foundations	\$ 571,8	363.38 \$	388,632,972.94	2164
2	13	Music Building	Substructure	Foundations	Standard Foundations	\$ 471, <sup>1</sup>	l89.62 \$	389,104,162.56	2164
~	13	One Room School House	Substructure	Foundations	Slab on Grade	\$ 8,5	\$ 66.69	389,112,729.25	2164
~ 64	13	P.E. Activities Building	Substructure	Foundations	Slab on Grade	\$ 618,6	569.70 \$	389,731,398.95	2164
2	13	P.E. Activities Building	Substructure	Foundations	Standard Foundations	\$ 928,0	04.51 \$	390,659,403.47	2165
2	13	Pavilion	Substructure	Foundations	Standard Foundations	\$ 1,318,4	137.85 \$	391,977,841.31	2165
7 0	13	Pavilion	Substructure	Foundations	Slab on Grade	5 878,9	958.60 \$	392,856,799.92	2166
7 6	13	PE Classroom Building DE Classroom Building	Substructure	Foundations	Standard Foundations Stab on Grado	5,055 ¢	599.43 \$	393,187,999.35 202 400 200 202	2166
1 0	13	r E Classi Udiri Buriurig Denre Hnian Building	Substructure Substructure	Foundations	Standard Foundations	5 1 699 5	\$ 00 80%	395,107,621,98	2167
7	13	President's Garage	Substructure	Foundations	Standard Foundations	5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	396.30 \$	395.113.518.28	2167
5	13	Radio-TV Building	Substructure	Foundations	Standard Foundations	\$ 210,9	926.45 \$	395,324,444.73	2167
2	13	Rozell Plant	Substructure	Foundations	Standard Foundations	\$ 469,4	111.04 \$	395,793,855.77	2167
2	13	Rozell Plant	Substructure	Foundations	Slab on Grade	\$ 312, <u>9</u>	940.71 \$	396,106,796.47	2167
2	13 .	Science Building	Substructure	Foundations	Slab on Grade	\$ 1,241,3	340.49 \$	397,348,136.97	2167
2	13	Science Building	Substructure	Foundations	Standard Foundations	\$ 1,862,0	010.66 \$	399,210,147.63	2168
5	13	Senior Hall	Substructure	Foundations	Slab on Grade	\$ 347,1	117.03 \$	399,557,264.65	2168
77	13	Solid Waste Transfer Station	Substructure	Foundations	Slab on Grade	5 5 7	102.78 5	399,562,667.43	2168
7 (	51 C		substructure		Standard Foundations	- ά <sup>2</sup> α 4	CO2 11 2	00.1//U/C/865	9017 9017
чr	12	Surbeck Services	Substructure	Foundations	Slab on Grade	5 242,1	788.11 >	399,813,942 TV 741 704	21100
1 0	1 6	Surbeck Services Sutton Hall	Substructure Substructure	Foundations Foundations	Standaru roundauons Stah on Grade	r/tac ¢	5 98.281 85.86 \$	400,1////41.0/ 400.381.927.73	2169
- 2	13	Tawanka Commons	Substructure	Foundations	Standard Foundations	\$ 812,4	140.58 \$	401.194.368.31	2169
2	13	Tawanka Commons	Substructure	Foundations	Slab on Grade	\$ 541,6	527.08 \$	401,735,995.38	2169
2	13	Turnbull Research Lab	Substructure	Foundations	Standard Foundations	\$ 70,6	505.64 \$	401,806,601.02	2169
2	13	Turnbull Research Lab	Substructure	Foundations	Slab on Grade	\$ 47,0	)70.43 \$	401,853,671.45	2169
2	13	University Theater	Substructure	Foundations	Standard Foundations	\$ 552,4	188.16 \$	402,406,159.61	2169
5 0	13	Williamson Hall	Substructure	Foundations	Standard Foundations	\$ 312,6	578.42 \$	402,718,838.02	2170
7 7	13	Woodward Field Concessions	Substructure	Foundations	Standard Foundations	5 22,3 6	333.55 Ş	402,741,171.57	2170
10	13	Woodward Field Toilets	Substructure	Foundations	Stab on Grade	, 23,6 \$ 23,6	30.45 \$	402,820,569.14	2170

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Proj Cost	ect Proje	ect Cost Running Total	Fiscal Year Complete
(1 +	13	Woodward Field Toilets	Substructure	Foundations	Standard Foundations	\$ 35,44 6 46	5.68 \$ 5.34 \$	402,856,014.82	2170
		Central Services Building Central Services Building	Services	Fire Protection	Fire Protection Specialities Snecial Fire Protection Systems	5 4,05 5 4,65	6 21 \$	402,860,671.02 402 865 327 23	0212
. 4	1	Kingston Hall	Services	Fire Protection	Fire Protection Specialties	\$ 24,45	4.50 \$	402,889,781.73	2170
1	1	Patterson Hall	Services	Fire Protection	Special Fire Protection Systems	\$ 66,79	2.60 \$	402,956,574.33	2170
1	1	Patterson Hall	Services	Fire Protection	Stand-Pipe and Hose Systems	\$ 66,79	2.60 \$	403,023,366.93	2170
1	1	Patterson Hall	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 467,54	8.20 \$	403,490,915.13	2170
1	1	Patterson Hall	Services	Fire Protection	Fire Protection Specialties	\$ 66,79	2.60 \$	403,557,707.73	2170
-	1	PE Classroom Building	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 110,29	9.81 \$	403,668,007.55	2170
Ч	Т	PE Classroom Building	Services	Fire Protection	Fire Protection Specialties	\$ 15,75	7.12 \$	403,683,764.66	2170
	-	University Recreation Center	Services	Fire Protection	Fire Protection Specialties	\$ 11,60	2.35 \$	403,695,367.01	2170
		University Recreation Center	Services	Fire Protection	Fire Protection Sprinkler Systems	\$ 81,21	6.45 \$	403,776,583.47	2170
		University Recreation Center	Services	Fire Protection	Special Fire Protection Systems	\$ 11,60	2.35 Ş	403,788,185.82	2170
		University Recreation Center Misitor Center	Services Services	Fire Protection Fire Protection	Stand-Pipe and Hose systems Fire Protection Snecialties	ې 11,60 د 1	2.35 ¢ 2.52	403,799,788.17 403 800 912 12	0/12
. 4	- 2	Hargreaves Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 133.38	7.29 \$	403.934.299.41	2170
1	2	Patterson Hall	Services	Vertical Transportation	Elevators and Lifts	\$ 333,96	2.98 \$	404,268,262.39	2170
1	2	University Recreation Center	Services	Vertical Transportation	Elevators and Lifts	\$ 58,01	1.75 \$	404,326,274.14	2170
1	2	University Recreation Center	Services	Vertical Transportation	Elevators and Lifts	\$ 58,01	1.75 \$	404,384,285.88	2170
1	e	Aquatics Building	Services	Electrical	Communication and Security Systems	\$ 169,97	9.67 \$	404,554,265.56	2170
1	3	Central Services Building	Services	Electrical	Communication and Security Systems	\$ 79,15	5.52 \$	404,633,421.08	2170
1	3	Computing and Engineering Sciences Bldg	Services	Electrical	Communication and Security Systems	\$ 1,000,99	7.88 \$	405,634,418.95	2171
1	ŝ	Hargreaves Hall	Services	Electrical	Electrical Service and Distribution	\$ 706,95	2.65 \$	406,341,371.60	2171
ب ا	ŝ	Hargreaves Hall	Services	Electrical	Communication and Security Systems	\$ 453,51	6.83 \$	406,794,888.43	2171
	e	Hargreaves Hall	Services	Electrical	Lighting and Branch Wiring	\$ 706,95	2.65 \$	407,501,841.08	2171
1	ŝ	Huston Hall	Services	Electrical	Communication and Security Systems	\$ 219,68	5.23 \$	407,721,526.31	2171
1	ŝ	Kingston Hall	Services	Electrical	Communication and Security Systems	\$ 415,72	6.55 \$	408,137,252.86	2171
1	ĉ	One Room School House	Services	Electrical	Communication and Security Systems	\$ 10,40	2.41 \$	408,147,655.27	2171
1	ŝ	Patterson Hall	Services	Electrical	Special Electrical Systems	\$ 333,96	2.98 \$	408,481,618.25	2171
1	ŝ	Patterson Hall	Services	Electrical	Lighting and Branch Wiring	\$ 1,770,00	3.82 \$	410,251,622.06	2172
1	ŝ	Patterson Hall	Services	Electrical	Communication and Security Systems	\$ 1,135,47	4.22 \$	411,387,096.28	2172
1	e	Patterson Hall	Services	Electrical	Electrical Service and Distribution	\$ 1,770,00	3.82 \$	413,157,100.10	2173
1	ŝ	Pavilion	Services	Electrical	Communication and Security Systems	\$ 1,067,30	6.90 \$	414,224,407.00	2173
1	ŝ	PE Classroom Building	Services	Electrical	Lighting and Branch Wiring	\$ 417,56	3.57 \$	414,641,970.57	2173
1	ĉ	Rozell Plant	Services	Electrical	Communication and Security Systems	\$ 379,99	9.44 \$	415,021,970.01	2174
-	3	Senior Hall	Services	Electrical	Communication and Security Systems	\$ 421,49	9.26 \$	415,443,469.26	2174
-	e	Surbeck Services	Services	Electrical	Communication and Security Systems	\$ 294,81	4.15 \$	415,738,283.41	2174
	Ω I	Sutton Hall	Services	Electrical	Communication and Security Systems	\$ 247,93	9.98 Ş	415,986,223.39	2174
	Ω.	Tawanka Commons	Services	Electrical	Communication and Security Systems	\$ 657,69	0.04 Ş	416,643,913.42	2174
1	e	University Recreation Center	Services	Electrical	Special Electrical Systems	\$ 58,01	1.75 \$	416,701,925.17	2174
1	e	University Recreation Center	Services	Electrical	Communication and Security Systems	\$ 197,23	9.96 \$	416,899,165.13	2174
-	e	University Recreation Center	Services	Electrical	Electrical Service and Distribution	\$ 307,46	2.27 \$	417,206,627.40	2174
1	e	University Recreation Center	Services	Electrical	Lighting and Branch Wiring	\$ 307,46	2.27 \$	417,514,089.67	2175
	ε Γ	University Recreation Center	Services	Electrical	Lighting and Branch Wiring	\$ 307,46	2.27 \$	417,821,551.93	2175
	Ω I	University Recreation Center	Services	Electrical	Electrical Service and Distribution	\$ 307,46	2.27 Ş	418,129,014.20	2175
-	e	University Recreation Center	Services	Electrical	Communication and Security Systems	\$ 197,23	9.96 \$	418,326,254.16	2175
1	ε Ω	Visitor Center	Services	Electrical	Communication and Security Systems	\$ 19,10	7.13 \$	418,345,361.29	2175
	ε Ω	Visitor Center	Services	Electrical	Electrical Service and Distribution	\$ 29,78	4.64 \$	418,375,145.93	2175
	Ω I	Visitor Center	Services	Electrical	Lighting and Branch Wiring	\$ 29,78	4.64 Ş	418,404,930.57	2175
	Ω •	Woodward Field Press Box	Services	Electrical	Communication and Security Systems	5 67,71 5 115 70	7.21 5	418,472,647.78	2175
	1 <	Hargreaves naii Harrannas Hall	Services		lerminal and rackage Units Linnt Constructions Svetame	× 1133 70 خ	0.02 V	418,015,575,455 87	3716
1	1		סבן אורבי		חבמו טבווכו מנוווט אאוכוווט	~ · · · · · · · · · · · · · · ·	7 TU-2	412,133,400,004	6113

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete
-	4	Hargreaves Hall	Services	HVAC	Energy Supply	\$ 133,387.29	\$ 419,886,553.11	2175
1	4	Hargreaves Hall	Services	HVAC	Distribution Systems	\$ 653,597.73	\$ 420,540,150.84	2176
1	4	Patterson Hall	Services	HVAC	Controls and Instrumentation	\$ 200,377.75	\$ 420,740,528.63	2176
	4	Patterson Hall	Services	HVAC	Cooling Generating Systems	\$ 333,962.98	\$ 421,074,491.61	2176
	4 <	Patterson Hall	Services		Distribution Systems	\$ 1,636,418.60 \$	422/10,910.21	7/17
	4	Patterson Hall Patterson Hall	Services	HVAC	спетву зирриу Terminal and Package Units	\$ 353,902.90	\$ 423,044,6/3.19 \$ 473,412,737,48	7717
	4	Patterson Hall	Services	HVAC	Special HVAC Systems and Equipment	\$ 634.529.66	\$ 424.046.762.13	2177
. 4	4	Patterson Hall	Services	HVAC	Heat Generating Systems	\$ 2,838,685.45	\$ 426,885,447.56	2178
1	4	PE Classroom Building	Services	HVAC	Distribution Systems	\$ 386,049.33	\$ 427,271,496.89	2178
1	4	PE Classroom Building	Services	HVAC	Heat Generating Systems	\$ 669,677.43	\$ 427,941,174.32	2179
1	4	PE Classroom Building	Services	HVAC	Controls and Instrumentation	\$ 47,271.35	\$ 427,988,445.67	2179
1	4	PE Classroom Building	Services	HVAC	Terminal and Package Units	\$ 86,664.14	\$ 428,075,109.81	2179
1	4	Practice Field Toilets	Services	HVAC	Terminal and Package Units	\$ 2,561.49	\$ 428,077,671.30	2179
1	4	Practice Field Toilets	Services	HVAC	Cooling Generating Systems	\$ 2,328.62	\$ 428,079,999.92	2179
1	4	Practice Field Toilets	Services	HVAC	Special HVAC Systems and Equipment	\$ 4,424.38	\$ 428,084,424.30	2179
1	4	Practice Field Toilets	Services	HVAC	Controls and Instrumentation	\$ 1,397.17	\$ 428,085,821.48	2179
1	4	Practice Field Toilets	Services	HVAC	Energy Supply	\$ 2,328.62	\$ 428,088,150.10	2179
1	4	Practice Field Toilets	Services	HVAC	Heat Generating Systems	\$ 19,793.30	\$ 428,107,943.40	2179
1	4	University Recreation Center	Services	HVAC	Distribution Systems	\$ 284,257.56	\$ 428,392,200.97	2179
1	4	University Recreation Center	Services	HVAC	Controls and Instrumentation	\$ 34,807.05	\$ 428,427,008.02	2179
1	4	University Recreation Center	Services	HVAC	Cooling Generating Systems	\$ 58,011.75	\$ 428,485,019.76	2179
1	4	University Recreation Center	Services	HVAC	Energy Supply	\$ 58,011.75	\$ 428,543,031.51	2179
 (	4	University Recreation Center	Services	HVAC	Heat Generating Systems	\$ 493,099.87	\$ 429,036,131.39	2179
٦ 66	4	University Recreation Center	Services	HVAC	Energy Supply	\$ 58,011.75	\$ 429,094,143.13	2179
1	4	University Recreation Center	Services	HVAC	Special HVAC Systems and Equipment	\$ 110,222.33	\$ 429,204,365.45	2179
1	4	University Recreation Center	Services	HVAC	Terminal and Package Units	\$ 63,812.93	\$ 429,268,178.38	2179
1	4	Visitor Center	Services	HVAC	Cooling Generating Systems	\$ 5,619.74	\$ 429,273,798.12	2179
1	4	Visitor Center	Services	HVAC	Controls and Instrumentation	\$ 3,371.85	\$ 429,277,169.97	2179
1	4	Visitor Center	Services	HVAC	Distribution Systems	\$ 27,536.74	\$ 429,304,706.71	2179
1	4	Visitor Center	Services	HVAC	Energy Supply	\$ 5,619.74	\$ 429,310,326.46	2179
1	4	Visitor Center	Services	HVAC	Heat Generating Systems	\$ 47,767.82	\$ 429,358,094.28	2179
1	4	Visitor Center	Services	HVAC	Terminal and Package Units	\$ 6,181.72	\$ 429,364,276.00	2179
1	4	Woodward Field Concessions	Services	HVAC	Terminal and Package Units	\$ 5,849.26	\$ 429,370,125.26	2179
1	4	Woodward Field Concessions	Services	HVAC	Heat Generating Systems	\$ 45,198.84	\$ 429,415,324.10	2179
1	4	Woodward Field Concessions	Services	HVAC	Distribution Systems	\$ 26,055.80	\$ 429,441,379.91	2179
1	4	Woodward Field Toilets	Services	HVAC	Heat Generating Systems	\$ 71,735.33	\$ 429,513,115.21	2179
1	4	Woodward Field Toilets	Services	HVAC	Distribution Systems	\$ 41,353.29	\$ 429,554,468.51	2179
1	4	Woodward Field Toilets	Services	HVAC	Terminal and Package Units	\$ 9,283.39	\$ 429,563,751.90	2179
-	5	Hargreaves Hall	Services	Plumbing	Special Plumbing Systems	\$ 186,742.23	\$ 429,750,494.12	2179
-	5	Hargreaves Hall	Services	Plumbing	Sanitary Waste	\$ 226,758.4	\$ 429,977,252.53	2179
1	5	Hargreaves Hall	Services	Plumbing	Rain Water Drainage	\$ 66,693.65	\$ 430,043,946.18	2180
1	2	Hargreaves Hall	Services	Plumbing	Plumbing Fixtures	\$ 360,145.70	\$ 430,404,091.88	2180
-	5	Hargreaves Hall	Services	Plumbing	Domestic Water Distribution	\$ 360,145.70	\$ 430,764,237.58	2180
		Patterson Hall	Services	Plumbing	Sanitary Waste	\$ 567,737.1	\$ 431,331,974.69	2180
1	2	Patterson Hall	Services	Plumbing	Special Plumbing Systems	\$ 467,548.20	\$ 431,799,522.89	2180
-	5	Patterson Hall	Services	Plumbing	Rain Water Drainage	\$ 166,981.49	\$ 431,966,504.38	2180
-	5	Patterson Hall	Services	Plumbing	Plumbing Fixtures	\$ 901,700.09	\$ 432,868,204.47	2181
-	5	Patterson Hall	Services	Plumbing	Domestic Water Distribution	\$ 901,700.09	\$ 433,769,904.56	2181
	5	Plant Utilities	Services	Plumbing	Rain Water Drainage	\$ 7,631.33	\$ 433,777,535.88	2181
	<u>л</u> п	Practice Field Ioliets	Services	Plumbing		5.182,0 5,281.28	433/83,823.10 2 433/83,823.10	1016
-	ר ר		Services	Plumbing	Plumping rixtures	57.107'n ¢	422'/ 20'TTOTT	TOTT

Score	Significance Rank	k Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated	Project Pr t	roject Cost Running Total	Fiscal Year Complete
1	_,	5 Practice Field Toilets	Services	Plumbing	Sanitary Waste	Ş	3,958.66 \$	433,794,069.10	2181
1		5 University Recreation Center	Services	Plumbing	Domestic Water Distribution	\$ 15	6,631.73 \$	433,950,700.83	2181
1		5 University Recreation Center	Services	Plumbing	Plumbing Fixtures	\$ 15	6,631.73 \$	434,107,332.56	2181
1		5 University Recreation Center	Services	Plumbing	Rain Water Drainage	\$ ·	9,005.87 \$	434,136,338.43	2181
		5 University Recreation Center	Services	Plumbing	Special Plumbing Systems	ۍ ۲ ۵	1,216.45 \$	434,217,554.88	2181
		5 Visitor Center	Services	Plumbing	Domestic Water Distribution	ጉ ህ	5,1/3.31 >	434,232,728.19 434,232,728.19	2181
		o visitor Center 5 Visitor Center	Services	Plumbing	Saliitaly waste Rain Water Drainage	ሱ ህ	C.CCCCC	434,242,201.70	1812
		5 Visitor Center	Services	Plumbing	Plumbing Fixtures	ۍ ر	5,173.31 \$	434,260,264.94	2181
-	Ţ	6 Computing and Engineering Sciences Bldg	Shell	Roofing	Projections	\$ 11	7,764.46 \$	434,378,029.39	2181
1		6 Computing and Engineering Sciences Bldg	Shell	Roofing	Roof Coverings	\$ 47	1,057.82 \$	434,849,087.21	2181
1		6 Computing and Engineering Sciences Bldg	Shell	Roofing	Roof Opening	\$ 29	4,411.12 \$	435,143,498.33	2182
1	-	6 Hargreaves Hall	Shell	Roofing	Roof Opening	\$ 13	3,387.29 \$	435,276,885.62	2182
	_ `	6 Hargreaves Hall	Shell	Roofing	Roof Coverings	\$ 21	3,419.68 \$	435,490,305.30	2182
	_ 4	o Hargreaves Hall 6 One Room School House	Shell	Kooting Roofing	Projections Proiections	ጉ ላ ባ	3,354.92 5,7381 5	435,543,660.22 435,543,884.04	2182
•	ļ	6 One Room School House	Shell	Roofine	Roof Opening	ъ v	3 059.53 \$	435,547,943,57	2182
	)	6 One Room School House	Shell	Roofing	Roof Coverines	γ v	4.895.25 \$	435.552.838.82	2182
	1	6 Patterson Hall	Shell	Roofing	Roof Opening	\$ 33	3,962.98 \$	435,886,801.80	2182
1		6 Patterson Hall	Shell	Roofing	Roof Coverings	\$ 53	4,340.81 \$	436,421,142.61	2182
1	-	6 Patterson Hall	Shell	Roofing	Projections	\$ 13	3,585.20 \$	436,554,727.81	2182
1	-	6 PE Classroom Building	Shell	Roofing	Roof Opening	\$ 2	8,785.58 \$	436,633,513.39	2182
1	-	6 Plant Utilities	Shell	Roofing	Roof Opening	Ş.	5,262.62 \$	436,648,776.01	2182
	-	6 Plant Utilities	Shell	Roofing	Projections	Ŷ	6,105.05 \$	436,654,881.06	2182
.⊣ 67	-	6 Plant Utilities	Shell	Roofing	Roof Coverings	\$ 2	4,420.20 \$	436,679,301.26	2182
1	-	6 Practice Field Toilets	Shell	Roofing	Projections	Ş	931.45 \$	436,680,232.71	2182
1	-	6 Practice Field Toilets	Shell	Roofing	Roof Coverings	Ŷ	3,725.80 \$	436,683,958.51	2182
-	-	6 Practice Field Toilets	Shell	Roofing	Roof Opening	ŝ	2,328.62 \$	436,686,287.13	2182
-	-	6 President's Garage	Shell	Roofing	Roof Coverings	\$ \$	2,246.21 \$	436,688,533.34	2182
	_ `	6 President's Garage	Shell	Roofing	Projections	<u>ر</u>	561.55 \$	436,689,094.89	2182
- ·	- `	6 President's House	Shell	Rooting	Projections	<u>ъ</u>	3,747.81 5	436,692,842.70	2182
	_ 1	b President's House	Shell	Kooting Boofing	Boof Coverings	ጉ ህ	4,991.23 \$	436,/U/,833.93 126 712 EDE 04	2182
			Sholl			ጉህ		430,000,017,000 7E	2012
	ļ	6 Substation	Shell	Roofing	Roof Coverines	ጉ ‹	9 219 23 \$	436,725,119,98	2182
	1	6 Surbeck Services	Shell	Roofing	Projections	ۍ ۲	4,684.02 \$	436,759,803.99	2182
1		6 Surbeck Services	Shell	Roofing	Roof Coverings	\$ 13	8,736.07 \$	436,898,540.06	2182
1	-	6 Surbeck Services	Shell	Roofing	Roof Opening	\$	6,710.04 \$	436,985,250.10	2182
	-	6 Surplus Sales Building	Shell	Roofing	Roof Coverings	ς Υ	4,398.21 \$	437,019,648.31	2182
-		6 Surplus Sales Building	Shell	Roofing	Projections	s, +	8,599.55 \$	437,028,247.86	2182
		6 Sutton Hall	Shell	Roofing	Projections	\$ 1	9,169.41 5	437,057,417.27	2182
		6 Turnbull Research Lab	Shell	Roofing	Roof Coverings	\$ 7	6,897.39 5	437,084,314.66	2182
		6 Turnbull Research Lab	Shell	Rooting	Projections	\$ 1	6,724.35 Ş	437,091,039.00	2182
	_ `	6 University Recreation Center	Shell	Roofing	Projections	\$ 7	3,204.70 \$	437,114,243.70	2182
	- `	6 University Recreation Center	Shell	Kooting	Koot Opening	ა ი ა	8,011.75 5	437,172,255.45	2182
			Shell	Roofing Boofing	Projections Prof Onsains	Λ L	3,204.70 >	43/,199,661,754 00 157 535 554	2012
		o University Recreation Center 6 Moodward Field Concessions	Shell	Koofing Roofing	Roof Coverings	∩ ∩		437,253,471.90 437,261,979,92	2812
	ł		Shell	Roofing	Projections	ጉፊ	2 127 00 \$	437 264 106 92	2102 2182
• -		7 Computing and Engineering Sciences Bldg	Shell	Exterior Closure	Exterior Windows	\$ 76	5.468.94 5	438.029.575.86	2183
		7 Computing and Engineering Sciences Bldg	Shell	Exterior Closure	Exterior Walls	\$ 1,70	7,584.47 \$	439,737,160.33	2183
1		7 Computing and Engineering Sciences Bldg	Shell	Exterior Closure	Exterior Doors	\$ 17	6,646.68 \$	439,913,807.00	2183
Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project Cost	Project Cost Running Total	Fiscal Year Complete	
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1 T		7 Hargreaves Hall	Shell	Exterior Closure	Exterior Doors	\$ 80,032.38	\$ 439,993,839.38	2183	
1	~	7 Hargreaves Hall	Shell	Exterior Closure	Exterior Windows	\$ 346,806.97	\$ 440,340,646.35	2184	
1		7 One Room School House	Shell	Exterior Closure	Exterior Windows	\$ 7,954.78	\$ 440,348,601.14	2184	
1		7 One Room School House	Shell	Exterior Closure	Exterior Doors	\$ 1,835.72	\$ 440,350,436.86	2184	
1	17	7 Patterson Hall	Shell	Exterior Closure	Exterior Walls	\$ 1,936,985.27	\$ 442,287,422.13	2184	
1		7 Patterson Hall	Shell	Exterior Closure	Exterior Windows	\$ 868,303.79	\$ 443,155,725.92	2185	
		Patterson Hall	Shell	Exterior Closure	Exterior Doors	\$ 200,377.79	\$ 443,356,103.71	2185	
		Practice Field Toilets	Shell	Exterior Closure	Exterior Doors	5 1,397.17 5 12 FOG 02	\$ 443,357,500.89 \$ 443,357,500.89	2185	
		/ Practice Field Tollets 7 Practice Field Toilets	Shell	Exterior Closure Exterior Closure	Exterior Walls Exterior Mindows	5 μ13,2005.02 ¢	\$ 443,371,000.90 \$ 443,377,06133	2185	
• -		7 Showalter Hall	Shell	Exterior Closure	Exterior Doors	\$ 136.924.49	\$ 443.513.985.81	2185	
		7 Substation	Shell	Exterior Closure	Exterior Windows	\$ 14,981.24	\$ 443,528,967.05	2185	
1		2 Substation	Shell	Exterior Closure	Exterior Walls	\$ 33,419.69	\$ 443,562,386.75	2185	
1		7 Substation	Shell	Exterior Closure	Exterior Doors	\$ 3,457.21	\$ 443,565,843.96	2185	
1	17	7 University Recreation Center	Shell	Exterior Closure	Exterior Walls	\$ 336,468.14	\$ 443,902,312.09	2185	
1		V University Recreation Center	Shell	Exterior Closure	Exterior Doors	\$ 34,807.05	\$ 443,937,119.14	2185	
1		V University Recreation Center	Shell	Exterior Closure	Exterior Walls	\$ 336,468.14	\$ 444,273,587.28	2185	
1		7 University Recreation Center	Shell	Exterior Closure	Exterior Doors	\$ 34,807.05	\$ 444,308,394.33	2185	
1		7 University Recreation Center	Shell	Exterior Closure	Exterior Windows	\$ 150,830.55	\$ 444,459,224.88	2185	
T		/ University Recreation Center	Shell	Exterior Closure	Exterior Windows	\$ 150,830.55	\$ 444,610,055.43	2185	
-		Visitor Center	Shell	Exterior Closure	Exterior Windows	\$ 14,611.33	\$ 444,624,666.76	2185	
1		Visitor Center	Shell	Exterior Closure	Exterior Walls	\$ 32,594.51	\$ 444,657,261.28	2185	
T		Visitor Center	Shell	Exterior Closure	Exterior Doors	\$ 3,371.85	\$ 444,660,633.12	2185	
н 6		7 Woodward Field Press Box	Shell	Exterior Closure	Exterior Windows	\$ 51,783.75	\$ 444,712,416.87	2185	
ы 86	17	7 Woodward Field Press Box	Shell	Exterior Closure	Exterior Doors	\$ 11,950.10	\$ 444,724,366.97	2185	
1	~	3 Computing and Engineering Sciences Bldg	Shell	Superstructure	Floor Construction	\$ 2,119,760.00	\$ 446,844,126.97	2186	
1	~	3 Computing and Engineering Sciences Bldg	Shell	Superstructure	Roof Construction	\$ 1,413,173.41	\$ 448,257,300.37	2187	
1	~	3 Hargreaves Hall	Shell	Superstructure	Floor Construction	\$ 960,388.48	\$ 449,217,688.85	2187	
1	~	3 Hargreaves Hall	Shell	Superstructure	Roof Construction	\$ 640,259.02	\$ 449,857,947.87	2187	
1	~	3 Patterson Hall	Shell	Superstructure	Roof Construction	\$ 1,603,022.36	\$ 451,460,970.23	2188	
1	~	3 Patterson Hall	Shell	Superstructure	Floor Construction	\$ 2,404,533.41	\$ 453,865,503.64	2189	
-	~	3 Practice Field Toilets	Shell	Superstructure	Floor Construction	\$ 16,766.09	\$ 453,882,269.73	2189	
-	~	3 Practice Field Toilets	Shell	Superstructure	Roof Construction	\$ 11,177.39	\$ 453,893,447.12	2189	
		S Substation	Shell	Superstructure	Roof Construction	\$ 27,657.68	\$ 453,921,104.80	2189	
	~ 0	S Substation	Shell	Superstructure	Floor Construction	\$ 41,486.51	\$ 453,962,591.31 \$ 15124000771	2189	
	~ 0	University Recreation Center	Shell	Superstructure	root Construction	ې 2/8,456.4U خ 417.684.F8	454,241,04/./1 خ 15755 222 26	2189	
	~ 0	8 University Recreation Center	shell	Superstructure	Floor Construction	5.41/b84.28 ک 22 م17 684 ک	454,058,/32.29 خ خ محد 776 م16 86	2189	
		3 University Recreation Center	Shell	Superstructure	Roof Construction	\$ 278.456.40	\$ 455.354.873.26	2190	
	, ω	8 Visitor Center	Shell	Superstructure	Floor Construction	\$ 40,462.15	\$ 455,395,335.42	2190	
1	ω	Visitor Center	Shell	Superstructure	Roof Construction	\$ 26,974.77	\$ 455,422,310.19	2190	
1	30	8 Woodward Field Press Box	Shell	Superstructure	Roof Construction	\$ 95,600.76	\$ 455,517,910.95	2190	
1	01	Computing and Engineering Sciences Bldg	Interiors	Staircases	Stair Construction	\$ 500,498.94	\$ 456,018,409.89	2190	
1	51	Hargreaves Hall	Interiors	Staircases	Stair Finishes	\$ 40,016.19	\$ 456,058,426.08	2190	
1	01	Hargreaves Hall	Interiors	Staircases	Stair Construction	\$ 226,758.41	\$ 456,285,184.49	2190	
1	51	) Monroe Hall	Interiors	Staircases	Stair Finishes	\$ 34,770.32	\$ 456,319,954.81	2190	
1	51	9 Monroe Hall	Interiors	Staircases	Stair Construction	\$ 197,031.82	\$ 456,516,986.63	2190	
-	51	Patterson Hall	Interiors	Staircases	Stair Construction	\$ 567,737.11	\$ 457,084,723.74	2190	
	5, 6	Patterson Hall	Interiors	Staircases	Stair Finishes	\$ 100,188.90 \$	\$ 457,184,912.63	2190	
		University Recreation Center	Interiors	Staircases	Stair Construction	5 98,619.98	5 45/,283,532.61 5 757 50 157 50	2190	
	, 01	University Recreation Center	Interiors	Staircases		\$ 17,403.52	\$ 457,399,556.12	2190	

Score	System Significance Rank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Pl Cost	oject Pro	oject Cost Running Total	Fiscal Year Complete
1	o	University Recreation Center	Interiors	Staircases	Stair Finishes	\$ 17,	403.52 \$	457,416,959.64	2190
1	J	Visitor Center	Interiors	Staircases	Stair Construction	\$ 9,	553.57 \$	457,426,513.21	2190
1	5	Visitor Center	Interiors	Staircases	Stair Finishes	\$ 1,	685.92 \$	457,428,199.13	2190
	10	Computing and Engineering Sciences Bldg	Interiors	Interior Construction	Specialties	\$ 441,	616.68 \$	457,869,815.81	2191
	J L	l computing and Engineering sciences blog Committing and Engineering Sciences Blog	Interiors Interiors	Interior Construction Interior Construction	linterior Doors Eived and Moveable Partitions	φ 1 F30.	4 40.04	458,546,901.39 760.077 800.77	1612
	10	Comparing and Engineering Seconds and	Interiors	Interior Construction	Specialties	\$ 200.	080.94 \$	460.277.980.20	2192
1	10	) Hargreaves Hall	Interiors	Interior Construction	Interior Doors	\$ 306,	790.78 \$	460,584,770.98	2192
1	10	Hargreaves Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 693,	613.94 \$	461,278,384.93	2192
1	10	One Room School House	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 15,	909.57 \$	461,294,294.49	2192
1	10	One Room School House	Interiors	Interior Construction	Interior Doors	\$ 7,	036.92 \$	461,301,331.42	2192
1	10	) Patterson Hall	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 1,736,	607.57 \$	463,037,938.99	2193
	10	) Patterson Hall	Interiors	Interior Construction	Interior Doors	\$ 768, \$	114.87 \$	463,806,053.86	2193
	10	) Patterson Hall Dractice Field Toilets	Interiors Interiors	Interior Construction Interior Construction	Specialties Snerialties	\$ 200, \$	944.47 Ş 492.94 Ş	464,306,998.33 464 310 491 27	2193
	10	Practice Field Toilets	Interiors	Interior Construction	Fixed and Moveable Partitions	ب 12, 12,	108.84 \$	464,322,600.11	2193
1	10	Practice Field Toilets	Interiors	Interior Construction	Interior Doors	\$ 2	355.83 \$	464,327,955.95	2193
1	10	Substation	Interiors	Interior Construction	Interior Doors	\$ 13,	252.64 \$	464,341,208.58	2193
1	10	University Recreation Center	Interiors	Interior Construction	Specialties	\$ 87,	017.62 \$	464,428,226.21	2193
1	10	University Recreation Center	Interiors	Interior Construction	Interior Doors	\$ 133,	427.02 \$	464,561,653.23	2193
1	10	University Recreation Center	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 301,	661.10 \$	464,863,314.33	2193
	10	University Recreation Center	Interiors	Interior Construction	Interior Doors	\$ 133,	427.02 \$	464,996,741.36	2193
	UT T	University Recreation Center	Interiors	Interior Construction	specialities	, 8/,	¢ 70./10	400,083,738.98	2194
6	IL 10	University Recreation Center	Interiors	Interior Construction	Fixed and Moveable Partitions Searcial+ior	ې 301, د 301,	\$ 0T.100	465,385,420.U8 07 019 000 321	2194
9	101	Visitor Center Visitor Center	Interiors Interiors	Interior Construction	Specialities Fived and Moveable Partitions	ς σ ο σ	\$ 20.624 \$ 79.00	465,235,649.70 A65,473,077,37	2194
	1 1	Visitor Center	Interiors	Interior Construction	ritized and introversitie rial during Interior Doors	ب ح 12, د	ς 11 ζ β25.41 ζ	465 435 997 78	2194
	101	Woodward Field Press Box	Interiors	Interior Construction	Interior Doors	\$ 45,	808.70 \$	465,481,806.48	2194
1	10	Woodward Field Press Box	Interiors	Interior Construction	Fixed and Moveable Partitions	\$ 103,	567.50 \$	465,585,373.97	2194
1	11	L Childcare Facility	Interiors	Interior Finishes	Wall Finishes	\$ 73,	433.10 \$	465,658,807.07	2194
1	11	L Computing and Engineering Sciences Bldg	Interiors	Interior Finishes	Ceiling Finishes	\$ 647,	704.47 \$	466,306,511.54	2194
1	11	l Hargreaves Hall	Interiors	Interior Finishes	Wall Finishes	\$ 333,	468.24 \$	466,639,979.78	2194
1	11	l Hargreaves Hall	Interiors	Interior Finishes	Floor Finishes	\$ 573,	565.39 \$	467,213,545.17	2194
	1	l Hargreaves Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 293,	452.05 \$	467,506,997.21	2195
	11	Monroe Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 254,	982.34 Ş	467,761,979.55	2195
	1 5	l Monroe Hall Doo Boom School Houro	Interiors	Interior Finishes Interior Einishes	Floor Finishes Coiling Einichae	\$ 498,	3/4.59 ¢	468,260,354.13 769 767 095 10	2195
	11	Lione Room School House	Interiors	Interior Finishes	Floor Finishes	\$ 13.	\$ 60.51	468.280.241.09	2195
1	11	l Patterson Hall	Interiors	Interior Finishes	Ceiling Finishes	\$ 734,	718.57 \$	469,014,959.66	2195
1	11	L Patterson Hall	Interiors	Interior Finishes	Floor Finishes	\$ 1,436,	040.90 \$	470,451,000.56	2196
1	11	L Patterson Hall	Interiors	Interior Finishes	Wall Finishes	\$ 834,	907.48 \$	471,285,908.04	2196
1	11	L Practice Field Toilets	Interiors	Interior Finishes	Wall Finishes	\$ 5,	821.56 \$	471,291,729.60	2196
1	11	l Practice Field Toilets	Interiors	Interior Finishes	Floor Finishes	\$ 10,	013.08 \$	471,301,742.68	2196
	11	l Practice Field Toilets	Interiors	Interior Finishes	Ceiling Finishes	\$ . 5	122.97 \$	471,306,865.65	2196
	11	University Recreation Center	Interiors	Interior Finishes	Floor Finishes	\$ 249,	450.53 Ş	471,556,316.19	2196
	11	University Recreation Center	Interiors	Interior Finishes	Ceiling Finishes	5 127, 5	625.85 Ş	471,683,942.03	2196
	1 1	L University Recreation Center I Iniversity Recreation Center	Interiors	Interior Finishes Interior Finishes	Celling Finishes Floor Finishes	, 121, С 2Л0,	\$ C8.C20	4/ 1/0C/118/1/ 472 061 018 41	9612
•	1 1	LUniversity Recreation Center	Interiors	Interior Finishes	Wall Finishes	5 145.	729.38 S	472.206.047.79	2196
	11	l Visitor Center	Interiors	Interior Finishes	Wall Finishes	\$ 14,	049.36 \$	472,220,097.15	2196
1	11	L Visitor Center	Interiors	Interior Finishes	Floor Finishes	\$ 24,	164.90 \$	472,244,262.05	2196
1	11	l Visitor Center	Interiors	Interior Finishes	Ceiling Finishes	\$ 12,	363.44 \$	472,256,625.48	2196

Score	System Significance Bank	Facility Name	Uniformat Category Level 1	Uniformat System Level 2	Uniformat Component Level 3	Estimated Project	Project Cost Running Total	Fiscal Year Complete
						1000		
1	11	Woodward Field Press Box	Interiors	Interior Finishes	Wall Finishes	\$ 49,792.07	\$ 472,306,417.55	2196
1	11	Woodward Field Toilets	Interiors	Interior Finishes	Wall Finishes	\$ 21,098.62	\$ 472,327,516.17	2196
1	12	Cheney Hall	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 64,974.90	\$ 472,392,491.12	2196
1	12	Computing and Engineering Sciences Bldg	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 88,323.3	\$ 472,480,814.46	2196
1	12	Hargreaves Hall	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Fixed Furnishings and Equipment	\$ 93,371.13	\$ 472,574,185.57	2197
1	12	Hargreaves Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 40,016.19	\$ 472,614,201.76	2197
1	12	One Room School House	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Moveable Furnishings (Capital Funded Only)	\$ 917.86	\$ 472,615,119.62	2197
1	12	Patterson Hall	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Fixed Furnishings and Equipment	\$ 233,774.10	\$ 472,848,893.72	2197
1	12	Patterson Hall	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 100,188.9(	\$ 472,949,082.62	2197
1	12	PE Classroom Building	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Fixed Furnishings and Equipment	\$ 55,149.93	\$ 473,004,232.52	2197
1	12	Pence Union Building	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Fixed Furnishings and Equipment	\$ 283,220.53	\$ 473,287,453.04	2197
1	12	Red Barn	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 7,783.52	\$ 473,295,236.56	2197
1	12	Senior Hall	Equipment and Furnishings	<b>Equipment and Furnishings</b>	Moveable Furnishings (Capital Funded Only)	\$ 37,191.13	\$ 473,332,427.67	2197
1	12	University Recreation Center	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 17,403.52	\$ 473,349,831.19	2197
1	12	University Recreation Center	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 40,608.23	\$ 473,390,439.42	2197
1	12	University Recreation Center	Equipment and Furnishings	Equipment and Furnishings	Fixed Furnishings and Equipment	\$ 40,608.23	\$ 473,431,047.64	2197
1	12	University Recreation Center	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 17,403.52	\$ 473,448,451.17	2197
1	12	University Recreation Center	Special Construction	Special Construction	Integrated Constr. & Special Constr. Systems	\$ 58,011.75	\$ 473,506,462.92	2197
1	12	University Recreation Center	Special Construction	Special Construction	Special Controls and Instrumentation	\$ 58,011.75	\$ 473,564,474.66	2197
1	12	Visitor Center	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 1,685.92	\$ 473,566,160.59	2197
1	12	Woodward Field Press Box	Equipment and Furnishings	Equipment and Furnishings	Moveable Furnishings (Capital Funded Only)	\$ 5,975.05	\$ 473,572,135.64	2197
1	13	Computing and Engineering Sciences Bldg	Substructure	Foundations	Standard Foundations	\$ 1,236,526.70	\$ 474,808,662.34	2197
1	13	One Room School House	Substructure	Foundations	Standard Foundations	\$ 12,850.03	\$ 474,821,512.37	2197
Ţ	13	Patterson Hall	Substructure	Foundations	Slab on Grade	\$ 935,096.40	\$ 475,756,608.77	2198
,⊣ 70	13	Patterson Hall	Substructure	Foundations	Standard Foundations	\$ 1,402,644.53	\$ 477,159,253.3C	2198
1	13	Practice Field Toilets	Substructure	Foundations	Standard Foundations	\$ 9,780.23	\$ 477,169,033.52	2198
1	13	Practice Field Toilets	Substructure	Foundations	Slab on Grade	\$ 6,520.15	\$ 477,175,553.66	2198
1	13	Showalter Hall	Substructure	Foundations	Slab on Grade	\$ 638,980.96	\$ 477,814,534.62	2199
1	13	Showalter Hall	Substructure	Foundations	Standard Foundations	\$ 958,471.39	\$ 478,773,006.01	2199
1	13	Substation	Substructure	Foundations	Standard Foundations	\$ 24,200.47	\$ 478,797,206.48	2199
1	13	Substation	Substructure	Foundations	Slab on Grade	\$ 16,133.65	\$ 478,813,340.12	2199
1	13	University Recreation Center	Substructure	Foundations	Slab on Grade	\$ 162,432.90	\$ 478,975,773.03	2199
1	13	University Recreation Center	Substructure	Foundations	Standard Foundations	\$ 243,649.3 <sup>,</sup>	\$ 479,219,422.37	2199
1	13	University Recreation Center	Substructure	Foundations	Slab on Grade	\$ 162,432.90	\$ 479,381,855.27	2199
1	13	University Recreation Center	Substructure	Foundations	Standard Foundations	\$ 243,649.34	\$ 479,625,504.62	2199
T T	13	Visitor Center	Substructure	Foundations	Slab on Grade	\$ 15,735.28	\$ 479,641,239.90	2199
1	13	Visitor Center	Substructure	Foundations	Standard Foundations	\$ 23,602.93	\$ 479,664,842.82	2199
1	13	Woodward Field Press Box	Substructure	Foundations	Standard Foundations	\$ 83,650.67	\$ 479,748,493.49	2199

### **PROJECT DATA**

Institution - Eastern Washington University

Project Title - Chilled Water Production and Distribution - 30000561

Project Location – Cheney, Washington

### **PROBLEM STATEMENT**

This request includes the necessary upgrades to our chilled water production plant and distribution system to service the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions or the chilled water system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

This amount requested for this project is \$8,606,000.

Eastern Washington University enrollment continues to grow and facilities are requiring expansion to accommodate this growth. This expansion requires that our Chilled Water Production and Distribution system grow with us. This request is to expand, upgrade, and improve the equipment and operations of Eastern Washington University chilled water plant and campus wide chilled water infrastructure.

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementation of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. This request includes the necessary expansion of the chilled water system to provide necessary service for the 2017-19 Capital Budget Requests including the proposed Interdisciplinary Science Center, renovation of our existing Science Building, and the Engineering Building.

In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and long-term actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities. These studies can be found in the following sites:

### APPENDIX A. LINK: 2014 Campus Infrastructure Renewal

### EXHIBIT A. LINK: Chilled Water System Evaluation 2014

This Capital Budget Request proposal reflects the requirement for the infrastructure expansion projects required to support the proposed Interdisciplinary Science Center, renovation of the existing Science Building, and Engineering Building, as well as the other listed project funding needs listed in this proposal.

Eastern's Infrastructure Renewal Project is a broad-based and comprehensive plan that spans several biennia. Projects in this 2017-19 capital request are of the highest priority, based upon professional recommendation and as reviewed by university administration to support and attain university and state goals and objectives. Eastern Washington University considers the cost for infrastructure renewal to be ongoing. Future capital budget requests will address the next set of high priority infrastructure needs as originally outlined in **Appendix A** and **Exhibit A** and modified based on further engineering study and/or redirected strategy.

In 2015, Eastern collaborated again with a professional engineering consultant to provide in-depth study of the recommendations that were identified in **Appendix A** and **Exhibit A**. One recommendation is the need for additional chilled water and electrical capacity to meet the expected loads of the proposed Interdisciplinary Science Center, renovation of the existing Science Building, and Engineering Building. Consultants determined the best route for providing electrical and heating/cooling distribution services for these new/renovated buildings and how these new facilities will affect the systems for the balance of the campus. The study determined how the corresponding tunnel needs to be constructed and from what direction, providing the pathway for the steam/chilled water piping, electrical, and communications services to be extended to the Interdisciplinary Science Center. Design for the tunnel extension is underway, and construction is expected to occur during FY2017. See **Exhibit B**.

### EXHIBIT B. LINK: Energy Utility Services Study 2016

The study also provides a list of the most urgent needs to be addressed based on operational/maintenance concerns, known system expansions, regulatory requirements of the campus chilled water production/distribution systems. From this list, specific projects are currently being designed for construction in FY 2016-17. **Exhibit C**. Funding received during this request period will be applied to the next logical set of projects. Design will be finalized and construction projects will be executed during the 2017-19 biennium.

### EXHIBIT C. LINK: Chilled Water Capacity Study 2016

In EWU's 2012-2017 Strategic Plan, "Inspiring the Future," the university established four pillars to success: Student Success, Institution of Innovation, Community Engagement, and Visibility. The intention of the university is to systematically expand, upgrade, replace, and renew portions of the infrastructure system to provide "a long-term response to the needs of the university, in order to have high-quality teaching and learning facilities available to students to promote their academic success."

### **HISTORY OF THE PROJECT OR FACILITY**

### **Chilled Water Production and Distribution**

The central chiller plant is located at the Rozell facility. The plant furnishes chilled water at approximately 45 degrees Fahrenheit to the majority of campus buildings through a three-mile network of underground tunnels and shallow utilidors providing space cooling and air conditioning needs of campus facilities.

There are five water-cooled centrifugal chillers located in the lower level of the Rozell central plant that have 4,000 tons of chilled water capacity. These chillers were installed in 1996 as a part of a major plant upgrade. All chillers utilize environmentally friendly R-0134a refrigerant.

Along with the chillers, auxiliary support equipment includes five cooling towers, two frame and plate free cooling heat exchangers, chilled water pumps, and chilled water primary and secondary system valves. The specification and history of this equipment are included in the Campus Infrastructure Renewal Project study/report attached in **Appendix A**.

The majority of the chilled water piping system is 40-years old. With some exceptions, the piping is in good condition. However, as it is currently sized, portions of the distribution system are at capacity. Any growth or additional campus demand cannot be accommodated with the current system. This restricts the ability to add new buildings to the system that are part of the Eastern's Ten-Year Capital Plan and our Comprehensive Campus Master Plan 2014.

### UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECT

All programs on the Cheney campus are supported by the utilities and infrastructure systems that are described in this request for renewal. Central Plant operations provide heating and cooling media to all buildings. Facilities staff operate and maintain equipment to provide a safe and comfortable academic atmosphere for instruction and other student services. The chilled water production and distribution system provides cooling for building staff, as well as mission critical operations such as electronic data centers, vivariums and other temperature sensitive equipment and systems. The energy management system automates the building heating and cooling to make the most effective use of the utilities provided.

Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

### SIGNIFICANT HEALTH, SAFETY, AND CODE ISSUES

Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), energy, utilities, or transportation code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

- RCW 70.235 Limiting Greenhouse Gas Emissions alternate fuels, clean energy, high efficiency systems, and system components
- RCW 39.35D High Performance Public Buildings high efficiency components and systems
- RCW43.19.668; 669; 670; 682 Energy Conservation high efficiency components and systems
- RCW 90.46 Reclaimed Water Use Storm water management and re-use.
- RCW 70.94 Washington Clean Air Act boiler emissions
  - Spokane Regional Clean Air Agency boiler emission
- Washington State Department of Ecology
  - o Aquifer protection and groundwater rights
  - o Storm Water
  - o SEPA Reporting
  - o State Waste Industrial Permitting
- Washington State Department of Heath
- National Electrical Codes
- National Fire Protection Association Codes
- American Colleges and University Presidents' Climate Commitment 2007

### **EVIDENCE OF INCREASED REPAIRS AND/OR SERVICE INTERRUPTION**

Identify prior facility repairs, work order repair history or contractor repair call-outs, increased utility and/or maintenance costs, and/or system unreliability. (Provide selected supporting documentation in appendices, and reference them in the body of the proposal.)

### **Central Campus Chiller Plant**

As described in detail in **Appendix A**, the central campus chiller plant is comprised of five (5) water-cooled centrifugal chillers located in the Rozell Central Plant. The chillers were installed in 1996 as part of a major plant improvement. All chillers utilize environmentally friendly R-134a refrigerant. Cooling towers coupled to the chillers by constant volume pumps and single speed chillers as well are reaching the end of serviceable life. A program for

phased replacement of each coupled system is being implemented and funding for this program is being requested in this proposal.

While the system is well maintained, age of the existing system coupled with the need for increased capacity drives this programming request. The existing chillers and auxiliary equipment are aged and were constructed prior to current climate and energy concerns. New technologies that support significant reductions in energy without sacrificing delivery and comfort will be put to good use as replacement projects are programmed and executed.

In addition to the plant and auxiliary equipment, the chilled water distribution piping on campus has areas that are reaching the end of their life cycle and showing signs of deterioration.

### IMPACT ON INSTITUTIONAL OPERATIONS WITHOUT THE INFRASTRUCTURE PROJECT

Describe how and the extent to which there would be an impact on existing operations and programs. Describe the potential impact on future, already funded or planned construction projects or program needs should this infrastructure project not occur.

Primarily, there are pending projects within our Ten-Year Capital Plan that require the additional chilled water capacity to operate including the Interdisciplinary Science Center, the renovated Science Building and a new Engineering Building. Under the current funding package, our contracted professional engineering consultants are currently in the design phase of this needed tunnel extension with construction expected to occur during FY2017. See **Exhibit B**.

This tunnel will extend heating, cooling, electrical, and communications systems from the distribution main to this branch of the campus.

The lack of infrastructure to support these new/remodeled facilities would greatly affect Eastern's Strategic Plan, our Comprehensive Campus Master Plan, and the ability for Eastern to grow enrollments, increase undergraduate rate in general education and STEM fields, and increase growth in graduate degrees.

Secondly, these projects substantially improve existing operation by increasing efficiency in operations, reducing energy costs, and providing the opportunity to consider alternate design applications and potentially alternate fuels for operations. Our engineering professionals have assessed and noted specific areas of each utility that are at end-of-lifecycle and in need for replacement or major renewal. There is potential for failures that are very costly and could affect the university's ability to operate until major emergency repairs are made.

Sustainability and conservation are part of Eastern's role in the community and assist in meeting the goals of Eastern Strategic Plan 2012-17 toward "Inspiring the Future". The university also developed a Sustainability Master Plan (2012) and a Climate Action Plan (2012). Implementing current sustainability trends and moving the university forward supports Eastern as an "Institution of Innovation." This request addresses specific improvements in the use of limited natural resources, which is part of our plan to improve student recruitment and retention rates. This project also responds to students' desire to reduce the impact of university operations on the natural environment

and support the commitment the university has to the ACUPCC (American College and University Presidents' Climate Commitment), which Eastern signed in 2007.

### **AVAILABILITY OF SPACE/UTILIZATION ON CAMPUS:**

Provide as much detailed cost estimate information as possible, including documentation of professional assessment of costs (may contain opinions of external experts or experienced project management staff from the institution).

The university, with information provided from our professional engineering consultants, has developed a list of the most critical and highest priority issues and an estimated cost of completion of each. These priorities will address student growth and success associated with the Interdisciplinary Science Center, remodeled Science building, and new Engineering building. The priorities also address the replacement of inefficient and non-functioning equipment, current code and regulatory compliance deficiencies, safety issues and lower our operating costs. Individual program requests are supported by detailed information contained in the attached Appendices and Exhibits referenced.

### **ENGINEERING STUDY**

Identify whether there is a completed comprehensive engineering study, site survey and recommendations, or opinion letter. (Provide referenced supporting documentation in appendices.)

Two engineering Studies were undertaken on all aspects of the campus infrastructure with emphasis on chilled water production and distribution. See **Exhibit A** and **Exhibit C**. The study reviewed the following:

### **Chilled Water System**

- 1. Site Investigation and assessment of the following:
  - a. Central Chiller Plant
  - b. Campus Chilled Water distribution systems
- 2. Computerized Flow Model Analysis of campus chilled water systems
  - a. Construct overall campus chilled water plan
  - b. Input flow data for chilled water in all buildings
  - c. Evaluate the capacity of the Central Plant for chilled water production and distribution taking into consideration the university's ten-year and facilities master plan
    - i. Once built, the model was altered to represent the addition of the Interdisciplinary Science Center, the Renovated Science Building, and the Engineering Building insertion into the campus system
      - 1. Alternate routes for delivery of chilled water and other utilities were evaluated.
      - 2. The resulting information was utilized in the decision making for a final route.
  - d. Provide working computerized model
    - i. Continue modeling sub-systems as needed to aid in engineering design

- 1. Information gained is used in the design of construction projects to support the university's need for increased capacity.
- 2. Modeling allows the opportunity to ask relatively low cost "what-if" questions and to see theoretical results of those questions at many system levels.

### **SUPPORTS FACILITIES PLAN**

Describe the proposed project's relationship and relative importance to the institution's

- a. Campus/Facilities Master Plan or other applicable strategic plan.
- b. Ongoing academic and/or research program.

### **Campus/Facilities Master Plan**

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science Technology Engineering and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems. **Appendix A, Exhibit A**, and **Exhibit C**.

### LINK: Eastern's Facilities Master Plan

### **Proposed Academic and/or Research Program**

The Interdisciplinary Science Center, renovated Science building, and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs, increasing our recruiting and retention rate, and improving time to graduation metrics. These three projects also offer better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs. Eastern's Current Strategic Plan is available at the link below:

### LINK: Eastern's Strategic Plan "Inspiring the Future" (2012-2017)

In conjunction with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan. These plans can be viewed at the following links:

LINK: American College and University President Climate Commitment Climate Action Plan 2012

*LINK:* <u>Eastern Washington University Energy Efficiency and Sustainability Report 2012</u>

### **Resource Efficiency and Sustainability**

Document project benefits associated with low-impact storm water management techniques, improvements in energy and resource conservation, and use of renewable energy sources.

### **Storm Water Management**

Eastern has also updated the Washington State Department of Ecology five-year state waste discharge permit which includes the study and report outlining the EWU plan for meeting current regulatory requirements over the next five

years, as well as conservation items in our plan. Chilled Water production, distribution and effluent from the system is part of our discharge permit and the university's wastewater plan.

Many measures of the EWU discharge plan have been implemented through changes in daily business practices within our facilities, thereby reducing costs, waste and the effects thereof. In FY2017, a project addressing wastewater flow monitoring will be executed and constructed, meeting other the requirements of the permit.

### **Energy and Resource Conservation**

Preliminary assessment and analysis demonstrates that there are a variety of potential energy and resource conservation improvements, including but not limited to:

- 1. Increase chiller capacity by 1,000 to 2,000 tons with high efficiency variable speed drive compressors.
  - a. Based on the study referenced in **Exhibit C** design and construction will be accomplished in FY2017.
- 2. Phased/periodic replacement of aging chillers.
  - a. All five (5) existing chiller plants are in excess of twenty (20) years old.
  - b. Requesting that programming should allow for the replacement of at least one (1) 1,000-ton chiller system every two (2) years until all five (5) chillers are modernized.
  - c. In the logical order of design and construction, this work should begin to occur in the 2017-19 biennium.
- 3. Install two new energy efficient cooling towers with variable speed drives.
  - a. In the logical order of design and construction, this work should begin to occur in the 2017-19 biennium.
- 4. Upgrade chilled water distribution piping along Washington Street side.
  - a. In the order of precedence, this work should occur in the 2017-19 biennium.
- 5. Upgrade chilled water pumps with high efficiency variable speed drive pumps.
  - a. This work should be accomplished at the same time as the upgrade of each matching chiller plant.
  - b. This work should occur in the 2017-19 biennium.
- 6. Install variable speed drives on existing chiller compressors.
  - a. This work should be accomplished at the same time as the upgrade of each matching chiller plant.
  - b. This work should occur in the 2017-19 biennium.

### **APPENDIX A**

2014 CAMPUS INFRASTRUCTURE RENEWAL

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368\_NAC\_Steam %20System%20Attachment%20A.pdf

### **EXHIBIT** A

CHILLED WATER SYSTEM EVALUATION 2014

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368 NAC Chille d%20Water%20Attachment%20B.pdf

### EXHIBIT B

### **ENERGY UTILITY SERVICES STUDY 2016**

https://goo.gl/GcVSLb

### EXHIBIT C

CHILLED WATER CAPACITY STUDY 2016

https://dl.dropboxusercontent.com/u/80246328/EWU-Chilled%20Water%20Capacity%20Upgrade%20-%20Pre-Design%20Report-Final-with%20Appendix%20%288-02-16%29.pdf

### **ADDITIONAL DOCUMENTS**

### EASTERN'S FACILITIES MASTER PLAN

http://access.ewu.edu/Documents/Facilities-Planning/PEC Executive%20Summary 9 27 13revision1-single.pdf

### EASTERN'S STRATEGIC PLAN "INSPIRING THE FUTURE" (2012-2017)

http://www.ewu.edu/Documents/Strategicplanning/strat plan doc webres.pdf

### American College and University President Climate Commitment Climate Action Plan 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Climate%2 0Action%20Plan.pdf

# EASTERN WASHINGTON UNIVERSITY ENERGY EFFICIENCY AND SUSTAINABILITY REPORT 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Energy%20 EfficiencySustainability%20Report.pdf

EASTERN WASHINGTON UNIVERSITY

Additional Documents

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	3

#### Project Summary

Eastern Washington University enrollment continues to grow and facilities are requiring expansion to accommodate this growth. This expansion requires that our Chilled Water Production and Distribution system grow with us. This request is to expand, upgrade, and improve the equipment and operations of Eastern Washington University chilled water plant and campus wide chilled water infrastructure.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

This request includes the necessary upgrades to our chilled water production plant and distribution system to service the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions or the chilled water system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

This amount requested for this project is \$8,606,000.

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementation of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. This request includes the necessary expansion of the chilled water system to provide necessary service for the 2017-19 Capital Budget Requests including the proposed Interdisciplinary Science Center, renovation of our existing Science Building, and the Engineering Building.

In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and long-term actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project, if funded will result in the design and construction of: Plant chillers, plant piping and pumping equipment, distribution piping replacement and plant and campus chilled water controls, automation and metering.

Design will commence as soon as capital funds are available to hire a design consultant. Design and construction of this phase of the infrastructure is planned to started in July of 2017 and complete prior to the end of the biennium June 30, 2019.

#### This project upgrades and replaces segments of the university Chilled Water Production System as stated below:

Site Investigation and assessment of the following: Central Chiller Plant Campus Chilled Water distribution systems

**Computerized Flow Model Analysis of campus chilled water systems** Construct overall campus chilled water plan

Input flow data for chilled water in all buildings

Evaluate the capacity of the Central Plant for chilled water production and distribution taking into consideration the university's ten-year and facilities master plan

Once built, the model was altered to represent the addition of the Interdisciplinary Science Center and Science,

Technology, Engineering and Math buildings insertion into the campus system

Alternate routes for delivery of chilled water and other utilities were evaluated

The resulting information was utilized in the decision making for a final route.

Provide working computerized model

Continue modeling sub-systems as needed to aid in engineering design

Information gained is used in the design of construction projects to support the university's need for increased capacity. Modeling allows the opportunity to ask relatively low cost "what-if" questions and to see theoretical results of those questions at many system levels.

Infrastructure Renewal projects are already offer a phased approach to replacing and upgrading our chilled water production and distribution. This segment is for the highest priority system upgrades and is necessary to support new facilities, Interdisciplinary Science Center and Engineering building as well as a planned major renovation to the Science Building.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This Capital Budget Request proposal reflects the requirement for the infrastructure expansion projects required to support the proposed remodel of the existing Science building, the proposed new Interdisciplinary Science Center, and the proposed new Engineering Building, as well as the other listed project funding needs listed in this proposal.

Eastern's Infrastructure Renewal Project is a broad-based and comprehensive plan that spans several biennia. Projects in this 2017-19 capital request are of the highest priority, based upon professional recommendation and as reviewed by university administration to support and attain university and state goals and objectives. Eastern Washington University considers the cost for infrastructure renewal to be ongoing. Eastern's 2019-21 capital budget request will address the next set of high priority infrastructure needs as originally outlined in the Chilled Water System Evaluation

2014 <u>https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368\_NAC\_Chilled%20W</u> <u>ater%20Attachment%20B.pdf</u> of Eastern's Major Capital request for this project and modified based on further engineering study and/or redirected strategy.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All programs on the Cheney campus are supported by the utilities and infrastructure systems that are described in this request for renewal.

Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are not IT related costs associated with this project request. This project does not fall under OCIO review requirements.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the

# agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science Technology Engineering and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems.

This project will be designed and implement in accordance with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan.

The Interdisciplinary Science Center, remodeled Science building and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs, increasing our recruiting and retention rate, and improving time to graduation metrics. This chilled water expansion project also offers better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

### Is there additional information you would like the decision makers to know when evaluating this request?

Preliminary assessment and analysis demonstrates that there are a variety of potential energy and resource conservation improvements, including but not limited to:

#### Increase chiller capacity by 1,000 to 2,000 tons with high efficiency variable speed drive compressors.

Based on the study referenced in Appendix C of our major capital proposal design and construction will be accomplished in FY2017.

#### Phased/periodic replacement of aging chillers.

All five (5) existing chiller plants are in excess of twenty (20) years old.

Requesting that programming should allow for the replacement of at least one (1) 1,000 ton chiller system every two (2) years until all five (5) chillers are modernized.

In the logical order of design and construction, this work should begin to occur in the 2017-19 biennium.

#### Install two new energy efficient cooling towers with variable speed drives.

In the logical order of design and construction, this work should begin to occur in the 2017-19 biennium.

### Upgrade chilled water distribution piping along Washington Street side.

In the order of precedence this work should occur in the 2017-19 biennium.

#### Upgrade chilled water pumps with high efficiency variable speed drive pumps.

This work should be accomplished at the same time as the upgrade of each matching chiller plant. This work should occur in the 2017-19 biennium.

#### Install variable speed drives on existing chiller compressors.

This work should be accomplished at the same time as the upgrade of each matching chiller plant. This work should occur in the 2017-19 biennium.

Location

City: Cheney

County: Spokane

Legislative District: 006

### Project Type

Infrastructure (Major Projects)

### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

### Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Curren t	2017-19 <u>Reapprops</u>	Fiscal Period New Approps
057-1	State Bldg Constr-State	8,606,000				8,606,000
	Total	8,606,000	0	0	0	8,606,000
			Future Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Onor	oting Imposto					

### Operating Impacts

No Operating Impact

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000561	30000561
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

# STATE OF WASHINGTON

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Chilled Water Production Distribution	
OFM Project Number	30000561	

	Contact Information	
Name	Shawn King	
Phone Number	509-359-6878	
Email	<u>sking@ewu.edu</u>	

		Statistics	
Gross Square Feet		MACC per Square Foot	
Usable Square Feet		Escalated MACC per Square Foot	
Space Efficiency		A/E Fee Class	
Construction Type		A/E Fee Percentage	
Remodel		Projected Life of Asset (Years)	30
	Addition	al Project Details	
Alternative Public Works Project	No	Art Requirement Applies	No
Inflation Rate	2.80%	Higher Ed Institution	Yes
Sales Tax Rate %	8.70%	Location Used for Tax Rate	Cheney WA
Contingency Rate	10%		
Base Month	July-16		
Project Administered By	Agency		

		chedule	
Predesign Start		Predesign End	
Design Start	July-17	Design End	December-17
Construction Start	March-18	Construction End	June-19
Construction Duration	15 Months		

Green cells must be filled in by user

	Project Co	ost Estimate	
Total Project	\$8,106,614	Total Project Escalated	\$8,606,186
		Rounded Escalated Total	\$8,606,000

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### STATE OF WASHINGTON

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Chilled Water Production Distribution	
OFM Project Number	30000561	

### **Cost Estimate Summary**

Acquisition				
\$0	Acquisition Subtotal Escalated	\$0		
	40 \$0	\$0 Acquisition Subtotal Escalated		

Consultant Services			
Predesign Services	\$325,000		
A/E Basic Design Services	\$0		
Extra Services	\$165,000		
Other Services	\$0		
Design Services Contingency	\$49,000		
Consultant Services Subtotal	\$539,000	Consultant Services Subtotal Escalated	\$556,910

Construction				
Construction Contingencies	\$326,000	Construction Contingencies Escalated	\$347,288	
Maximum Allowable Construction	\$3,260,000	Maximum Allowable Construction Cost	\$3,462,414	
Cost (MACC)	\$5,200,000	(MACC) Escalated	Ş5,402,414	
Sales Tax	\$311,982	Sales Tax Escalated	\$331,445	
Construction Subtotal	\$3,897,982	Construction Subtotal Escalated	\$4,141,147	

Equipment				
Equipment	\$3,360,000			
Sales Tax	\$292,320			
Non-Taxable Items	\$0			
Equipment Subtotal	\$3,652,320	Equipment Subtotal Escalated	\$3,890,817	

Artwork			
Artwork Subtotal	\$17,312	Artwork Subtotal Escalated	\$17,312

Agency Project Administration				
Agency Project Administration				
Subtotal				
DES Additional Services Subtotal	\$0			
Other Project Admin Costs	\$0			
Project Administration Subtotal	\$0	Project Administation Subtotal Escalated	\$0	

Other Costs				
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0	

Project Cost Estimate			
Total Project	\$8,106,614	Total Project Escalated	\$8,606,186
		Rounded Escalated Total	\$8,606,000

### **PROJECT DATA**

Institution - Eastern Washington University

Project Title - Central Steam Production and Distribution - 30000560

Project Location – Cheney, Washington

### **PROBLEM STATEMENT**

This request includes the necessary upgrades for our central steam plant and steam distribution system to provide service to the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions of the steam system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

The requested amount for this project is \$8,406,000.

Eastern Washington University enrollment continues to grow and facilities are requiring expansion to accommodate the enrollment growth. This expansion requires that our Central Steam Production and Distribution system grow with us. This request is to expand, upgrade, and improve the equipment and operations of Eastern Washington University Steam Plant and campus wide steam infrastructure.

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementation of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and longterm actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities. These studies are included as **Appendix A** and **Exhibit A**.

### APPENDIX A. LINK: 2014 Campus Infrastructure Renewal

EXHIBIT A. LINK: Steam System Evaluation 2014

This Capital Budget Request proposal reflects the requirement for the infrastructure expansion projects required for the proposed new Interdisciplinary Science Center, the proposed remodel of the existing Science building, and the proposed new Engineering Building, as well as the other listed project funding needs listed in this proposal.

Eastern's Infrastructure Renewal Project is a broad-based and comprehensive plan that spans several biennia. Projects in this 2017-19 capital request are of the highest priority, based upon professional recommendation and as reviewed by university administration to support and attain university and state goals and objectives. Eastern Washington University considers the cost for infrastructure renewal to be ongoing. Future capital budget requests will address the next set of high priority infrastructure needs as originally outlined in **Exhibit A** and modified based on further engineering study and/or redirected strategy.

In 2015, Eastern collaborated again with a professional engineering consultant to provide in-depth study of the recommendations identified in **Appendix A**. One recommendation is the need for additional steam plant capacity to meet the expected loads of the proposed remodel of the existing Science building, proposed Interdisciplinary Science Center, and the proposed Engineering building. Consultants determined the best route for providing electrical and heating/cooling distribution services for new/remodeled buildings and the effect on the systems for the balance of the campus. The study determined how the corresponding tunnel needs to be constructed and from what direction, providing the pathway for the steam/chilled water piping, electrical, and communications services to be extended to the Interdisciplinary Science Center. Design for the tunnel extension is underway, and construction planned during FY2017. See **Exhibit B**.

### EXHIBIT B. LINK: Energy Utility Services Study 2016

The study also provides a list of the most urgent needs based on operational/maintenance concerns, known system expansions, regulatory requirements of the campus steam production/distribution systems. From this list, specific projects are currently being designed for construction in FY 2016-17. See **Exhibit A**. Funding received during this request period the university will be applied to the next logical set of projects. Design will be finalized, and construction projects will be executed during the 2017-19 biennium.

In EWU's 2012-2017 Strategic Plan, "Inspiring the Future," the university established four pillars to success: Student Success, Institution of Innovation, Community Engagement, and Visibility. The intention of the university is to systematically expand, upgrade, replace, and renew portions of the infrastructure system to provide "a long-term response to the needs of the university, in order to have high-quality teaching and learning facilities available to students to promote their academic success."

### **HISTORY OF THE PROJECT OR FACILITY**

### **Central Steam Production and Distribution**

The central campus steam plant is located in the Rozell facility at the north end of campus. The Rozell plant was constructed in 1960 with minor additions since. The steam plant furnishes high-pressure steam (100 psig) to the majority of the campus buildings through a network of tunnels and shallow utilidors to provide space heating and domestic water heating of campus facilities.

There are five high-pressure steam boilers in the Rozell power plant. All are capable of firing on either natural gas or No. 2 fuel oil. Avista Utilities supplies natural gas to the plant, and fuel oil is stored in two 15,000-gallon underground storage tanks adjacent to the plant.

This mission-critical system is approximately fifty years old. Although the steam plant is well maintained, it is showing signs that specific components need replacement and major renewal to extend the lifecycle of the complete system. Additionally, due to current advances in controls and conservation design, there are many opportunities to increase the systems efficiency and sustainability. Another aspect of our goal is to analyze the potential for alternative fuels and other green technologies that meet state requirements and the university's commitment to the American College and University Presidents' Climate Commitment 2007.

### UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECT

All programs on the Cheney campus are supported by the utilities and infrastructure systems that are described in this request for renewal. Central Plant operations provide heating and cooling media to all buildings. Facilities staff operate and maintain equipment to provide a safe and comfortable academic atmosphere for instruction and other student services. The electrical system provides power for building equipment, as well as lighting and other electrical convenience power. The energy management system automates the building heating and cooling to make the most effective use of the utilities provided.

Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

### SIGNIFICANT HEALTH, SAFETY, AND CODE ISSUES

Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), energy, utilities, or transportation code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

- RCW 70.235 Limiting Greenhouse Gas Emissions alternate fuels, clean energy, high efficiency systems, and system components
- RCW 39.35D High Performance Public Buildings high efficiency components and systems
- RCW43.19.668; 669; 670; 682 Energy Conservation high efficiency components and systems
- RCW 90.46 Reclaimed Water Use Storm water management and re-use.

- RCW 70.94 Washington Clean Air Act boiler emissions
- Spokane Regional Clean Air Agency boiler emission
- Washington State Department of Ecology
  - o Aquifer protection and groundwater rights
  - o Storm Water
  - o SEPA Reporting
  - o State Waste Industrial Permitting
- Washington State Department of Heath
- National Electrical Codes
- National Fire Protection Association Codes
- American Colleges and University Presidents' Climate Commitment 2007

### **EVIDENCE OF INCREASED REPAIRS AND/OR SERVICE INTERRUPTION**

Identify prior facility repairs, work order repair history or contractor repair call-outs, increased utility and/or maintenance costs, and/or system unreliability. (Provide selected supporting documentation in appendices, and reference them in the body of the proposal.)

### **Steam Production/Distribution**

Steam Boiler #3 has been out of operation for several years due to the prohibitive cost of repairs. The programming for this project includes replacing this boiler with a new 40,000-pph boiler to restore plant capacity to originally programmed levels and allow for some redundancy, thereby reducing the wear and tear on the other boilers in the system, increase efficiency, and introduce flexible equipment into the system operations.

The existing condensate "Hot Well" and bulk "de-aeration" (DA) tank are single system units and service all five boilers. These sub-systems to the steam condensate system have exceeded their lifecycles in operation and need to be replaced with redundant systems dedicated to each boiler thereby offering redundancy and reducing energy costs in operation and stability in maintenance of systems.

Likewise, the Rozell plant Burner Management System (BMS) is aged with controls that are no longer supported with manufacturer's replacement parts. This system is critical to the operation of the steam plant and is mission critical.

Field-testing shows that specific parts of the steam distribution system are in need of replacement and that equipment is well beyond the expected life cycle. Replacement of these components will extend the life of the entire system and upgrade equipment with higher efficiency and sustainable products.

The campus three-mile long tunnel system provides the route by which multiple utility systems are distributed throughout the campus to each facility. Much of the internal tunnel structure supporting the piping systems for steam, condensate, chilled water supply and return is in need of localized repair. Much of the existing condensate control system valves, piping, traps and pumps all have been well maintained and therefore they have operated well beyond normal lifespan and are in need of replacement.

### IMPACT ON INSTITUTIONAL OPERATIONS WITHOUT THE INFRASTRUCTURE PROJECT

Describe how and the extent to which there would be an impact on existing operations and programs. Describe the potential impact on future, already funded or planned construction projects or program needs should this infrastructure project not occur.

Primarily, there are pending projects within our Ten-Year Capital Plan that require the upgrade of our steam production and distribution system, namely the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. Under the current funding package, our contracted professional engineering consultants are currently in the design phase of this needed tunnel extension with construction expected to occur during FY2017. See **Exhibit B**.

This tunnel will extend heating, cooling, electrical, and communications systems from the distribution main to this branch of the campus.

The lack of infrastructure to support these new/remodeled facilities would greatly affect Eastern's Strategic Plan, our Comprehensive Campus Master Plan, and the ability for Eastern to grow enrollments, increase undergraduate rate in general education and STEM fields, and increase growth in graduate degrees.

Secondly, these projects substantially improve existing operation by increasing efficiency in operations, reducing energy costs, and providing the opportunity to consider alternate design applications and potentially alternate fuels for operations. Our engineering professionals have assessed and noted specific areas of each utility that are at end-of-lifecycle and in need for replacement or major renewal. There is potential for failures that are very costly and could affect the university's ability to operate until major emergency repairs are made.

Sustainability and conservation are part of Eastern's role in the community and assist in meeting the goals of Eastern Strategic Plan 2012-17 toward "Inspiring the Future". The university also developed a Sustainability Master Plan (2012) and a Climate Action Plan (2012). Implementing current sustainability trends and moving the university forward supports Eastern as an "Institution of Innovation." This request addresses specific improvements in the use of limited natural resources, which is part of our plan to improve student recruitment and retention rates. This project also responds to students' desire to reduce the impact of university operations on the natural environment and support the commitment the university has to the ACUPCC (American College and University Presidents' Climate Commitment), which Eastern signed in 2007.

### **AVAILABILITY OF SPACE/UTILIZATION ON CAMPUS:**

Provide as much detailed cost estimate information as possible, including documentation of professional assessment of costs (may contain opinions of external experts or experienced project management staff from the institution).

The university, with information provided from our professional engineering consultants, has developed a list of the most critical and highest priority issues and an estimated cost of completion of each. These priorities will address student growth and success associated with the Interdisciplinary Science Center, remodeled Science building, and new Engineering building. The priorities also address the replacement of inefficient and non-functioning equipment, and current code and regulatory compliance deficiencies, safety issues and lower our operating costs. Individual program requests are supported by detailed information contained in the attached Appendices and exhibits referenced.

### **ENGINEERING STUDY**

Identify whether there is a completed comprehensive engineering study, site survey and recommendations, or opinion letter. (Provide referenced supporting documentation in appendices.)

Two engineering Studies were undertaken on all aspects of the campus infrastructure with emphasis on steam generation and distribution, and chilled water production and distributions. See **Appendix A** and **Exhibit A**. The study reviewed the following:

### **Steam System**

Site Investigation and assessment of the following:

- Central Boiler Plant.
- Campus Steam and Condensate distribution systems.
- Computerized Flow Model Analysis of campus steam distribution.
- Construct overall campus steam production and distribution.
- Input flow data for all buildings steam flow and capacity.
- Evaluate the capacity of the Central Plant for both steam production and distribution taking into consideration the university's ten-year and facilities master plan.
- Once built, the model was altered to represent the addition of the Interdisciplinary Science Center, the renovated Science Building and the Engineering Building insertion into the campus system.

- Alternate routes for delivery of steam service were evaluated.
- The resulting information was utilized in the decision making for a final route.
- Provide working computerized model.
- Continue modeling sub-systems as needed to aid in engineering design.
- Information gained is used in the design of construction projects to support the university's need for increased capacity.
- Modeling allows the opportunity to ask relatively low cost "what-if" questions and to see theoretical results of those questions at many system levels.

### **SUPPORTS FACILITIES PLAN**

Describe the proposed project's relationship and relative importance to the institution's:

- a. Campus/Facilities Master Plan or other applicable strategic plan.
- b. Ongoing academic and/or research program.

### **Campus/Facilities Master Plan**

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science Technology Engineering and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems. See **Appendix A** and **Exhibit A**.

LINK: Eastern's Facilities Master Plan

### **Proposed Academic and/or Research Program**

The Interdisciplinary Science Center, renovated Science building, and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs, increasing our recruiting and retention rate, and improving time to graduation metrics. These three projects also offer better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs. Eastern's Current Strategic Plan is available at the link below:

### *LINK:* <u>Eastern's Strategic Plan "Inspiring the Future" (2012-2017)</u>

In conjunction with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan. These plans can be viewed at the following links:

LINK: American College and University President Climate Commitment Climate Action Plan 2012

LINK: Eastern Washington University Energy Efficiency and Sustainability Report 2012

### **Resource Efficiency and Sustainability**

Document project benefits associated with low-impact storm water management techniques, improvements in energy and resource conservation, and use of renewable energy sources.

### **Storm Water Management**

Eastern has updated the Washington State Department of Ecology five-year state waste discharge permit which includes the study and report outlining the EWU plan for meeting current regulatory requirements over the next five years, as well as conservation items in our plan. Contained in the planning for Central Steam Production and distribution is the plan for mitigation of discharge from the steam plant operations into the local sanitary and storm sewers.

Many measures of the EWU discharge plan have been implemented through changes in daily business practices within our facilities, thereby reducing costs, waste and the effects thereof. In FY2017, a project addressing wastewater flow monitoring will be executed and constructed, meeting other the requirements of the permit.

### **Energy and Resource Conservation**

Preliminary assessment and analysis demonstrates that there are a variety of potential energy and resource conservation improvements, including but not limited to:

- 1. Install new 40,000 -pph high-pressure steam boiler with dual fuel and low NOX burner. Install new stack economizer.
- 2. Install new boiler feed water stack economizers on boilers #2 and #3.
- 3. Upgrade boiler feed water pumps with variable speed drive controllers.
- 4. Replace utility tunnel electric condensate pumps with steam-powered pumps.

### **APPENDIX** A

2014 CAMPUS INFRASTRUCTURE RENEWAL

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368 NAC Steam %20System%20Attachment%20A.pdf

### EXHIBIT A

STEAM SYSTEM EVALUATION

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368\_NAC\_Steam %20System%20Attachment%20A.pdf

### EXHIBIT B

### ENERGY UTILITY SERVICES STUDY 2016

https://goo.gl/GcVSLb

### **ADDITIONAL DOCUMENTS**

### EASTERN'S FACILITIES MASTER PLAN

http://access.ewu.edu/Documents/Facilities-Planning/PEC Executive%20Summary 9 27 13revision1-single.pdf

### EASTERN'S STRATEGIC PLAN "INSPIRING THE FUTURE" (2012-2017)

http://www.ewu.edu/Documents/Strategicplanning/strat\_plan\_doc\_webres.pdf

### AMERICAN COLLEGE AND UNIVERSITY PRESIDENT CLIMATE COMMITMENT CLIMATE ACTION PLAN 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Climate%2 0Action%20Plan.pdf

# EASTERN WASHINGTON UNIVERSITY ENERGY EFFICIENCY AND SUSTAINABILITY REPORT 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Energy%20 EfficiencySustainability%20Report.pdf

### 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:33AM

### Project Number: 30000560

Project Title: Central Steam Production and Distribution

### **Description**

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:5

#### Project Summary

Eastern Washington University continues to have enrollment growth and expansion of university facilities. This expansion requires that our Central Steam Production and Distribution system grow with us. This request is to expand, upgrade and improve the equipment and operations of Eastern Washington University Steam Plant and campus wide steam infrastructure.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

This request includes the necessary upgrades for our central steam plant and steam distribution system to provide service to the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions of the steam system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

The requested amount for this project is \$8,406,000. Eastern Washington University's Cheney campus contains 2.7 millio

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementations of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. This request includes the necessary upgrades for our central steam plant and distribution system service the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portion of the steam system that are reaching the end of their lifecycle or are in need of improvement to reduce energy cost and support the university's commitment to sustainable operations and reduction of greenhouse gas emissions.

In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and long-term actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project, if funded will result in the design and construction of: A new steam boiler in Rozell power plant, new feed water stack economizers, upgrading the boiler feed water pumps, repair of the Rozell plant stack, and replacement of utility tunnel condensate piping.

Design will commence as soon as capital funds are available to hire a design consultant. Design and construction of this phase of the infrastructure is planned to started in July of 2017 and complete prior to the end of the biennium June 30, 2019. Current programming has followed the scope below. Assessments and recommendations by the consultant are included in a detail study that is attached to Eastern's 2017-19 Capital Budget Request proposal.

### 370 - Eastern Washington University Capital Project Request

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Project Title: Central Steam Production and Distribution

### **Description**

Since this request only includes upgrade to the most critical segments of the steam production and distribution system, this is already a phase request. We have assessed and evaluated the condition of these components and system segments for their high level of criticality to support new university facilities and to be replace before the end of their lifecycle.

### **Steam Production and Distribution System**

### Site Investigation and assessment of the following:

Central Boiler Plant Campus steam and condensate distribution systems

#### Computerized Flow Model Analysis of campus steam distribution

Construct overall campus steam production and distribution.

Input flow data for all buildings steam flow and capacity.

Evaluate the capacity of the Central Plant for both steam production and distribution taking into consideration the university's ten-year and facilities master plan

Once built, the model was altered to represent the addition of the Interdisciplinary Science Center and Science building renovation, and construction of the propsed engineering building.

Alternate routes for delivery of steam service were evaluated.

The resulting information was utilized in the decision making for a final route.

Provide working computerized model

Continue modeling sub-systems as needed to aid in engineering design

Information gained is used in the design of construction projects to support the university's need for increased capacity.

Modeling allows the opportunity to ask relatively low cost "what-if" questions and to see theoretical results of those questions at many system levels.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This requests would address the highest priority issues related to:

### **Central Steam Production and Distribution**

The central campus steam plant is located in the Rozell facility at the north end of campus. The Rozell plant was constructed in 1960 with minor additions since. The steam plant furnishes high-pressure steam (100 psig) to the majority of the campus buildings through a network of tunnels and shallow utilidors to provide space heating and domestic water heating of campus facilities.

There are five high-pressure steam boilers in the Rozell power plant. All are capable of firing on either natural gas or No. 2 fuel oil. Avista Utilities supplies natural gas to the plant, and fuel oil is stored in two 15,000-gallon underground storage tanks adjacent to the plant.

This mission-critical system is approximately fifty years old. Although the steam plant is well-maintained, it is showing signs that specific components need replacement and major renewal to extend the lifecycle of the complete system. Additionally, due to current advances in controls and conservation design, there is ample opportunity to increase the systems efficiency and sustainability. Another aspect of our goal is to analyze the potential for alternative fuels and other green technologies that meet state requirements and the university's commitment to the American College and University Presidents' Climate Commitment 2007.

Without periodic upgrades and replacement of steam equipment and specialties there is an increasing risk of system failures. These systems and related equipment have a life cycle and when the equipment and materials reach or exceed that life cycle

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### **Description**

the cost of operations increase and well as the potential for catastrophic failures. These types of failures related to steam production and distribution could impact facilities and academic instruction on the campus. Cost associate with repairs and upgrade in most cases are lower than cost associated with equipment or system failures. These failures would normally come at the least opportune time for the university.

Since the request is for the highest priority needs of this critical infrastructure system deferring this work would restrict our ability to support new and remodeled university facilities that are included in our Strategic and Comprehensive Campus Master Plan. Those facilities are the Interdisciplinary Science Center, a future new Engineering Building and the complete remodel of the Science Building. Also there are some areas of the system that are at the end of their useful lifecycle. To defer this work until these components could cause service outage to the campus and increase the cost under emergency repairs.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All programs on the Cheney campus are supported by the utilities and infrastructure systems that are described in this request for renewal. Central Plant operations provide heating and cooling media to all buildings. Facilities staff operate and maintain equipment to provide a safe and comfortable academic atmosphere for instruction and other student services. The electrical system provides power for building equipment, as well as lighting and other electrical convenience power. The energy management system automates the building heating and cooling to make the most effective use of the utilities provided. Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no IT related costs associated with this project request. This project does not fall under OCIO review requirements.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate. Master plans, space programming, and other analyses as appropriate.

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science Technology Engineering and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems

This project will be designed and implemented in accordance with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan.

The Interdisciplinary Science Center, remodeled Science building and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs,
2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:33AM

### Project Number: 30000560 Project Title: Central Steam Production and Distribution

### **Description**

increasing our recruiting and retention rate, and improving time to graduation metrics. This chilled water expansion project also offers better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs.

The university through engineering and architectural consultants have completed several studies to address steam production and distribution. Those studies lay out a progressive replacement of equipment over a period time that is cost effective, extends systems lifecycles and reduces overall operating costs.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

The university, with information provided from our professional engineering consultants, has developed a list of the most critical and highest priority issues and an estimated cost of completion of each. These priorities will address student growth and success associated with the Interdisciplinary Science Center, remodeled Science building, and new Engineering building. The priorities also the replacement of inefficient and non-functioning equipment, and current code and regulatory compliance deficiencies, safety issues and lower our operating costs. Individual projects are supported by detailed information contained in our 2017-19 major capital project request.

Projects like this are affecting many of the other state programs such as sustainability and cost effective utility management. All projects related to Infrastructure relate to Eastern's strategic goal of "an institution of innovation" which means the consideration of high quality cost effective improvements and replacements, concern of greenhouse gas emission and reduction of our carbon footprint. Major infrastructure projects also address reducing deferred backlog maintenance which is a priority of the state and the university.

### Location

City: Cheney

County: Spokane

Legislative District: 006

### Project Type

Funding

Infrastructure (Major Projects)

### **Growth Management impacts**

There are no Growth Management Impacts associated with this project

i unc	r unung					
		Expenditures		•	2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	8,406,000				8,406,000
	Total	8,406,000	0	0	0	8,406,000
		Fu	uture Fiscal Peri	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	٥	0	

# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:33AM

Project Number: 30000560

Project Title: Central Steam Production and Distribution

### **Operating Impacts**

**No Operating Impact** 

# **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000560	30000560
Sort Order	Project Priority	Priority
Include Page Numbers	Υ	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

### STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University			
Project Name	Central Steam Production and Distribution			
OFM Project Number	30000560			

Contact Information				
Name	Shawn King			
Phone Number	509-359-6878			
Email	<u>sking@ewu.edu</u>			

Statistics				
Gross Square Feet		MACC per Square Foot		
Usable Square Feet		Escalated MACC per Square Foot		
Space Efficiency		A/E Fee Class	А	
Construction Type	Heating and power plan	A/E Fee Percentage	13.17%	
Remodel	Yes	Projected Life of Asset (Years)	30	
	Additiona	al Project Details		
Alternative Public Works Project	No	Art Requirement Applies	No	
Inflation Rate	2.80%	Higher Ed Institution	Yes	
Sales Tax Rate %	8.70%	Location Used for Tax Rate	Cheney WA	
Contingency Rate	10%			
Base Month	July-16			
Project Administered By	Agency			

Schedule				
Predesign Start		Predesign End		
Design Start	July-17	Design End	January-18	
Construction Start	March-18	Construction End	June-19	
Construction Duration	15 Months			

Green cells must be filled in by user

Project Cost Estimate			
Total Project	\$7,969,609	Total Project Escalated	\$8,405,670
		Rounded Escalated Total	\$8,406,000

## **S**TATE OF **W**ASHINGTON

# AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Central Steam Production and Distribution	
OFM Project Number	30000560	

# **Cost Estimate Summary**

Acquisition				
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0	

Consultant Services				
Predesign Services	\$50,000			
A/E Basic Design Services	\$457,318			
Extra Services	\$210,000			
Other Services	\$205,462			
Design Services Contingency	\$92,278			
Consultant Services Subtotal	\$1,015,058	Consultant Services Subtotal Escalated	\$1,059,391	

	Con	struction	
Construction Contingencies	\$457,500	Construction Contingencies Escalated	\$487,375
Maximum Allowable Construction	\$4 575 000	Maximum Allowable Construction Cost	¢1 817 783
Cost (MACC)	\$4,575,000	(MACC) Escalated	Ş4,017,705
Sales Tax	\$437,828	Sales Tax Escalated	\$461,549
Construction Subtotal	\$5,470,328	Construction Subtotal Escalated	\$5,766,707

Equipment				
Equipment	\$1,000,000			
Sales Tax	\$87,000			
Non-Taxable Items	\$0			
Equipment Subtotal	\$1,087,000	Equipment Subtotal Escalated	\$1,157,982	

Artwork					
Artwork Subtotal	\$24,089	Artwork Subtotal Escalated	\$24,089		

Agency Project Administration						
Agency Project Administration Subtotal	\$373,134					
DES Additional Services Subtotal	\$0					
Other Project Admin Costs	\$0					
Project Administration Subtotal	\$373,134	Project Administation Subtotal Escalated	\$397,501			

Other Costs					
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0		

Project Cost Estimate				
Total Project	\$7,969,609	Total Project Escalated	\$8,405,670	
		Rounded Escalated Total	\$8,406,000	

### **PROJECT DATA**

Institution - Eastern Washington University

Project Title - Medium Voltage Electrical Distribution System - 30000562

Project Location - Cheney, Washington

### **PROBLEM STATEMENT**

This request includes the necessary upgrades for our medium voltage (13,200V) electrical distribution system to provide required service to the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016. Additionally, this request will replace and upgrade portions of the electrical distribution systems that are reaching the end of their lifecycle, and present hazards to maintenance and operations staff relating to current Labor and Industries workplace safety codes and regulations.

The amount requested for this project is \$4,766,000.

To support the growth in our academic programs and facilities investments the university's medium voltage electrical system is in need of increased capacity, expansion and replacement of equipment that is at the end of its life cycle. This project requests capital funds to accomplish the upgrades in this system the support the entire Cheney campus.

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementation of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. This request includes the necessary upgrade for a medium voltage electrical system to support 2017-19 Capital Budget Requests including the proposed Interdisciplinary Science Center, renovation of the Science Building, and new Engineering Building.

In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and long-term actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities. See **Appendix A**.

APPENDIX A. LINK: 2014 Campus Infrastructure Renewal

This Capital Budget Request proposal reflects the requirement for the infrastructure expansion projects required to support the proposed new Interdisciplinary Science Center, renovation of the existing Science Building and the new Engineering Building, as well as the other listed project funding needs listed in this proposal.

Eastern's Infrastructure Renewal Project is a broad-based and comprehensive plan that spans several biennia. Projects in this 2017-19 Capital Budget Request are of the highest priority, based upon professional recommendation and as reviewed by university administration to support and attain university and state goals and objectives. Eastern Washington University considers the cost for infrastructure renewal to be ongoing. Eastern's 2019-21 capital budget request will address the next set of high priority infrastructure needs as originally outlined in **Appendix A** and modified based on further engineering study and/or redirected strategy.

In 2015, Eastern collaborated again with a professional engineering consultant to provide in-depth study of the recommendations identified in **Appendix A**. One recommendation is the need for additional electrical capacity to meet the expected loads of the proposed Interdisciplinary Science Center, renovations of the existing Science building, and the proposed Engineering building. The consultants determined the best route for providing electrical and heating/cooling distribution services for these buildings. The consultants work also analyzed how these new facilities will affect the systems for the balance of the campus. The study determined how the corresponding tunnel needs to be constructed and from what direction, providing the pathway for the steam/chilled water piping, electrical, and communications services to be extended to the Interdisciplinary Science Center. The design for the tunnel extension is underway, and construction will occur during FY2017. See **Exhibit A**.

### EXHIBIT A. LINK: Energy Utility Services Study 2016

The study also provided a list of the most urgent needs to be addressed based on operational/maintenance concerns, known system expansions, and regulatory requirements of the campus electrical systems. From this list, specific projects are currently being designed for construction in FY 2016-17. Funding received during this request period will be applied to the next logical set of projects. Design will be finalized and construction projects will be executed during the 2017-19 biennium. See **Appendix B** and **Exhibit A**.

### APPENDIX B. LINK: Electrical Capacity Upgrade

In EWU's 2012-2017 Strategic Plan, "Inspiring the Future," the university established four pillars to success: Student Success, Institution of Innovation, Community Engagement, and Visibility. The intention of the university is to systematically expand, upgrade, replace, and renew portions of the infrastructure system to provide "a long-term response to the needs of the university, in order to have high-quality teaching and learning facilities available to students to promote their academic success".

### **HISTORY OF THE PROJECT OR FACILITY**

### Medium Voltage Electrical Distribution System

The university owns and operates a 15-kV electrical distribution system. The existing system feeds the entire campus with four feeders: two "A" feeders and two "B" feeders. The current configuration of electric switchgear allows for

the expansion of two "C" feeders for future campus expansion as one option. Negotiations with the City of Cheney Light Department have determined that additional capacity can be provided to a new switchgear, and rebalancing various electrical loads across campus to further stabilize the "A" and "B" feeder loads offer another option. Additional capacity is required to support the proposed Interdisciplinary Science Center, renovation of the existing Science building, and the proposed Engineering buildings that are in the Campus Comprehensive Master Plan (CCMP) and the university's Ten-Year Capital Plan.

This plan also includes the cyclical replacement of the belowground electric distribution system vacuum switches with aboveground fusible air switches. The age and condition of this equipment warrants replacement before costly repairs become necessary. These switches are currently under ground in the steam tunnels. Current safety and accessibility codes require that they be relocated on concrete pads above ground. The current technology for fusible air switches provides a number of advantages over the old-style vacuum switches.

Consistent with vacuum switch replacement are various sections of high voltage conductor replacements. As is the case with the vacuum switches, the age, condition, and verification testing of these conductors suggest replacement in the near future is required to maintain a safe, operational system.

### UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECT

The utilities and infrastructure support all programs on the Cheney campus. Central Plant operations provides primary electrical power to all buildings. Facilities staff operate and maintain equipment to provide a safe and comfortable academic atmosphere for instruction and other student services. The electrical system provides power for building equipment, as well as lighting and other electrical convenience power. The communications infrastructure associated with the energy management system automates the building heating and cooling to make the most effective use of the utilities provided.

Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

### SIGNIFICANT HEALTH, SAFETY, AND CODE ISSUES

Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), energy, utilities, or transportation code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

• RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components

- RCW 39.35D High Performance Public Buildings high efficiency components and systems
- RCW43.19.668; 669; 670; 682 Energy Conservation high efficiency components and systems
- RCW 90.46 Reclaimed Water Use Storm water management and re-use.
- RCW 70.94 Washington Clean Air Act boiler emissions
  - o Spokane Regional Clean Air Agency boiler emission
- Washington State Department of Ecology
  - o Aquifer protection and groundwater rights
  - o Storm Water
  - o SEPA Reporting
  - o State Waste Industrial Permitting
- Washington State Department of Heath
- National Electrical Codes
- National Fire Protection Association Codes
- American Colleges and University Presidents' Climate Commitment 2007

### **EVIDENCE OF INCREASED REPAIRS AND/OR SERVICE INTERRUPTION**

Identify prior facility repairs, work order repair history or contractor repair call-outs, increased utility and/or maintenance costs, and/or system unreliability. (Provide selected supporting documentation in appendices, and reference them in the body of the proposal.)

### **Electrical System**

As described in detail in **Appendix A**, Eastern's medium voltage electrical distribution system is in relatively good condition and well maintained. The programming for this project is related to the need for expanding the capacity of the system to meet the need of the university Comprehensive Campus Master Plan 2014 and replacement of system components that have reached their end of life cycle. The system expansion is required to meet the needs of the university's top priorities, the proposed new Interdisciplinary Science Center, renovation of the existing Science building and new Engineering building.

There are potentials for failures in every system that are very costly and could affect the university's ability to operate until major emergency repairs are made.

An example of a service interruption and system unreliability is the recent failure of the electrical transformer that provides all tunnel system power. This medium voltage transformer had been showing signs of age for some time, and in March 2016, completely failed. The failure of this system triggered several additional emergency upgrades to meet current electrical safety and system codes thereby requiring additional work beyond simply replacing an underground transformer. The additional work required to meet life safety and National Electric Codes added significant cost. Many of our current systems are in this aged state. The proposal addresses these realities, and a plan for renewal will be implemented upon approval of this request.

### IMPACT ON INSTITUTIONAL OPERATIONS WITHOUT THE INFRASTRUCTURE PROJECT

Describe how and the extent to which there would be an impact on existing operations and programs. Describe the potential impact on future, already funded or planned construction projects or program needs should this infrastructure project not occur.

Primarily, there are pending projects within our Ten-Year Capital Plan that require the additional capacity to operate including the Interdisciplinary Science Center, the Science Building renovation and a new Engineering Building. Under the current funding package, our contracted professional engineering consultants are currently in the design phase of this needed tunnel extension with construction expected to occur during FY2017. **Exhibit A**.

This tunnel will extend heating, cooling, electrical, and communications systems from the distribution main to this branch of the campus.

The lack of infrastructure to support these new/remodeled facilities would greatly affect Eastern's Strategic Plan, our Comprehensive Campus Master Plan, and the ability for Eastern to grow enrollments, increase undergraduate rate in general education and STEM fields, and increase growth in graduate degrees.

Secondly, these projects substantially improve existing operations by increasing efficiency, reducing energy costs, and providing the opportunity to consider alternate design applications and potentially alternate fuels for operations. Our engineering professionals have assessed and noted specific areas of each utility that are at end-of-lifecycle and in need for replacement or major renewal.

Sustainability and conservation are part of Eastern's role in the community and assist in meeting the goals of Eastern Strategic Plan 2012-17 toward "Inspiring the Future". The university also developed a Sustainability Master Plan (2012) and a Climate Action Plan (2012). Implementing current sustainability trends and moving the university forward supports Eastern as an "Institution of Innovation." This request addresses specific improvements in the use of limited natural resources, which is part of our plan to improve student recruitment and retention rates. This project also responds to students' desire to reduce the impact of university operations on the natural environment and support the commitment the university has to the ACUPCC (American College and University Presidents' Climate Commitment), which Eastern signed in 2007.

### **AVAILABILITY OF SPACE/UTILIZATION ON CAMPUS:**

Provide as much detailed cost estimate information as possible, including documentation of professional assessment of costs (may contain opinions of external experts or experienced project management staff from the institution).

Our professional engineering consultants have developed a supplemental report to **Appendix A** of the most critical and highest priority issues and an estimated cost of completion of each. See **Appendix B**. These priorities will address student growth and success associated with the Interdisciplinary Science Center, Science Building renovation, and new Engineering Building. The priorities also address the replacement of inefficient and non-functioning equipment, current code and regulatory compliance deficiencies, safety issues and lower our operating costs. Individual program requests are supported by detailed information contained in the attached Appendices.

### **ENGINEERING STUDY**

Identify whether there is a completed comprehensive engineering study, site survey and recommendations, or opinion letter. (Provide referenced supporting documentation in appendices.)

A 2014 engineering study assessed and evaluated the condition of the current electrical system and switchgear. In 2016, an additional study was conducted to evaluate the current system capacity for the new Interdisciplinary Science Building, the renovation of the existing Science Building and the potential of a future Engineering Building. **Appendix A** and **Appendix B**. The study reviewed and returned the following recommendations:

### Medium Voltage Electrical System

- 1. Assessment and Evaluation
  - a. Review existing medium voltage and fiber optic drawings and equipment.
  - b. Review coordination with utility company protection schemes.
    - i. Our electrical purveyor has been included during the design process offering cost effective alternatives that also create more reliable system delivery to the campus.
  - c. Evaluate condition and lifecycle of medium voltage switchboards, feeders, switches.
    - i. The finding indicate that our aged vacuum switches and primary feeders are in need of replacement for many reasons to include safety and effective lifespan has been reached.
  - d. Review current campus electrical demand with Utility Company.
- 2. Recommendations

- a. A prioritized list of electrical projects focusing on current system conditions, system safety concerns and code deficiencies and lifecycle analysis of systems and equipment are included in **Appendix A** and **Appendix B**.
- 3. Computerized modeling of campus electrical system
  - a. By law, every time the university submits a new or remodeled building for electrical plan review the Department of Labor & Industries requires a load analysis of the entire medium-voltage distribution system.
    - i. The model serves as a tool in evaluating electrical safety, flow direction, resistance to flow, efficiency, capacity and other characteristics valuable in aiding the design.
  - b. Continue modeling sub-systems as needed to assist in engineering design.

### **SUPPORTS FACILITIES PLAN**

Describe the proposed project's relationship and relative importance to the institution's

- a. Campus/Facilities Master Plan or other applicable strategic plan.
- b. Ongoing academic and/or research program.

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science Technology Engineering and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems. See **Appendix A** and **Exhibit A**.

LINK: Eastern's Facilities Master Plan

### **Proposed Academic and/or Research Program**

The Interdisciplinary Science Center, renovated Science building, and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs, increasing our recruiting and retention rate, and improving time to graduation metrics. These three projects also offer better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs. Eastern's Current Strategic Plan is available at the link below:

### LINK: Eastern's Strategic Plan "Inspiring the Future" (2012-2017)

In conjunction with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan. These plans can be viewed at the following links:

LINK: American College and University President Climate Commitment Climate Action Plan 2012

LINK: Eastern Washington University Energy Efficiency and Sustainability Report 2012

### **RESOURCE EFFICIENCY AND SUSTAINABILITY**

Document project benefits associated with low-impact storm water management techniques, improvements in energy and resource conservation, and use of renewable energy sources.

### **Storm Water Management**

There are not storm water management issues related directly to this project request.

### **Energy and Resource Conservation**

Preliminary assessment and analysis demonstrates that there are a variety of potential energy and resource conservation improvements, including but not limited to:

- 1. Electrical system modeling to improve flexibility of medium voltage electrical system.
  - As part of the consultant electrical engineering agreement, an electrical system model has been developed and is used as a tool for our electrical system capacity design. See Appendix A, Appendix B, and Exhibit A.
  - b. The model has proven valuable regarding the identification of incidences of arc-flash and other electrical safety concerns currently in the university system.
  - c. The model serves as a tool in evaluating how existing systems react to changes in the distribution of electrical power to the campus.
  - d. This allows low cost evaluation and is a tool that will be used during the design of various campus low and high-level expansions for years to come.
  - e. Modeling accounts for otherwise unknown effects of the loads of new system coming on line on the campus system to other un-changed campus facilities and potential costly problems are avoided, or at least become known.

f. Modeling allows for creative thinking and theoretical re-routing and load sharing offering opportunities to potentially re-feed system and gain back capacity wisely as opposed to simply expanding what is currently in place.

### **APPENDIX A**

2014 CAMPUS INFRASTRUCTURE RENEWAL

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/AE1368 NAC Steam %20System%20Attachment%20A.pdf

### **APPENDIX B**

### ELECTRICAL CAPACITY UPGRADE

https://www.google.com/url?q=https://access.ewu.edu/Documents/Construction%2520and%2520Planning/Capital %2520Planning/2016%2520Electrical%2520Capacity%2520Upgrade.pdf&sa=U&ved=0ahUKEwjO2MvRwzOAhUK22MKHYEzDaEQFggIMAE&client=internal-udscse&usg=AFQiCNFn1Q9qAecUejiCduIXFNqfVD5mrA

### EXHIBIT A

### **ENERGY UTILITY SERVICES STUDY 2016**

https://goo.gl/GcVSLb

### **ADDITIONAL DOCUMENTS**

### EASTERN'S FACILITIES MASTER PLAN

http://access.ewu.edu/Documents/Facilities-Planning/PEC Executive%20Summary 9 27 13revision1-single.pdf

### EASTERN'S STRATEGIC PLAN "INSPIRING THE FUTURE" (2012-2017)

http://www.ewu.edu/Documents/Strategicplanning/strat plan doc webres.pdf

### American College and University President Climate Commitment Climate Action Plan 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Climate%2 0Action%20Plan.pdf

# EASTERN WASHINGTON UNIVERSITY ENERGY EFFICIENCY AND SUSTAINABILITY REPORT 2012

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU%20Energy%20 EfficiencySustainability%20Report.pdf

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:35AM

### Project Number: 30000562

Project Title: Medium Voltage Electrical Distribution System

### **Description**

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:6

#### Project Summary

To support the growth in our academic programs and facilities investments the university's medium voltage electrical system is in need of increased capacity, expansion and replacement of equipment that is at the end of its life cycle. This project request capital funds to accomplish the upgrades in this system the support the entire Cheney campus.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's Cheney campus contains 2.7 million gross square feet of academic and student support facilities served by university-owned infrastructure services and building utility systems. This infrastructure includes steam generation and distribution, chilled water production and distribution, domestic water production and distribution, electrical distribution, sanitary and storm water collections and disposal, site improvements, central facilities automation, energy management system, and emergency vehicle access to the campus. These infrastructure systems are mission-critical components to Eastern's primary goal of student success.

These recommendations support the sequential implementations of Eastern's 2014 Comprehensive Campus Master Plan as well as EWU's Ten-Year Capital Plan. This request includes the necessary upgrade for a medium voltage electrical system to service the proposed renovation of our existing Science building, the proposed Interdisciplinary Science Center, and the proposed Engineering Building requests in 2016.

In 2014, Eastern collaborated with a professional engineering consultant to examine each major system for current condition assessment, lifecycle renewal/replacement, potential energy savings, and sustainable upgrades. Included in this detailed study were recommendations for short- and long-term actions to reduce potential failures, lower maintenance costs, increase efficiencies, and identify potential alternate energy sources for future production of utilities

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Request for funding is to design and construct new medium voltage distribution and equipment for Eastern Facilities.

#### **Electrical System**

Eastern's medium voltage electrical distribution system is in relatively good condition and well maintained. The programming for this project is related to the need for expanding the capacity of the system to meet the need of the university Comprehensive Campus Master Plan 2014 and replacement of system components that have reached their end of life cycle. The system expansion is required to meet the needs of the university's top priorities, the proposed new Interdisciplinary Science Center, the proposed remodel of the existing Science building and the proposed new Engineering building.

Eastern's Infrastructure Renewal Project is a broad-based and comprehensive plan that spans several biennia. Projects in this 2017-19 capital request are of the highest priority, based upon professional recommendation and as reviewed by university administration to support and attain university and state goals and objectives. Eastern Washington University considers the cost for infrastructure renewal to be ongoing. Eastern's 2019-21 capital budget request will address the next set of high priority infrastructure needs as outlined in our 2014 Comprehensive Campus Master Plan.

In 2015, Eastern collaborated again with a professional engineering consultant to provide in-depth study of the recommendations identified in the university's detail capital request. One recommendation is the need for additional electrical

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Project Title: Medium Voltage Electrical Distribution System

### **Description**

capacity to meet the expected loads of the proposed remodel of the existing Science building, proposed Interdisciplinary Science Center, and the proposed Engineering building. The consultants determined the best route for providing electrical and heating/cooling distribution services for these buildings. The consultants work also analyzed how these new facilities will affect the systems for the balance of the campus. The study determined how the corresponding tunnel needs to be constructed and from what direction, providing the pathway for the steam/chilled water piping, electrical, and communications services to be extended to the Interdisciplinary Science Center. The design for the tunnel extension is underway, and construction will occur during FY2017.

The current request for funding is a reflection of a phase approach to replacement and upgrading of system equipment. This request outlines the top priorities for medium voltage electric system improvements.

How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

#### Medium Voltage Electrical System

#### Assessment and Evaluation

Review existing medium voltage and fiber optic drawings and equipment

Review coordination with Utility Company protection schemes

Our electrical purveyor has been included during the design process offering cost effective alternatives that also create more reliable system delivery to the campus.

Evaluate condition and lifecycle of medium voltage switch boards, feeders, switches

The finding indicate that our aged vacuum switches and primary feeders are in need of replacement for many reasons to include safety and effective lifespan has been reached.

Review current campus electrical demand with Utility Company

#### Recommendations

A prioritized list of electrical projects focusing on current system conditions, system safety concerns and code deficiencies and lifecycle analysis of systems and equipment are included in Appendices A- C of our major project request.

### Computerized modeling of campus Electrical System

By law, every time the university submits a new or remodeled building for electrical plan review the Department of Labor & Industries requires a load analysis of the entire medium-voltage distribution system.

The model serves as a tool in evaluating electrical safety, flow direction, resistance to flow, efficiency, capacity and other characteristics valuable in aiding the design.

Continue modeling sub-systems as needed to assist in engineering design

The current medium voltage electrical system is in good condition. The request relates to the need to expand the system for new projects and to replace equipment that is at the end or nearing the end of its life cycle. No action take would restrict the university's ability to support new facilities like the Interdisciplinary Science Center, a future Engineering Building and the remodel or our existing Science building. Other deferred items relate to aging equipment in which failure could impact university operations. Finally there are some regulatory issues related the location of equipment and Arc Flash requirements that the university needs to address to meet current codes and safety regulations.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The utilities and infrastructure support all programs on the Cheney campus are supported by the utilities and infrastructure systems that are described in this request for renewal. Central Plant operations provide heating and cooling media to all buildings. Facilities staff operate and maintain equipment to provide a safe and comfortable academic atmosphere for instruction and other student services. The electrical system provides power for building equipment, as well as lighting and

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:35AM

### Project Number: 30000562

Project Title: Medium Voltage Electrical Distribution System

#### **Description**

other electrical convenience power. The energy management system automates the building heating and cooling to make the most effective use of the utilities provided.

Since these are infrastructure systems, they are by nature tied to each facility, and support every program on campus. Eastern's goals of student success and innovation are fully represented in this project, which promotes student success through a safe, healthy, and supportive environment.

Through our engineering studies and design process we continue to refine the project budget for this project. Detailed cost analysis is available upon request.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no IT related costs associated with this project request. This project does not fall under OCIO review requirements.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The current 2014 Eastern Comprehensive Campus Master Plan states that the university's top priorities are the expansion of Eastern Science, Technology, Engineering, and Math (STEM) programs. The growth and increased graduation rates in these programs tie directly to the construction of the Interdisciplinary Science Center, the remodeled Science building and a new Engineering building. As stated in the engineers report, the current university infrastructure (steam, chilled water, and medium voltage electrical) will not support these new facilities without expansion of these systems

This project will be designed and implemented in accordance with State of Washington's requirement for reduction of greenhouse gas emissions and reduction of the university carbon footprint, this project is also aligned with Eastern's Climate Action Plan and the University Sustainability Master Plan.

The Interdisciplinary Science Center, remodeled Science building and proposed Engineering building are key components in the university's ability to meet our academic plan for enrollment growth, degrees awarded, degrees in high demand programs, increasing our recruiting and retention rate, and improving time to graduation metrics. This chilled water expansion project also offers better facilities for student and faculty research programs to expand and be more successful. These improvements in our academic plan are tied to the design and construction of our Science facilities, and the university infrastructure does not have the current capacity to meet those projected needs.

The university, through engineering and architectural consultants, have completed several studies to address steam production and distribution. Those studies lay out a progressive replacement of equipment over a period time that is cost effective, extends systems lifecycles and reduces overall operating costs.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

### Is there additional information you would like the decision makers to know when evaluating this request?

The university, with information provided from our professional engineering consultants, has developed a list of the most critical

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Project Title: Medium Voltage Electrical Distribution System

### **Description**

and highest priority issues and an estimated cost of completion of each. These priorities will address student growth and success associated with the Interdisciplinary Science Center, remodeled Science building, and new Engineering building. The priorities are the replacement of inefficient and non-functioning equipment, current code and regulatory compliance deficiencies, safety issues, and lower our operating costs. Individual programs (listed below) are supported by detailed information contained in our major project proposal.

Location

City: Cheney

County: Spokane

Legislative District: 006

### Project Type

Infrastructure (Major Projects)

### **Growth Management impacts**

There are not Growth Management Impacts associated with this project.

				Expenditures		2017-19	Fiscal Period
Acct Code	Account Title	Es	timated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1 State Bldg Constr-State Total	4,7	766,000				4,766,000	
	4,7	766,000	0	0	0	4,766,000	
			Fu	uture Fiscal Perio	ods		
		:	2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State						
	Total		0	0	0	0	
Sche	edule and Statistics						
		Start Date	End D	ate			

# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:35AM

### Project Number: 30000562

Project Title: Medium Voltage Electrical Distribution System

### **Schedule and Statistics**

	Start Date	End Date
Predesign		
Design	7/1/2017	1/1/2018
Construction	3/1/2018	6/1/2019
	Total	
Gross Square Feet:	1	
Usable Square Feet:	1	
Efficiency:	100.0%	
Escalated MACC Cost per Sq. Ft.:	2,871,747	
Construction Type:	Heating and Pov	ver Plants
Is this a remodel?	Yes	
A/E Fee Class:	А	
A/E Fee Percentage:	13.73%	

### **Cost Summary**

	Escalated Cost	% of Project
Acquisition Costs Total	0	0.0%
Consultant Services		
Pre-Schematic Design Services	30,909	0.7%
Construction Documents	0	0.0%
Extra Services	171,188	3.6%
Other Services	0	0.0%
Design Services Contingency	64,808	1.4%
Consultant Services Total	698,148	14.7%
Maximum Allowable Construction Cost(MACC) 2,8	71,747	
Site work	2,251,178	47.2%
Related Project Costs	78,713	1.7%
Facility Construction	541,856	11.4%
GCCM Risk Contingency	0	0.0%
GCCM or Design Build Costs	0	0.0%
Construction Contingencies	291,237	6.1%
Non Taxable Items	0	0.0%
Sales Tax	275,179	5.8%
Construction Contracts Total	3,438,162	72.2%
Equipment		
Equipment	336,464	7.1%
Non Taxable Items	0	0.0%
Sales Tax	29,272	0.6%

# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:35AM

### Project Number: 30000562

Project Title: Medium Voltage Electrical Distribution System

### **Cost Summary**

Equipment Total	Escalated Cost 365,736	<u>% of Project</u> 7.7%
Art Work Total	0	0.0%
Other Costs Total	0	0.0%
Project Management Total	263,580	5.5%
Grand Total Escalated Costs	4,765,626	
Rounded Grand Total Escalated Costs	4,766,000	

### **Operating Impacts**

**No Operating Impact** 

# **Capital Project Request**

2017-19 Biennium

<u>Parameter</u>	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000562	30000562
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

# 370 - Eastern Washington University **Cost Estimate Summary**

2017-19 Biennium

Cost Estimate Number:	58		*	Report Number: CBS	003
Cost Estimate Title:	Medium Voltage	Electrical Dis	tribution System	Date Run: 8/12/2016	5:01PM
Version: Project Number: Project Title:	A6 Eastern Washington University 30000562 Medium Voltage Electrical Distribution System		rsity tribution System	Agency Preferred: Yes	
Project Phase Title:			,		
Contact Info	Contact Name:	Shawn King		Contact Number: 509.359.6878	
Statistics					
Gross Sq. Ft.:	0				
Usable Sq. Ft.:	0				
Space Efficiency:					
MACC Cost per Sq. Ft	.: 0				
Escalated MACC Cost	per Sq. Ft.: 0				
Remodel?	Yes				
	Heat	ing and Powe	er Plants		
A/E Fee Class:	A 12.7	20/			
A/E ree reicentage.	13.7	ort Data	End Data		
Drodosian	<u>– – – – – – – – – – – – – – – – – – – </u>		<u>Lifu Date</u>		
Predesign.	0-	7 2017	01 2019		
Design.	07	2017	01-2010		
Duration of Construction	on (Monthe):	15	00-2019		
Cost Summary Esc	alatod	10			
Acquisition Costs Total					0
Pre-Schematic Design	Services			30.909	0
Construction Documen	its			0	
Extra Services				171,188	
Other Services				0	
Design Services Conti	ngency			64,808	
Consultant Services To	tal				698,148
Site work				2,251,178	
Related Project Costs				78,713	
Facility Construction				541,856	
Construction Continge	ncies			291,237	
Non Taxable Items				0	
Sales Tax				275,179	
Construction Contracts	Total				3,438,162
Maximum Allowable C	Construction Cos	t(MACC)	2,871,747	226 464	
Equipment Non Taxable Itoms				550,404	
Sales Tax				20 272	
Fourinment Total				23,212	265 726
Art Work Total					305,730
Other Costs Total					0
Project Management To	tal				263 580
Grand Total Escalated (	Costs			_	4,765,626
Rounded Grand Total E	scalated Costs				4,766,000
Additional Details					
Alternative Public Wor	ks Project:		No		

Alternative Public Works Project:

# 370 - Eastern Washington University Cost Estimate Summary

2017-19 Biennium \*

Cost Estimate Number: Cost Estimate Title:	58 Medium Voltage I	Electrical Distribution System	Rep Dat	oort Number: CBS003 e Run: 8/12/2016 5:01PM
Version: Project Number: Project Title: Project Phase Title:	A6 Eastern Wash 30000562 Medium Voltage I	ington University Electrical Distribution System	Agency Preferred	: Yes
Contact Info	Contact Name:	Shawn King	Contact Numb	er: 509.359.6878
Additional Details				
State Construction Infla	ation Rate:	2.80%	þ	
Base Month and Year:		06-20	16	
Project Administration	By:	AGY		
Project Admin Impact t	o DES that is NOT	۲ Included in Project Total:\$0		

# 370 - Eastern Washington University Cost Estimate Detail

2017-19 Biennium

				*			
Cost Estimate Number: Cost Estimate Title:	58 Medium	Voltage Electrica	I Distributio	n System	Analysi	s Date:	August 11, 2016
Detail Title: Project Number:	Medium	Voltage Electrica	I Distributio	n System			
Project Title: Project Phase Title:	Medium	Voltage Electrica	I Distributio	n System			
Location:	Cheney,	, WA					
Contact Info	Contac	t Name: Shawn	King		Contact N	lumber:	509.359.6878
Statistics							
Gross Sq. Ft.: Usable Sq. Ft.: Rentable Sq. Ft.: Space Efficiency: Escalated MACC Cost pe	r Sq. Ft.:						
Escalated Cost per S. F. I	Explanation	on					
Construction Type:		Heating and Pov	ver Plants				
Remodel?		Yes					
A/E Fee Class:		A 13 73%					
Contingency Rate:		10.00%					
Contingency Explanation							
Projected Life of Asset (Y	'ears):	30					
Location Used for Tax Ra	ate:	Cheney, WA					
Tax Rate:		8.70%					
Art Requirement Applies:		No					
Project Administration by	:	AGY					
Higher Education Instituti	on?:	Yes					
Alternative Fublic Works	ſ.	NO					
Project Schedule		Start Date	End	Date			
Predesign:							
Design:		07-2017	01-2	2018			
Construction:		03-2018	06-2	2019			
Duration of Construction (	Months):	15					
Base Month and Year:	n Rale.	2.00%					
		0-2010					
Project Cost Summ	ary		07.450				
MACC:		\$2,7	27,450				
Current Project Total		ቅ ∠,8 ፍ / ፍ	18 180				
Rounded Current Project	Total:	φ <del>4</del> ,5 \$ 4 5	18.000				
Escalated Project Total		\$ 4 0	70.804				
Rounded Escalated Proie	ct Total:	\$ 4.0	71,000				
		, .,.	-				

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
CONSULTANT SERVICES				
Pre-Schematic Design Services	30,000			
SubTotal: Pre-Schematic Design Services	50,000	20.000	1 0303	20.000
Construction Documents		30,000	-	50,909
A/E Basic Design Services				284,229
SubTotal: Construction Documents			-	0
Extra Services	50.000		-	
Civil Design (Above Basic Services)	50,000			
Geolechnical Investigation	20,000			
Constructability Review Participation	75,000			
SubTotal: Extra Sorvices	20,000	405.000	4 0075	
Other Services		165,000	1.0375	171,188
Bid/Construction/Closeout				127.697
SubTotal: Other Services			-	0
Design Services Contingency			-	
Design Services Contingency	60,693			
SubTotal: Design Services Contingency		60,693	1.0678	64,808
			-	
Total: Consultant Services		667,619	1.0457	698,148
CONSTRUCTION CONTRACTS				
Site work				
G20 - Site Improvements	20,000			
G40 - Site Electrical Utilities	2,100,000			
G60 - Other Site Construction	25,000			
SubTotal: Site work		2,145,000	1.0495	2,251,178
Related Project Costs			-	
City Utilities Relocation	75,000		-	
SubTotal: Related Project Costs			-	78,713
Facility Construction	102 450			
F10 - Special Construction	192,450			
General Conditions	200.000			
SubTotal: Facility Construction		507 450	1 0678	E 4 4 9 E G
Construction Contingencies		507,450	-	541,050
Allowance for Change Orders	272,745			
SubTotal: Construction Contingencies		272,745	1.0678	291,237
		,	-	· · ·
Sales Tax		261,017	1.0543	275,179
			-	
Total: Construction Contracts		3,261,212	1.0543	3,438,162
maximum Allowable Construction Cost (MACC)		2,727,450	1.0500	2,871,747
EQUIPMENT				
E10 - Equipment	215,100			
F10 - Special Construction	100,000			
SubTotal:		315,100	1.0678	336,464

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
EQUIPMENT				
Sales Tax		27,414	1.0678	29,272
Total: Equipment		342,514	1.0678 =	365,736
PROJECT MANAGEMENT				
Agency Project Management	246,844			
Total: Project Management		246,844	1.0678	263,580

# **Cost Estimate Summary and Detail**

2017-19 Biennium \*

Report Number: CBS003

All User Ids

Date Run: 8/12/2016 5:01PM

Cost Estimate Number: 58

Cost Estimate Title: Medium Voltage Electrical Distribution System

<u>Parameter</u>	Entered As	Interpreted As
Associated or Unassociated	Associated	Associated
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000562	30000562
Cost Estimate Number	58	58
Sort Order	Cost Estimate Title	Title
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget

\*

User Id

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2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

### **Description**

 Starting Fiscal Year:
 2018

 Project Class:
 Preservation

 Agency Priority:
 7

#### Project Summary

These requests are a priority based upon on-going assessment, review and prioritization of campus facilities operations and the needs to support effective operation management. These preservation projects were identified through evaluation of our current systems by architectural engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS) and identify those properties and system that are generating high operation costs and concerns

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Project Request in the category of Facility Preservation are developed and requested to address the preservation of facilities and property on the Eastern Cheney Campus. Projects in this category include: Heating and Cooling Equipment Replacements, Chiller Controls, Walkway and Paver replacements, Exterior Building Preservation, Roofs on Martin Hall, the Music Building, Pavilion, Indoor Air Quality issues, Landscape improvements, Building Controls and Energy Management and Storm Water use for irrigation.

These requests are priority based upon on-going assessment, review and prioritization of campus facilities operations and the needs to support effective operation management. These projects were identified through evaluation of our current systems by architectural engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS) and identified the properties and systems that are generating high operation costs and concerns. Once the maintenance items are captured, we then prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

Eastern's facilities are complex and costly resources to maintain and operate. These minor projects enable us to defer major capital expenditures through creative preservation measures to extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvements and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

The results of these identified projects will be:

Replacement or upgrading of systems that are not currently operating in a manner that best fits the campus needs Reduction of backlog maintenance

Reduction of operating cost including the cost of utilities to operate

Replacement of obsolete equipment with new and higher efficiency equipment and systems

- Improved operations and indoor air quality and health safety related operations
- Reduction in costs associated with building cleaning

Higher level of comfort for building customers and improved environment for teaching and student learning

Each separate project will produce enhancements and improvements for university facilities. Once funding is approved, we will design and construct projects that will replace or improve the systems or equipment indicated in the proposal. Design on these project will start as soon as funding is approved in July of 2017. Construction will follow as soon as the design and bid for the project are completed. These projects will be scheduled for construction throughout the biennium in coordination with other

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

### **Description**

departments to minimize disruptions, to work around seasonal weather conditions that are related to the scope of work, and finally depending upon the current workload of university staff, implement the projects or manage the contractor that installs the projects.

Requests contained in Minor Works Preservation are already developed to be phased once funding is approved. The university understands that funding will not always be available at the level of the request, therefore we plan our projects to be dynamic and flexible with the funding that is made available. We will either reduce the scope of specific project or reduce the facilities being addressed in this request.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The requests would address the following problems on current university facilities:

Replacement of roofs and roof systems

Protection of interior elements of facilities from weather damage to the structure and finishes

Reduction of backlog maintenance associated with building envelope

The opportunity to replace old equipment with more energy efficient and cost effective equipment

Extension of the affective lifecycle of these systems and equipment to defer more costly capital expenditures

Capture and resolve any pending regulatory items

Support the long term strategy of the university and the state

Reduction of university costs related to these systems

Improving the learning environment for the campus as a whole

Unfortunately, the result of taking no action will increase the potential for older systems not to perform as needed in all situation. Without addressing the critical and key facilities issues, operation costs will continue to rise. This includes regular preventative actions, demand maintenance, and utility costs associated with lower performing equipment and systems. This impacts the ability to provide a safe, comfortable and accessible campus for all that use it.

As is the case with reduction of approved funding, the university will prioritize the highest needed project and defer other as required. In many cases the will be an additional burden on our operation budgets.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

These requests impact our university students, faculty, staff and community members that use our facilities on campus. This is our service area and includes a variety of university and community activities on a daily basis. Some projects specifically address specific buildings but, these improvements are a benefit the campus as a whole and our entire clientele.

Currently, our estimates for this project are based upon cost per square foot or budgetary estimate provide by paid consultants or internal staff generated estimates. Once funding is approved and design is underway, more detailed cost estimate will be developed and reviewed to provide information for project implementation and good stewardship of state resources.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no related IT cost in this request. These projects do not fall under the requirements of OCIO review or oversight.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

### **Description**

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The projects are developed and prioritized based upon the needs stated in the university Academic Strategic Plan and our Comprehensive Campus Master Plan (2014).

The projects included here affect many other state programs such as sustainability and cost effective facilities management. These projects extend the lifecycle of our buildings' systems and respond to the normal life cycle deterioration that progress in all facilities.

All projects related to Minor Works Preservation relate to Eastern's strategic goal to remain an "institution of innovation." As a priority to us, we consider the aspects relating to high quality/cost effective improvement and replacements, greenhouse gas emissions and the reduction of our carbon footprint. These projects also address the reduction of deferred backlog maintenance that stand as a priority of the state and university.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

### Is there additional information you would like the decision makers to know when evaluating this request?

These projects reduce total replacement costs and defer major capital requests over a longer period of time. Implementing these projects extends the overall lifecycle of our facilities and aligns with our university's mission and goals by managing our maintenance backlog and reducing cost.

Good planning, system renewal and minor capital improvements allow for long term reduction of operating costs, reduction of emergency or catastrophic failures and extend the lifecycle of mission critical systems for the university.

The university continues to capture and prioritize Minor Works so that when funds become available, we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

### Location

City: Cheney

County: Spokane

Legislative District: 006

### **Project Type**

Facility Preservation (Minor Works)

### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

### Funding

		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	7,000,000				7,000,000
	Total	7,000,000	0	0	0	7,000,000

# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

Funding					
	Future Fiscal Periods				
	2019-21	2021-23	2023-25	2025-27	
057-1 State Bldg Constr-State					
Total	0	0	0	0	
Operating Impacts					
No Operating Impact					
SubProjects					
SubDroiget Numbers 20000590					

SubProject Number: 30000580

SubProject Title: Minor Works Preservation - Heating/Cooling/Ventilation Replace

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

### **SubProjects**

SubProject Number: 30000580 SubProject Title: Minor Works Preservation - Heating/Cooling/Ventilation Replace

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Work Preservation funding for replacement, renewal and improvement to our HVAC system. Heating Ventilation Air Conditioning (HVAC) preservation. This project identifies specific HVAC systems in our campus buildings that require timely updates and renovations to ensure safe, effective and efficient operations. Indoor Air Quality (IAQ) and customer comfort are critical issues for our facilities. This project was identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). We prioritized this project to improve and extend the lifecycle of our HVAC systems and equipment and to reduce the maintenance and operating cost for the university.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University has identified buildings across campus that require Heating Ventilation Air Conditioning (HVAC) systems replacement and upgrades. These projects were selected through evaluation of our current systems by engineering consultants, regulatory agencies and operating staff. EWU captures the costs associated with maintaining and operating these systems through a computerized maintenance management system.

Improving these systems will extend their lifecycles, increase operating efficiencies and reduce maintenance and operating costs.

What determines this as a priority is the unreliability of these systems as they have reached their end of lifecycle which impacts the comfort of the buildings occupants, indoor air quality, efficiency and the cost to maintain these systems.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce a design for prioritized campus building HVAC preservation, restoration and equipment replacement including but not limited to Music/Recital; Art, Radio/TV, Communications, Theatre, second floor Cheney Hall, Pavilion, and JT Fieldhouse. The project will commence as soon as funds are approved. Once the design is complete the project will be advertised, bid and scheduled to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU will improve upon existing HVAC systems or replace obsolete equipment with new and higher efficiency equipment which would produce a higher level of comfort for building occupants and improved environment for teaching and student learning.

Not addressing the deficiencies increases maintenance, prolongs inefficiency, produces indoor air quality/health safety related issues, and may bring about catastrophic system failures.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

### **SubProjects**

#### SubProject Number: 30000580

SubProject Title: Minor Works Preservation - Heating/Cooling/Ventilation Replace

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All building users would be impacted by this request. Students, faculty, staff and university guests. The clientele will have the benefit of the use of high quality and comfortable spaces in buildings where these projects are implemented and indoor air quality will be improved as well. The clients of Eastern Washington University, students, faculty, staff and community members will experience better customer service and a quality environment.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project would be supported and controlled through the existing building automation system and campus network. There will be no new software purchased for this project, no enhancement to the university data cente,r and will require no oversight by the Office of the Chief Information Officer (OCIO)

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components

RCW 39.35D High Performance Public Buildings – high efficiency components and systems

RCW43.19.668; 669; 670; 682 Energy Conservation - high efficiency components and systems

EWU Energy Efficiency Sustainability Report

EWU Climate Actions Plan

EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success; innovations and opportunity and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.
2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000580

SubProject Title: Minor Works Preservation - Heating/Cooling/Ventilation Replace For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Heating/Cooling Equipment Replacement/Preservation projects bring EWU closer to our commitment to sustainability goals, greenhouse gas emission regulation, reduction of the campus carbon footprint and cost effective utility management. Consideration of this project will respond to state energy and regulatory requirements.

It is vital to improve systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, addressing deferred maintenance backlog, and helping to meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	1,000,000				1,000,000
	Total	1,000,000	0	0	0	1,000,000
			Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
N	a madda ar lanan a ad					

No Operating Impact

SubProject Number: 30000581

SubProject Title: Minor Works Preservation - Chiller Control System

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

#### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number:30000581SubProject Title:Minor Works Preservation - Chiller Control System

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the critical need for new controls and instrumentation on our Chilled Water production and distribution system. The renewal project will replace aging and equipment that is at the end of its usable lifecycle and provide new equipment that will enhance the energy management and conservation in our plant and across campus.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University has a centralized chiller plant, chilled water distribution system and chiller control system. The chiller plant (Rozell) has five production chillers that deliver chilled water to the campus buildings cooling systems through an elaborate 3-1/2 mile underground tunnel & utilidor system. Rozell's ageing direct digital control (DDC) and energy management systems (EMS) require an integration that will bring it current with the standardized modern DDC/EMS operating systems.

This priority request for the DDC/EMS integration is to modernize the chiller operating system to meet current control strategies and optimal energy management practices.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This DDC/EMS integration project will produce specifications that represent the university's standards on the chiller control system and will be advertised, bid and scheduled for the integration to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The chiller DDC/EMS integration will modernize operations and management that facilitate EWU's innovative campus operating system.Not taking action in the integration will affect the reliability of maintaining the chiller plant operations and energy management.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff, and university guests would be impacted by this request as air conditioning and air quality efficiencies effect the campus community as a whole.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center and will require no

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000581

SubProject Title: Minor Works Preservation - Chiller Control System oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

This project will ensure that facilities are comfortable and reliable and moreover, a healthy sustainable environment. One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state."

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components

RCW 39.35D High Performance Public Buildings - high efficiency components and systems

RCW43.19.668; 669; 670; 682 Energy Conservation – high efficiency components and systems

#### EWU Energy Efficiency Sustainability Report

#### EWU Climate Actions Plan

#### EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success; innovations and opportunity, and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

This project will ensure that the chiller plant is reliable and maintainable, older outdated systems need to be replaced in order to effectively meet the efficiency & sustainability goals set by the state.

It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs, defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.



2017-19 Biennium

Version: A6 Eastern Washington University

**Report Number:** CBS002 **Date Run:** 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number:30000581SubProject Title:Minor Works Preservation - Chiller Control System

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
			Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000582

SubProject Title: Minor Works Preservation - Walkway/Paver Replacements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000582 SubProject Title: Minor Works Preservation - Walkway/Paver Replacements

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Eastern Washington is requesting Minor Works Preservation funding to renew and replace walkways, pedestrian pathways and other hard maintainable surfaces on campus. These projects respond to the need to improve vehicle and pedestrian routes on Eastern's Cheney campus. These projects support safe and easy access for pedestrians and vehicles on campus through repairs made to walkways, pavements, roadways, access drives, pathways and associated equipment and systems. These projects also include work to replace deficient or broken equipment. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS).

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The safety of all people that work, attend class, or visit our campus is the highest priority of the university.

The campus has many vehicular and pedestrian routes to help people navigate daily to their various destinations whether it be to classes, offices, gathering spaces or to get to a work location. These routes are constructed of varying materials such as concrete, asphalt, and brick and vary in type from being walkways, access drives, sidewalks, and paths. Most of these routes have been in place for many years and do not meet current accessibility codes and safety standards.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will take the results of the route hazard analyses performed and re-construct the highest priority sites to the current standard for access and safety.

The project will start after funding is approved and be completed within the biennium.

The project will be phased based on the prioritization list developed in the route evaluation.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project reduces the risk of injury to anyone accessing the campus on foot as well as eliminate additional damage to areas where pavements have degraded to the point that vehicular traffic further exacerbates the damage.

This project will also address accessibility as it applies to this exterior environment.

By not taking action to replace existing failed/failing walkway routes our customers will meet ever increasing challenges to navigate their way across campus, and the university may expose itself to legal action should an accident occur.

The clients of Eastern Washington University will experience better customer service and enjoy a quality environment when we manage our long and short term facility's goals properly. When operating costs are controlled, limited budgets are allocated

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000582

SubProject Title: Minor Works Preservation - Walkway/Paver Replacements

more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

In general all students, faculty, staff and university guests would be impacted by this request. More specifically, mobility challenged individuals will be impacted at certain locations as they navigate their way to either classes or work locations. This project addresses the "campus" as opposed to specific building related barrier free design philosophies.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship for these state assets. Minor Works projects like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for facilities' projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; Third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation: and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Facility Preservation (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000582 SubProject Title: Minor Works Preservation - Walkway/Paver Replacements

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	400,000				400,000
	Total	400,000	0	0	0	400,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000583 SubProject Title: Minor Works Preservation - Exterior Building Preservation

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000583 SubProject Title: Minor Works Preservation - Exterior Building Preservation

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University request Minor Works Preservation funds to address Exterior Building Improvements and Renewal on the Cheney campus. We developed these projects to address building envelope issues on Eastern's Cheney campus. These projects include exterior masonry upgrades and replacements for windows, doors and roofs. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). We prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The Cheney campus of Eastern Washington University has approximately seventy (70) buildings with the average year of construction being 1970. While some of our facilities were constructed after that date the majority were constructed in the 1950's and 1960's.

The effects of time and weather have resulted in many of the buildings requiring more attention in the areas of: Increased energy consumption required to maintain a temperate interior climate; numerous roof patching projects to stop leaks mainly due to the age of existing roof systems; sporadic masonry repairs on a case by case basis where structural settlement or other shifting has occurred.

Technologies related to building construction have advanced considerably since these facilities were originally constructed. New window and door systems provide much better insulating properties than similar systems designed in the last century and will go far toward mitigating energy loss. Roofing materials and techniques for application have eliminated many time-dependent leak issues that are present in these older building roofs. All buildings require exterior surface maintenance on occasion to maintain the qualities of the building envelope, and it is time for a number of our buildings to receive such attention.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Eastern building maintenance staff together with architectural and engineering consultants have identified and prioritized a condition report for our numerous campus structures. From this list building specific projects will be executed for the highest priority facilities based on certain criteria.

These projects will install new windows and doors, new or renovated roofs, and minor structural and weatherization repairs based on the priority list.

The project will be start after funding is approved and be completed within the biennium.

The project will be phased based on the prioritization list developed.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000583

#### SubProject Title: Minor Works Preservation - Exterior Building Preservation

How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project will decrease energy consumption related to each facility. The project will also reduce damage to various types of equipment due to roof leaks within the buildings.

By not taking action to replace leaky windows, doors, and roofs the university will not be making the most efficient use of our allocated funds. Instead we will continue to spend more on energy consumption which results in spending less on energy conservation.

The clients of Eastern Washington University will experience better customer service delivery and enjoy a quality environment when we manage our long and short term facility's goals properly. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Students, faculty, and staff members residing in these buildings would be impacted by this request. A comfortably conditioned interior working/living environment should be the goal, as well as delivering conditioned air in an efficient cost-effective manner.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship for these state assets. Minor Works projects like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

#### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000583

#### SubProject Title: Minor Works Preservation - Exterior Building Preservation

Priorities for the facilities' projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; Third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation; and lastly, the reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	1,200,000				1,200,000
	Total	1,200,000	0	0	0	1,200,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000584 SubProject Title: Minor Works Preservation - Martin/Music/Pavilion Roof Replace

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000584 SubProject Title: Minor Works Preservation - Martin/Music/Pavilion Roof Replace

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Works funding to replace the aging and deteriorating roofs on Martin Hall, Music Building and the Pavilion. This project aims to repair or replace worn roofs and roofing systems on specific listed existing university facilities. Renewal projects include extending the life cycle of current roofs and roofing systems as well as full replacements as needed.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The project is comprised of work to repair or replace worn roofing systems on three campus buildings:Martin Hall, Music, and the Pavilion.

This priority request for roof replacement is for the reason that these roofs have gone beyond their lifecycle and have become a burden to maintain and require replacement.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This roofing project will produce specifications that represent the university's standard on roofing systems and will be advertised, bid and scheduled for the replacements to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The roofing replacement will repair and replace roofing systems that have either outlived their life span or have failed. Failed roofing systems allow unnecessary damage to occur within campus facilities. This damage can be avoided with renewed and durable roofing systems.

Not taking action in replacing the roofing systems will affect the facilities from the penetration of moisture. Moisture can be extremely damaging to the infrastructure within, and modern watertight roofing systems are critical to maintaining a resilient healthy building.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff, and university guests would be impacted by this request as roofing upgrades and improvements effect the campus community as a whole.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center and will require no

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000584

SubProject Title: Minor Works Preservation - Martin/Music/Pavilion Roof Replace oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state." This project will ensure that facilities are protected from damage due to moisture infiltration.

#### EWU Energy Efficiency Sustainability Report

#### **EWU Climate Actions Plan**

The goals for the university under our current Strategic Plan are: student success, innovations, opportunity, and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request? This project will ensure that facilities are protected from damage due to moisture infiltration, and will allocate resources in direct

I his project will ensure that facilities are protected from damage due to moisture infiltration, and will allocate resources in direct support of a major building system that is integral to physical health of program space on campus. Without proper maintenance of roofs, part of the university population would be unable to utilize critical program space.

It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

**OFM** 

### 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000584

SubProject Title: Minor Works Preservation - Martin/Music/Pavilion Roof Replace

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	850,000				850,000
	Total	850,000	0	0	0	850,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number: 30000585

SubProject Title: Minor Works Preservation - Indoor Air Quality Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

#### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

 SubProject Number:
 30000585

 SubProject Title:
 Minor Works Preservation - Indoor Air Quality Improvements

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University Requests Minor Works Preservation funding to address the high priority need of improving Indoor Air Quality in various facilities on campus. Due to age and lifecycle deterioration of some system renewal and upgrade are require to meet the air quality needs for academic instruction and student activities. It is critical provide quality spaces and environments for our students, faculty and staff.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University is responsible for providing a healthy and safe learning environment for the campus community. Indoor air quality (IAQ) refers to the air quality within and around buildings. A number of aging buildings and facilities on campus need modern systems and infrastructure upgrades that will greatly improve their air quality.

EWU prioritizes this IAQ action of building improvements in support of our commitment to providing positive, healthy, and safe environments. Poor IAQ can cause illness and adverse symptoms to students, guests, teachers, and staff that results in absences, missed schoolwork, and lower test scores.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce professional inspections and testing in areas that have been reported on, compromised, and—in aging buildings on campus—followed by engineering and design efforts for repair and improvement. Upon design completion the project will be advertised, bid and scheduled for the improvements and upgrades to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU would address the problem by acting on and implementing the recommendations of the IAQ professional services provider.

Not taking action or mitigating the existing problems and reports will result in an unhealthy and unsafe environment for the students, and campus community as a whole. EWU's knowledge of problem areas that could be improved upon and not mitigating or making improvements would put EWU in a position of operating out of state regulation.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff, and university guests would be impacted by this request as these IAQ upgrades and improvements effect the campus community as a whole.

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Version: A6 Eastern Washington University

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#### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000585

SubProject Title: Minor Works Preservation - Indoor Air Quality Improvements

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The campus IAQ project would leave EWU positioned in compliance with Washington State Department of Health and Indoor Air Quality code.

#### Chapter 70.162 RCW - INDOOR AIR QUALITY IN PUBLIC BUILDINGS

"Scientific studies indicate that pollutants common in the indoor air may include radon, asbestos, volatile organic chemicals including formaldehyde and benzene, combustion by-products including carbon monoxide, nitrogen oxides, and carbon dioxide, metals and gases including lead, chlorine, and ozone, respirable particles, tobacco smoke, biological contaminants, micro-organisms, and other contaminants. In some circumstances, exposure to these substances may cause adverse health effects, including respiratory illnesses, multiple chemical sensitivities, skin and eye irritations, headaches, and other related symptoms."

#### EWU Energy Efficiency Sustainability Report

#### EWU Climate Actions Plan

#### EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

"Indoor Air Quality" is exceptionally important and moreover EWU strives to comply with Washington State regulatory requirements and is committed to the safety of the campus community. It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs, defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

OFM
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2017-19 Biennium

Version: A6 Eastern Washington University

**Report Number:** CBS002 **Date Run:** 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000585 SubProject Title: Minor Works Preservation - Indoor Air Quality Improvements

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000586

SubProject Title: Minor Works Preservation - Landscape Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000586 SubProject Title: Minor Works Preservation - Landscape Improvements

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Eastern Washington University request Minor Works funding to update and replace landscaping on campus. This is includes architectural components as well as the use of natural and drought resistant plantings to enhance the campus. These project have been developed, reviewed and prioritized base upon the best use of funds to enhance the campus, reduce operating costs and reduce the amount of irrigation needed to sustain landscaped areas.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The landscaping in several areas of Eastern's Cheney campus have been in place since the adjacent buildings were constructed in the 1950' and 1960's. Consequently these areas have become overgrown, resulting in the increasing maintenance costs annually in these areas due to extra care needed to contain and repair damage.

What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Eastern's grounds and maintenance staff together with a landscape architectural consultant have identified and prioritized areas where upgrades to the landscaping need to occur.

These projects will remove the existing overgrown areas and re-construct them to new landscape standards that include the use of native plants that require less water.

The project will start after funding is approved and be completed within the biennium.

The project will be phased based on the prioritization list developed.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project will decrease water consumption related to our current landscape needs.

By not taking action to replace this overgrown condition the university will not be making the most efficient use of our allocated funds. Instead we will continue to spend more on water consumption which results in spending less on other needs.

The clients of Eastern Washington University will experience better customer service and enjoy a quality environment when we manage our long and short term facility's goals properly. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000586

#### SubProject Title: Minor Works Preservation - Landscape Improvements

Students, faculty and staff members would be impacted by this request. A well-functioning and cost effective landscape system results in less costs being applied to these systems in terms of maintenance dollars.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship of these state assets. Minor works projects like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for facilities projects are focused on our base goals which are: First, safety for our customers/clientele; Second, the protection of university assets; Third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation; and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

**OFM** 

### 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000586

SubProject Title: Minor Works Preservation - Landscape Improvements

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	450,000				450,000
	Total	450,000	0	0	0	450,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000587

SubProject Title: Minor Works Preservation - Building Controls/Energy Management

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

#### Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000587 SubProject Title: Minor Works Preservation - Building Controls/Energy Management

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Work funding to replace aging and failing building temperature controls and energy management equipment on the university campus. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University has a sophisticated campus wide building automation system (BAS) and energy management system (EMS). Many buildings on campus are not modernized with the BAS/EMS upgrades. This project will integrate remaining campus buildings with updated BAS/EMS that is consistent with EWU's current campus operating system.

This priority request for the BAS/EMS integration is to modernize the remaining campus building's to meet current control strategies and optimal energy management practices. This will allow university staff to monitor and manage these systems from a centralized location.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This BAS/EMS integration project will produce specific specifications that represent the university's standards on campus and will be advertised, bid, and scheduled for the integration to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The BAS/EMS integration will modernize operations and management that facilitate EWU's innovative campus operating system.

Not taking action in the integration will affect the reliability of maintaining and monitoring buildings that have not yet been upgraded and will hinder operations and energy management, moreover EWU's commitment to state regulations compliance as well as campus efficiency and sustainability goals will not have been met.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff, and university guests would be impacted by this request campus building operating efficiencies and comfort levels affect the campus community as a whole.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000587

SubProject Title: Minor Works Preservation - Building Controls/Energy Management

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT-related costs. There will be no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state."

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 39.35D High Performance Public Buildings - high efficiency components and systems

RCW43.19.668; 669; 670; 682 Energy Conservation - high efficiency components and systems

EWU Energy Efficiency Sustainability Report

EWU Climate Actions Plan

#### EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. Installation of new, cost-effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

This project will ensure that facilities are a healthy, sustainable environment as well as comfortable and reliable. The installation of building automation and energy management systems for HVAC, power, and lighting systems allow university staff to monitor and manage these systems from a centralized location. These systems also allow the university to automate energy usage schedules in order reduce usage throughout the day. Centralized energy management helps reduce energy costs by reducing wasteful energy usage.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000587 SubProject Title: Minor Works Preservation - Building Controls/Energy Management

It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs, defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	700,000				700,000
	Total	700,000	0	0	0	700,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Opera	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000588 SubProject Title: Minor Works Preservation - Greenhouse Replacement

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000588 SubProject Title: Minor Works Preservation - Greenhouse Replacement

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Easteren Washington University request Minor Works Preservation funding to replace our again and failing Biology Greenhouse locate on the Cheney campus. This facility is beyond normal repair costs to improve to the level that is required for the Biology Department to provide instruction and research space for the department. A systematic review by a specialized consultant identify that existing greenhouse cost of improvement is more than the actual replacement cost for a new facility.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The greenhouse located in the science complex was originally constructed in 1961 and has never had any upgrades or modifications since that date. Many of the sub-systems within the greenhouse are no longer operable as parts for these systems are no longer produced.

What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

This request will replace the existing highly aged structure.

This project will start after funding is approved and be completed within the biennium.

It is not likely that this project will be phased.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project will construct a new greenhouse to support class and laboratory work within the science department.

By not taking action to replace this aged support facility, the science department will have to continue with modified operations in the course of daily classroom and laboratory activities.

The clients of Eastern Washington University will experience better customer service delivery and enjoy a quality environment when we manage our long and short-term facilities goals properly. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Students, faculty and staff members in the science department would be impacted by this request. A well-functioning and cost effective greenhouse will mitigate the altered daily lab and class environment.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

#### SubProject Number: 30000588

SubProject Title: Minor Works Preservation - Greenhouse Replacement

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship for these state assets. Minor works project like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for the facilities' projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; Third, the provision of a comfortable and attractive place for our clients to work, learn, play and visit; Fourth, the extension of the lifecycle of state assets, reducing the maintenance backlog and operating costs; Sustainable design and energy conservation are the elements of the fifth priority; and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Manage Impacts Associated with this project

Funding			Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	900,000				900,000	
	Total	900,000	0	0	0	900,000	

**OFM** 

### 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:37AM

Project Number: 30000565

Project Title: Minor Works Preservation - Facility Preservation

#### **SubProjects**

SubProject Number: 30000588

SubProject Title: Minor Works Preservation - Greenhouse Replacement

		Future Fiscal Periods						
	2019-21	2021-23	2023-25	2025-27				
057-1 State Bldg Constr-State								
Total	0	0	0	0				
Operating Impacts								
No Operating Impact								

### OFM

## **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000565	30000565
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **Description**

 Starting Fiscal Year:
 2018

 Project Class:
 Preservation

 Agency Priority:
 7

#### Project Summary

These requests are a priority based upon on-going assessment, review and prioritization of campus facilities operations and the needs to support effective operation management. These Infrastructure projects were identified through evaluation of our current systems by architectural engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS) and identify those properties and system that are generating high operation costs and concerns

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Project Request in the category of Facility Preservation – Infrastructure Renewal are developed and requested to address the preservation of facilities and property on the Eastern Cheney Campus. Projects in this category include: Replacement of Steam Boiler #3, Steam System Equipment replacement, Campus fiber upgrades, Medium Voltage (13,200 volt) switch replacement, Sanitary and Storm Sewer Improvements, Campus Building Automation/Energy Management Upgrades, Irrigation Controller replacement and Steam Boiler Burner Controls upgrades.

The requests are priority based upon on-going assessment, review and prioritization of campus facilities infrastructure operations and the needs to support effective operation management. These projects were identified through evaluation of our current systems by architectural engineering consultants, regulatory agencies and plant staff. We obtained the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS) and identify those properties and system that are generating high operation costs and concerns. Once the maintenance item was captured, we then prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

Eastern's facilities are complex and costly resources to maintain and operate; these minor projects enable us to defer major capital expenditures through creative preservation measures to extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvement and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

The results of these identified projects will be:

Replacement of Steam Boiler #3 (currently nonoperational) Upgrade of Boiler Plant controls and burners Replacement of Steam Equipment Upgrade of our fiber network that is used for communication for all infrastructure and building controls and automation. Campus sewer improvements Campus building automation New efficient irrigation controls

Higher level of comfort for building customers and improved environment for teaching and student learning

Each separate project will produce enhancements and improvements to the university infrastructure systems and equipment.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **Description**

Once funding is approved, we will design and construct projects that will replace or improve the systems or equipment indicated in the proposal Design on these project will start as soon as funding is approved in July of 2017. Construction will follow as soon as the design and bid for the project are completed. These projects will be scheduled for construction throughout the biennium in coordination with other departments to minimize disruptions, to work around seasonal weather conditions that are related to the scope of work, and finally depending upon the current workload of university staff, implement the projects or manage the contractor that installs the projects.

Requests contained in Minor Works Preservation are already developed to be phased once funding is approved. The university understands that funding will not always be available at the level of the request therefore, we plan for our projects to be dynamic and flexible with the funding that is made available. We will either reduce the scope of specific project or reduce the facilities being addressed in this request.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Infrastructure Preservation provides for the long term operations of campus facilities through the distribution of Primary Electrical Power, Steam, Chilled Water and Domestic Water. The university also owns and operates its own sanitary and storm sewer infrastructure. These systems are expensive capital investment for the university and the state of Washington.

To maintain and upgrade these systems is the university's responsibility to be good steward of state resources. The requests addressed as the highest priority issues are currently identified and responded to with upgrades and replacement that respond to specific failures and low performing conditions. There are also regulatory requirements associated with the operations of our systems that we must address on a periodic basis to continue to be in compliance.

Unfortunately, the result of taking no action will increase the potential for older systems not to perform as needed in all situation. Without being addressed, critical and key facilities' operation costs will continue to rise. This include regular preventative and demand maintenance and utility costs associate with lower performing equipment and systems. This impacts the ability to provide a safe, comfortable and accessible campus for all that use it.

As is the case with reduction of approved funding, the university will prioritize the highest needed project and defer other as required. In many cases the will be an additional burden on our operation budgets.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

These requests impact our university students, faculty, staff and community members that use our facilities on campus. This is our service area and includes a variety of university and community activities on a daily basis. Some projects specifically address specific buildings but, these improvements are a benefit the campus as a whole and our entire clientele.

Currently our estimates for this project are based upon cost per square foot or budgetary estimate provided by paid consultants or internal staff generated estimates. Once funding is approve and design is underway more detailed cost estimate will be develop and reviewed to provide information for project implementation and good stewardship of state resources.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no related IT cost in this request. These projects do not fall under the requirements of OCIO review or oversight.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **Description**

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

These projects are developed and prioritized based upon the needs stated in the university Academic Strategic Plan and our Comprehensive Campus Master Plan (2014). The projects included here affect many other state programs such as sustainability and cost effective facilities management. These projects extend the lifecycle of our buildings' systems and respond to the normal life cycle deterioration that progress in all facilities.

All projects related to Minor Works Preservation relate to Eastern's strategic goal to remain an "institution of innovation." As a priority to us, we consider the aspects relating to high quality/cost effective improvement and replacements, greenhouse gas emissions and the reduction of our carbon footprint. These projects also address the reduction of deferred backlog maintenance that stand as a priority of the state and university

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

These projects reduce total replacement costs and defer major capital requests over a longer period of time. Implementing these projects will extend the overall lifecycle of our campus infrastructure and also aligns with our university's mission and goals by managing our maintenance backlog and reducing cost.

Good planning, system renewal and minor capital improvements on our infrastructure allow for long term reduction of operating costs, reduction of emergency or catastrophic failures and the extension of the lifecycle of mission critical systems for the university.

The university continues to capture and prioritize Minor Works Infrastructure projects so that when funds become available, we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

#### Funding

			Expenditures		2017-19	Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1 State Bldg Constr-State Total	State Bldg Constr-State	7,000,000				7,000,000
	7,000,000	0	0	0	7,000,000	

**OFM** 

Funding

### 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

	Fu	uture Fiscal Perio	ods		
	2019-21	2021-23	2023-25	2025-27	
057-1 State Bldg Constr-State					
Total	0	0	0	0	
Operating Impacts					
No Operating Impact					
SubProjects					

SubProject Number: 30000589

SubProject Title: Minor Works Preservation - Boiler #3 Replacement

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000589 SubProject Title: Minor Works Preservation - Boiler #3 Replacement

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University request Minor Works Preservation funding for the replacement our the plant boiler #3. Eastern Washington University's steam plant (Rozell) provides high pressure steam to all 2,700,000 gross square feet of campus buildings. Rozell has 5 (five) boilers of different sizes that are used individually or in combination to provide steam 24 hours a day, 365 days a year. Due to internal failure and material deterioration, boiler #3 has not been operational for the past 8 (eight) years. It was taken off-line due to many operational and efficiency problems. It also would not pass inspection and therefore was deemed unsafe to operate. The size of boiler #3 and configuration of the plant require the replacement of this equipment to efficiently stage steam production and distribution to the campus.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's campus steam plant (Rozell) distributes high pressure steam to 2,978,097 gross square feet of campus buildings through an extensive utility tunnel system. This steam utility provides space heating and domestic hot water to the campus buildings and production facilities. Rozell has five boilers of different sizes that are used individually or in combination to provide steam 24 hours a day, 365 days a year. Due to internal failure and material deterioration, boiler #3 has not been operational for the past 13 years. It was taken offline and decommissioned in 2003 due to many operational and efficiency problems, it also would not pass inspection and therefore was deemed unsafe to operate. The size of boiler #3 and configuration of the plant require the replacement of this equipment to efficiently stage steam production and distribution to the campus.

The boiler #3 replacement project was identified through evaluation of our current system by engineering consultants, regulatory agencies and boiler plant staff. We prioritized this project to improve and extend the lifecycle of our steam plant and system equipment to reduce the maintenance and operation costs for the university. The Rozell Boiler Plant is at its threshold of capacity to serve the campus steam utility infrastructure efficiently and as the campus has grown considerably over the last thirteen years with new buildings, additions and production facilities, it puts more demand load on the boiler plant which leaves this boiler replacement a priority project. EWU will continue to grow with new buildings scheduled for construction, i.e. the new Interdisciplinary Science Center (ISC) and will require the boiler replacement to meet steam capacity demands.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce engineering & design for boiler #3 replacement. The project will commence as soon as funds are approved. Once the design is complete the project will be advertised, bid and scheduled to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU would address the problem by replacing the decommissioned boiler with a new higher efficiency modern boiler and by doing so increasing the boiler plants capacity to serve the campus. This is an opportunity to improve efficiency, reduce carbon emissions and conserve natural resources which follows EWU's commitment of reaching carbon neutral goals.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000589 SubProject Title: Minor Works Preservation - Boiler #3 Replacement

Rozell boiler plant operations were designed to operate on five boilers of differing capacities to maintain the campus steam utility. The lack of one boiler adds more work to the other parts of the system which reduces the potential for energy conservation, operational flexibility and redundancy. By operating the plant in this manner it is taxing the remaining four boiler capacities & lifecycle expectancies.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request as all plant infrastructure upgrades and improvements effect the campus community as a whole.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project would be supported and controlled through the existing building automation system and campus network. There will be no new software purchased for this project, no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components RCW 39.35D High Performance Public Buildings – high efficiency components and systems RCW43.19.668; 669; 670; 682 Energy Conservation – high efficiency components and systems RCW 70.94 Washington Clean Air Act – boiler emissions

Spokane Regional Clean Air Agency - boiler emission

EWU Steam System Evaluation

EWU Energy Efficiency Sustainability Report

EWU Climate Actions Plan

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000589

SubProject Title: Minor Works Preservation - Boiler #3 Replacement
<u>EWU Campus infrastructure Renewal</u>

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

Is there additional information you would like the decision makers to know when evaluating this request?

The Campus Steam Plant – Boiler #3 Replacement project will support carrying EWU closer to our commitment to sustainability goals, greenhouse gas emission regulation, reduction of the campus carbon footprint and cost effective utility management. Consideration of this project will also respond to state energy and regulatory requirements.

It is vital to improve systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	2,000,000				2,000,000
	Total	2,000,000	0	0	0	2,000,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000590

SubProject Title: Minor Works Preservation - Steam System Equipment Upgrades

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number:30000590SubProject Title:Minor Works Preservation - Steam System Equipment Upgrades

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University request Minor Works Preservation funding for the renewal, replacement and improvement our the steam system equipment. We identified and developed these projects in response to the need for replacements and improvements in the university's central steam production and distribution system. The projects include upgrading our steam distribution channels, equipment and specialties replacements as well as capacity, distribution and equipment upgrades. We also intend to replace deficient equipment at the end of its lifecycle. These projects were identified through a comprehensive engineering evaluation by professional consultants with expertise in areas of system performance, design and condition. The system assessment also included the help of regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). We prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's centralized steam production plant (Rozell) utilizes more than 3.5 miles of underground tunnels and utilidors to deliver steam to 2.9 million square feet of campus buildings. The steam distribution system is vital to the university's campus infrastructure. This project includes and encompasses the repair of: steam line replacement, piping modifications, replacement of select steam valves, integral operating components, pressure control valves, piping examination, and nondestructive testing. The piping utility exhibits compromised support infrastructure throughout the tunnel system that requires repairs or replacement as well.

The requested priority project will benefit the campus steam distribution system, infrastructure and safeguard that the steam utility to campus buildings is resilient and reliable. The project will focus on upgrades and renewal of ageing segments of the steam system.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This Steam Systems Infrastructure Upgrade project will produce engineering & design. The project will commence as soon as funds are approved. Once the design is complete the project will be advertised, bid and scheduled to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU will improve upon the steam infrastructure and distribution systems by identifying obsolete and failing equipment and replacing them with new and higher efficiency equipment which would produce reliability, a higher level of comfort for building occupants, and improved environment for teaching and student learning.

Not addressing the deficiencies increases maintenance, prolongs inefficiency, and may bring about catastrophic system failures.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000590

SubProject Title: Minor Works Preservation - Steam System Equipment Upgrades

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request as the steam distribution and infrastructure effect the campus community as a whole.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

This project will ensure that facilities are comfortable and reliable and moreover, a healthy sustainable environment. One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state."

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components RCW 39.35D High Performance Public Buildings – high efficiency components and systems RCW43.19.668; 669; 670; 682 Energy Conservation – high efficiency components and systems

#### EWU Steam System Evaluation

EWU Energy Efficiency Sustainability Report

#### EWU Climate Actions Plan

EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success; innovations & opportunity and community engagement. Installation of new, cost-effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000590 SubProject Title: Minor Works Preservation - Steam System Equipment Upgrades

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

This project will ensure that the steam distribution utility is reliable and maintainable; older outdated systems need to be replaced in order to effectively meet the efficiency & sustainability goals set by the state.

It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000591

SubProject Title: Minor Works Preservation - Storm Water Irrigation
2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000591 SubProject Title: Minor Works Preservation - Storm Water Irrigation

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University request Minor Work Preservation funding to address storm water and sanitary sewer deficiencies on the Cheney campus. This projects focuses on the campus sanitary sewer and storm water management needs. These projects focus on improving and replacing the distribution systems and equipment necessary to sanitary and storm water disposal from campus to the Cheney sewer treatment plant. We also designed a system that will reduce specific types of effluent discharged to the city, which will reduce the environmental impact on the treatment plant and local ecology. These projects also aim to replace deficient equipment at the end of its lifecycle. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). We prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The Eastern Washington University campus sits on approximately 300 acres. Much of the campus is in a park-like setting comprised of lawns and mature deciduous and evergreen trees. Being in a semi-arid environment, large quantities of water are required to keep these established settings green and thriving.

A separate problem on the campus is the continual pumping of groundwater that seeps into most of our facilities basements. Currently this water is pumped from the sumps located in the basements into the City of Cheney storm water system.

The opportunity we would like to address is the capture of the storm water for use in our irrigation system. This would help to alleviate some of the large quantity of fresh water that is currently used for irrigation. This concept is consistent with current sustainable philosophies and would be a great example of our commitment to the environment.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project would provide design and construction of an irrigation system that would supplement the existing system by the introduction of storm water as available for re-use to irrigate campus grounds.

The project will start after funding is approved and be completed within the biennium.

The project will be phased based on the prioritization identified during design development.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project decreases the use of potable fresh water related to turf/landscape irrigation. It also will reduce the impact of downstream loading of the city's storm water facilities, thereby further reducing the impact on our environment.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000591

#### SubProject Title: Minor Works Preservation - Storm Water Irrigation

By not taking action to intercept and re-use this disposed water the university would continue with the current impacts on the environment by only using fresh domestic water for irrigation and would continue sending this effluent downstream unnecessarily loading storm water facilities.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Students, faculty, staff members, visitors to the university, and the community of the City of Cheney all would be impacted by this request. By effectively capturing and re-using this available source of water for irrigation less waste of our natural resources is realized.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

There are no non-state funds associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship of these state assets. Minor Works projects like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

The ground beneath the campus has always had large amounts of groundwater within its structure and has been a problem for the university in addressing basement flooding of our many facilities. This problematic water source can now be used in a positive sense for irrigation purposes which is the essence of sustainable design.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Infrastructure Preservation (Minor Works)



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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000591 SubProject Title: Minor Works Preservation - Storm Water Irrigation

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	2,000,000				2,000,000
	Total	2,000,000	0	0	0	2,000,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000592

SubProject Title: Minor Works Preservation - Sanitary/Storm Sewer Improvements

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Version: A6 Eastern Washington University

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#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000592 SubProject Title: Minor Works Preservation - Sanitary/Storm Sewer Improvements

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the critical need to upgrade, replace and renew portions of our sanitary and storm sewer system. Eastern owns and operate both sanitary and storm sewer system for the campus and renewal is an important part of our long term facilities strategic plan. These projects have been identified and developed to respond to needs related to campus sanitary sewer and storm water management and efficiency. These projects include improvement and replacement of distribution systems and equipment related to sanitary and storm water disposal from campus to the Cheney sewer treatment plant. Also included are projects that are required throughout the system to reduce specific types of effluent discharged to the city to reduce impact on the treatment plant and local ecology. This project also includes the replacement of deficient and equipment that is at the end of it lifecycle. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The discharge of sanitary and storm sewage is a utility cost for the university, as well as it is a health, safety, and ecological cost/issue within the greater community. More attention is being paid to the issue of sanitary and storm sewer disposal.

The existing disposal systems on campus have been in place for many years, and much of it has not been altered since the original construction. Ever increasing regulatory oversight and monitoring require the university to address our disposal systems at the source as opposed to simply sending downstream to the end user.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will begin to design and construct a series of sanitary and storm sewer improvements. These improvements will likely be specific to particular facilities depending on the use of that facility.

This project will start after funding is approved and be completed within the biennium.

This project will be phased in over a number of biennia.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project will begin to design site specific sanitary and storm sewer improvements thereby reducing the pollutant load of the facility.

By not taking action the university is not being a committed partner in protecting our environment. Our costs to send effluent for treatment will continue to increase as our purveyor needs to increase costs for the treatment of sanitary and storm sewer

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Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000592

## SubProject Title: Minor Works Preservation - Sanitary/Storm Sewer Improvements runoff.

The clients of Eastern Washington University will experience better customer service delivery and enjoy a quality environment when we manage our long and short term facilities goals properly. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, and staff members would be impacted by this request. A well-functioning and cost effective sanitary and storm sewer collection and transportation system with improvements for detection and adjustment will reduce the negative impacts of high pollutant loading on the overall sanitary sewer system. Additionally this will help reduce the environmental impacts to downstream recipients of our sanitary effluent.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship for these state assets. Minor works project like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for facilities projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; Third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation; and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006



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Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### **Project Type**

SubProject Number:30000592SubProject Title:Minor Works Preservation - Sanitary/Storm Sewer Improvements

#### **Project Type**

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	800,000				800,000
	Total	800,000	0	0	0	800,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000593

SubProject Title: Minor Works Preservation - Campus Energy Management

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000593 SubProject Title: Minor Works Preservation - Campus Energy Management

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Work funding to replace aging and failing building temperature controls and energy management equipment on the university campus. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University has a campus wide infrastructure energy management system (EMS). Many utilities across campus are not modernized with the EMS upgrades. This project will integrate remaining utilities with the new modern EMS that is current with EWU's campus operating system.

This priority request for the EMS integration is to modernize the remaining infrastructure utilities to meet current control strategies and optimal energy management practices. This will allow university staff to monitor and manage these systems from a centralized location.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This infrastructure EMS integration project will produce specifications that represent the university's standards on campus and will be advertised, bid, and scheduled for the integration to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The infrastructure EMS integration will modernize operations and management that facilitate EWU's innovative campus operating system.

Not taking action in the integration will affect the reliability of maintaining and monitoring utilities that have not yet been upgraded and will hinder operations and energy management, moreover EWU's commitment to state regulations compliance and campus efficiency and sustainability goals will not have been met.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request; campus building operating efficiencies effect the campus community as a whole.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000593

SubProject Title: Minor Works Preservation - Campus Energy Management

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state."

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 70.235 Limiting Greenhouse Gas Emissions – alternate fuels, clean energy, high efficiency systems, and system components

RCW 39.35D High Performance Public Buildings – high efficiency components and systems RCW43.19.668; 669; 670; 682 Energy Conservation – high efficiency components and systems RCW 90.46 Reclaimed Water Use – Storm water management and re-use.

Washington State Department of Ecology Aquifer protection and groundwater rights Storm Water SEPA Reporting

Washington State Department of Heath

EWU Energy Efficiency Sustainability Report

EWU Climate Actions Plan

EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000593

SubProject Title: Minor Works Preservation - Campus Energy Management

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

This project will ensure that facility utilities are monitored and reliable and moreover, sustainable and efficient. The installation of utility energy management systems for electrical power, natural gas, steam condensate, chilled water usage, and sewer discharge allow university staff to monitor and manage these systems from a centralized location. These systems also allow the University to automate energy usage schedules in order reduce usage throughout the day. Centralized energy management helps reduce energy costs by reducing wasteful energy usage.

It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number: 30000594

SubProject Title: Minor Works Preservation - Boiler Management System Upgrade

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Report Number: CBS002 Date Run: 9/15/2016 9:38AM

#### Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

SubProject Number: 30000594 SubProject Title: Minor Works Preservation - Boiler Management System Upgrade

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Work funding to replace aging and failing burner controls on the plant steam boilers. This project was identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. This project is of high priority to operate our boiler system and also to have better energy conservation and reduction of greenhouse gas emission from the university's steam plant. These controls have exceed their programmed lifecycle and are currently a barrier to optimizing the plant control sequences.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's campus steam plant (Rozell) has five steam distribution boilers that are managed and controlled by an automated boiler burner management system (BMS). The BMS has surpassed its lifecycle and requires replacement as its systems components are no longer supported.

This replacement/upgrade is a priority as it is critical to the campus needs for heat, hot water and process facilities. Process facilities include and are not limited to production, restaurants, kitchens, and laundry.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce engineering and design for the BMS replacement once the design is complete the project will be advertised, bid, and scheduled to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU would address the problem by replacing the unsupported and outdated BMS with the most supported and advanced computerized boiler/burner management system available.

The BMS operates and manages the boiler plant, if the system were to fail it would potentially cause catastrophic damage to the boiler plant and campus wide steam utility distribution infrastructure.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request as all plant infrastructure upgrades and improvements effect the campus community as a whole.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO

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Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### SubProject Number: 30000594

SubProject Title: Minor Works Preservation - Boiler Management System Upgrade review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project would be supported and controlled through the current building infrastructure and existing campus network. There will be no enhancement to the university data center and will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

This project is designed to address the necessary replacement of infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with a variety of state and local jurisdictional requirements including:

RCW 39.35D High Performance Public Buildings – high efficiency components and systems RCW 43.19.668; 669; 670; 682 Energy Conservation – high efficiency components and systems

EWU Energy Efficiency Sustainability Report

EWU Climate Actions Plan

#### EWU Campus infrastructure Renewal

The goals for the university under our current Strategic Plan are: student success; innovations and opportunity, and community engagement. Installation of new, cost-effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

The Rozell Steam Plant – Boiler BMS Replacement Project will support carrying EWU closer to our commitment to sustainability goals, greenhouse gas emission regulation, reduction of the campus carbon footprint, and cost-effective utility management. Consideration of this project will also respond to state energy, efficiency and regulatory requirements.

It is vital to improve systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

County: Spokane

Legislative District: 006



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:38AM

Project Number: 30000566

Project Title: Minor Works Preservation - Infrastructure Preservation

#### **SubProjects**

#### **Project Type**

SubProject Number:30000594SubProject Title:Minor Works Preservation - Boiler Management System Upgrade

#### **Project Type**

Infrastructure Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	700,000				700,000
	Total	700,000	0	0	0	700,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

## OFM

## **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000566	30000566
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **Description**

 Starting Fiscal Year:
 2018

 Project Class:
 Preservation

 Agency Priority:
 7

#### Project Summary

These requests are a priority based upon on-going assessment, review and prioritization of campus facilities operations and the needs to support effective operation management. These Health, Safety and Code Compliance projects were identified through evaluation of our current systems by architectural engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS) and identify those properties and system that are generating high operation costs and concerns

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Health Safety and Code Compliance projects are identified and developed in response to the university's current needs to offer the safest facilities to the users of the Cheney campus.

Projects request in this category include: Fire System Replacements, Building Access Controls, Elevator Improvements, Barrier Free Access, Exterior Lighting Improvements, Emergency Generator and Uninterrupted Power Source (UPS) Replacements, Interior Lighting Improvements, Chemical Storage Building, Arc Flash Regulatory upgrades and Indoor Air Quality items.

These projects directly address life safety issues, regulatory compliance, property protection and projects that provide a safe and healthy environment for the campus community. These projects also include the replacement of deficient equipment that is at the end of its lifecycle. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). We prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

Each separate project will produce enhancements and improvements for the university's facilities. Once funding is approved, we will design and construct projects that will replace or improve the systems or equipment indicated in the proposal. Design on these project will start as soon as funding is approved in July of 2017. Construction will follow as soon as the design and bid for the project are completed. These projects will be scheduled for construction throughout the biennium in coordination with other departments to minimize disruptions, to work around seasonal weather conditions that are related to the scope of work, and finally depending upon the current workload of university staff, implement the projects or manage the contractor that installs the projects.

The results of these identified projects will be:

Resolution of facilities safety issues identified on campus Provision of safe, comfortable and easy access to university facilities for the community Response to regulatory agencies request for improvements for campus facilities Replacement of equipment and systems that better respond to campus health and safety needs

Additionally, these projects are developed to address the following issues that occur with existing systems:

Reduction of backlog maintenance

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#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **Description**

Reduction of operating cost including the cost of utilities to operate Replacement of obsolete equipment with new and higher efficiency equipment and systems Improved operations and indoor air quality and health safety related operations Reduction in costs associated with building cleaning Higher level of comfort for building customers and improved environment for teaching and student learning

The size of these projects have been scoped as to allow for prioritization of specific buildings or areas. Reduction in funding for this/these project would result in reduction of scope in one or more of the facilities listed or the reduction of the lower priority building systems that have been requested. We will continue to scope and prioritize these sized project to meet our funding requests. Subsequently, we will obtain funding approval as to respond to the greatest need first and make the biggest reduction to our deferred maintenance backlog.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The results of these projects are to improve the safety and access for the members of the university community for the use of the campus and our facilities. These projects also address updates and changes identified by regulatory agencies: City of Cheney building department, fire marshal, Washington State Department of Labor and Industries, Washington State Department of Health and other local and region agencies units that oversee safety on the campus.

Replacement and upgrade of fire detection and reporting systems Expansion of electronic access controls Upgrading and improvement of university elevator equipment Reduction of barriers to community members with special needs (ADA) Upgrading of exterior and interior lighting for safety can energy conservation Expansion of our chemical storage building Emergency Generator and UPS replacement Response to new regulations for Arc Flash requirement on buildings

As previously stated, this is also the opportunity to replace equipment and update systems that are reaching the end of their productive lifecycle and are high costs to maintain and operate. Periodic, regular replacement and upgrades extends the usable life cycle of our university facilities.

Unfortunately, the result of taking no action will increase the potential for older systems not to perform as needed in an emergency situation. Also various compliance requirements that are not addressed may increase our risk of violation with local agencies that oversee the safety of campus users. As is the case with reduction of approved funding for the university, we will prioritize the highest demand project and defer others as required. In many cases, there will be an additional burden on our operation budgets..

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The clients of Eastern Washington University, the students, faculty, staff and community members will experience better customer service, delivery, and a quality environment when we manage our long and short term facilities goals properly. When operating cost are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

The clientele associated with this project includes Eastern Washington University students, faculty and staff. This project also addresses community members and organizations that visit and use the campus for activities. These projects do not specifically add units to the university operations but respond to needs for high quality, safe, and secure spaces and facilities used for university and community activities. The university has a wide range of communities that use our facilities for academic instruction, student and community activities.

2017-19 Biennium

Version: A6 Eastern Washington University

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#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **Description**

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no related IT cost in this request. These projects do not fall under the requirements of OCIO review or oversight.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

These projects are developed and prioritized based on the needs stated in the university Academic Strategic Plan and our Comprehensive Campus Master Plan (2014).

These projects directly relate to our goal of "access" which includes the safety and security of all those who use our campus facilities. Projects included here affect many other state programs such as sustainability and cost effective facilities management. All projects related to Minor Works Preservation – Life Safety Code Compliance relate to Eastern's strategic goal to remain an "institution of innovation." As a priority to us, we consider the aspects relating to high quality/cost effective improvement and replacements, greenhouse gas emissions and the reduction of our carbon footprint. These projects also address the reduction of deferred backlog maintenance that stand as a priority of the state and university.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

As a primary goal of the university and university staff, the projects requested in this category directly relate to providing a safe and inviting campus to the university community members and visitors. This makes the campus more inviting and safer for our clientele. These projects support safety and emergency response professions and assist the university police provide a better, safer environment for our students and staff.

Good planning, system renewal and minor capital improvements allow for long term reduction of regulatory violations, operating costs, reduction of emergency or catastrophic failures and extension of the lifecycle of mission critical systems for the university.

The university continues to capture and prioritize Minor Works so that when funds become available, we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor Projects reduce the frequency of emergencies and cost less on a long term basis.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Health, Safety and Code Requirements (Minor Works)



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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **Description**

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

#### Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Current Biennium	2017-19 Reapprops	Fiscal Period New Approps
057-1	State Bldg Constr-State	7,000,000				7,000,000
	Total	7,000,000	0	0	0	7,000,000
		Fi	uture Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
•	<i>·</i> · · <i>· ·</i>					

#### Operating Impacts

#### No Operating Impact

#### **SubProjects**

SubProject Number: 30000570 SubProject Title: Minor Works Preservation - Fire System Upgrades

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000570 SubProject Title: Minor Works Preservation - Fire System Upgrades

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Eastern Washington University request Minor Works Preservation funding to address the Life Safety and Code Compliance issues related to our centrally monitored and dispatched fire detection and reporting system. Fire Detection and Reporting projects were identified and developed in response to the needs of the university to upgrade and replace fire detection, suppression and reporting equipment on the Cheney Campus. These projects include the upgrade and replacement of fire detectors, alarms, panels, equipment, fire sprinkler systems, emergency reporting communication and centralized monitoring equipment needs and requirements. This project also includes the replacement of deficient and equipment at the end of it lifecycle

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University has a state-of-the-art fire detection/reporting systems (FireWorks). The system is a centrally monitored and supervised fire detection and reporting system. This system monitors all of the university's building for supervisory and fire alarms within the building. The FireWorks system is connected to Edwards's fire alarm panels in many of the campus buildings.

This requested project is to expand the system to buildings that have not been upgraded yet to the new supervised system. This is a priority request due to requirements of National Fire Protection Association code (NFPA) and International Building Code (IBC). Local jurisdiction, the Cheney Fire Department and Fire Marshal's also require continual upgrades and replacements of systems deemed to be past their lifecycle and/or in condition not in the best interest of the building users. The systems support a 2 minute response time by city emergency services and provide reduction in our liability insurance premiums for facilities. Reliable and supervised systems are critical to early detection and reporting that reduces the potential risk to our students, faculty, staff, and community users of our facilities.

Eastern's current reporting system automatically dispatches through Spokane County who in turn dispatches the City of Cheney emergency services in the event of a building alarm. Requirements for fire detection and reporting are strictly governed by: National Fire Protection Associate NFPA, International Building Code IBC, and local jurisdictional authority in the form of City of Cheney Building Department and Fire Marshal.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will consist of the design and installation of fire alarm system in the highest priority building on campus including but not limited to Showalter Hall; JFK Library; Cheney Hall and Isle Hall. New control panels, communication wiring and devices will be added to specific building on the priority list. The master panels are linked to the campus networks back to the centrally monitored and dispatched alarms. Theses project will install all new panels, pathway and end-field devices as required by the local jurisdiction and the NFPA. Projects will commence design as soon as funds are approved. Once the design is complete the project will be advertised and bid and scheduled to be completed during a time of the academic that least impacts the student and instruction on the campus. Since these projects are a building by building installation they can be phased, but this requests is for the most critical facilities on our system currently.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000570

#### SubProject Title: Minor Works Preservation - Fire System Upgrades

How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Unfortunately since these are life safety issues, not addressing the issues put facility users at risk if the current systems are not working correctly or have component failures. If the local jurisdiction does not see the system in appropriate working order they will require fire watches when the building is being used and could, if necessary not allow academic classes to be held if there is potential for injury of loss of life.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All building users would be impacted by this request. Students, faculty, staff and university guests. The university is required to have fire detection and reporting systems operational as all times, day and night to protect the building users first and protect the properties for damage secondary.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen? This project does not have any IT impacts.

The projects are design and installation of wired systems that report through the existing campus network to a standalone monitoring system that is operated by the university. There will be no new software purchased for this project, no enhancement to the university data center and it will not require oversight by the Office of the Chief Information Officer (OCIO)

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds will not be used for this project. There are no additional matching funds available for this project. Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. We cannot meet this goals without a safe and comfortable campus for our students, faculty, staff, and community guests. This project promotes basic needs for a public institution to operate in and safe and productive manner for all our constituents to enjoy.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project has no relationship with the Puget Sound Action Agenda.

Is there additional information you would like the decision makers to know when evaluating this request?

No.

Location City: Cheney

County: Spokane

Legislative District: 006

**Project Type** 



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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### **Project Type**

 SubProject Number:
 30000570

 SubProject Title:
 Minor Works Preservation - Fire System Upgrades

 Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	1,000,000				1,000,000
	Total	1,000,000	0	0	0	1,000,000
			Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000571 SubProject Title: Minor Works Preservation - Access Controls

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000571 SubProject Title: Minor Works Preservation - Access Controls

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the expansion of our Electronic Access Controls System. In response to Life Safety Issues for students, faculty, staff and community members the university continue promote and expand our electronic key access system. This system provide security and property protection for many of our university facilities and the expansion will bring more facilities under this centrally monitored system. The expansion of this system also reduced the risk of lost keys and reduce operating costs associate with a "hard key" system.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The safety and security of students, faculty, staff, and visitors are the university's highest priority. Additionally, the monitoring and protection of our state assets is critical to our success. The installation and expansion of these access controls and monitoring systems allow for cost effective monitoring, control, and risk mitigation with regard to campus users and facilities. Eastern's facilities are complex and are resource intensive to maintain and operate. We are continually looking for ways to extend the lifecycle of facilities, systems, and deferred major capital expenditures to bring them up to a maintainable and cost effective level. This project, like many of our Minor Works projects, is programmed to extend lifecycle, improve facilities quality for our customers, integrate innovative design into our projects, and reduce the long term costs of the university and the state. We creatively designed this projects to respond to many of these needs within one renovation or improvement.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Access Control projects requested under this project will construct additional systems for existing university buildings. Minor Works projects of this nature will begin design as soon as appropriations are approved and the budget it available. All work will be completed in the 2017-19 biennium unless circumstances, bidding and contract execution, scheduling work in buildings, or impact on the students requires a modified or extended schedule for completion. As with many Minor Works request the installation of new access controls system can be phased by building. A list of buildings that currently do not have these systems is developed and when funding is received the top priorities on the list are the projects that are phased. Additional projects that are not funded would be deferred until such time as funding is available.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The project(s) identified and developed for this request are related to building security and facilities protection. They include keycard access controls system expansion, and replacement; selective camera installation and replacement; data gathering and storage for security systems and replacement of deficient equipment at the end of its lifecycle. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, and plant staff, they also capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems, and reducing the maintenance and operating cost for the university.

#### Which clientele would be impacted by the budget request? Where and how many units would be added, people or

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000571 SubProject Title: Minor Works Preservation - Access Controls communities served etc. Be prepared to provide detail cost backup.

Access controls system impact all of the campus community including students, staff, faculty and community members that visit and use Eastern campus facilities. All of the university units including Academic Affairs, Student Affairs, Business and Finance, Office of Informational Technology, Athletics, and the Develop unit use these systems as a part of their day-to-day op Projects are affecting many of the other state programs such as sustainability and cost effective utility management. All projects related to Minor Works relate to Eastern's strategic goal of "an institution of innovation" which means the consideration of high quality cost effective improvement and replacements, consideration of greenhouse gas emission, and reduction of the carbon footprint. These projects also address reducing deferred backlog maintenance which is a priority of the state and the university.

These projects are directly related to customer safety and building security. Risk associated with personal injury and the protection of state facilities and assets will be the primary service level change that our customers will receive. Expansion of our access controls system also offers better flexibility when it comes to making quick and affective changes to the system and reduces the time and costs associated with traditional access controls.

The clients of Eastern Washington University, the students, faculty, staff, and community members will experience better customer service and a quality environment when we manage our long and short term facilities goals properly. Better and more cost effective control of our building environments, monitoring, and evaluation of our utility use are critical to facilities. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

The connectivity between university buildings is communicated through the existing campus fiber optic network. That being said, no IT costs are associated with the implementation of this project in any location. The systems for transmission of information are already in place and have the capacity to support the transfer of information throughout the campus. The system hardware and equipment are also in place and this request is to expand the existing system to buildings on campus that have yet to have access controls installed.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds will be used for the implementation of this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The preservation of facilities has been a priority of government for many years. Eastern responds by balancing long term goals and short term implementations to provide stewardship of these state assets. Minor works projects like these respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

Benefits include increasing and expanding our state-of-the-art access control system; addition of security initiatives including cameras and intruder alarms; increased safety of university customers through added technology; more effective connection between the system and university police; extension of the affective lifecycle of these systems and equipment to defer more costly capital expenditures; resolution of any pending regulatory items; support of long term strategy of the university and the

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000571

#### SubProject Title: Minor Works Preservation - Access Controls

state; reduction of university costs related to these systems: and improvement of the learning environment for the campus as a Whole.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

There are no impacts linked to the Puget Sound Action Agenda in this request.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Prioritization and implementation of these types of projects are the best option because they; reduce the total replacement costs and defer major capital request by extending the lifecycle of facility; address deferred backlog; review upgrades for potential cost reducing initiatives; and meet university mission and goals.

Projects are affecting many of the other state programs such as sustainability and cost effective utility management. All projects related to Minor Works relate to Eastern's strategic goal of "an institution of innovation" which means the consideration of high quality cost effective improvement and replacements, consideration of greenhouse gas emission, and reduction of the carbon footprint. These projects also address reducing deferred backlog maintenance which is a priority of the state and the university.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Fundir	<u>1q</u>		Expenditures		2017-19 I	Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	500,000				500,000
	Total	500,000	0	0	0	500,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Opera	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000572

SubProject Title: Minor Works Preservation - Elevator Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000572 SubProject Title: Minor Works Preservation - Elevator Improvements

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the improvement to campus elevators. Through evaluation of the condition, age and lifecycle along with close communication with Washington State Department of Labor and Industries Elevator Division the university has developed a list of high priority replacements, improvements and responses to code requirements as a part of this request.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

This project includes work to update and renew worn components, fixtures, and finishes within existing elevators and conveyance systems on campus.

Many of the elevators and wheel chair lifts on campus are older than the originally designed life span and need to be either repaired or replaced. This project will renew the life of these elevators by upgrading major system components with modern technology, such as digital controllers and door closers. These elevators will also be connected to newly installed fire detection systems so that they operate properly during fire alarm emergencies. Worn architectural finishes and ADA fixtures will also be updated to comply with modern elevator code requirements.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Minor Works request in this category will result and design and construction equipment and system upgrades that meet programmatic needs and regulatory compliance issues required by one or more of the following agencies/associations: (IBC) International Building Code; City of Cheney Building department and Fire Marshal; Washington's State Department of Labor and Industries Elevator Compliance division: and state and federal requirements for (ADA) Americans with Disabilities Act.

In this category there are a variety of projects and system upgrades that extend past the resources that will be appropriated. As is consistently the case the university will prioritize a list of elevator projects and address the most pressing issues first. Those that can wait will be deferred until funding is available at a later date.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Most of the elevators That need to be repaired or replaced within this project are out of compliance with ADA requirements. Most of these elevators are past designed life span and require renewal of major system components in order to continue operation. Doing nothing would guarantee failure of these elevators and thus create potential for harm to University student or staff.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000572

#### SubProject Title: Minor Works Preservation - Elevator Improvements

Elevators are used by all university clientele including: students, faculty, staff, and community guests. Vertical transportation is a critical part of the requirements and goals for the university support of facilities users with mobility issues. Access to all university programs and activities is one our strategic goals and upgrades to elevators and system support those goals.

The renewal and repair of major components throughout campus elevators systems will ensure that patrons using elevators will have a safe experience. This also means less maintenance calls, less elevator down time, and proper operation when a building fire alarm occurs. This project should also eliminate elevator entrapment emergencies, where patrons are trapped on broken elevators.

Compliant ADA controls and fixtures within modernized elevator cabs will provide disabled students and staff a comfortable and safe experience while traveling between floors.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no IT related costs associate with this request.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

There will be no non-state funds used to complete this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

One of the policy goals in the 2008 HECB Master Plan states; "Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state." This project will ensure that facilities and programs within those facilities are readily accessible to all.

One of the strategic goals in the University's Strategic Plan states; "The University will allocate resources, capacity and people in support of our mission and academic goals." This project will allocate resources in direct support of a major building system that is integral to physical access of program space on campus. Without proper maintenance of elevators part of the University population would be unable to reach critical academic programs.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

The project request does not have any impact on the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for the facilities' projects are focused on our base goals which are; Safety of our clientele; Protection of university assets; Providing a comfortable and attractive place for our clients to work, learn, live, play, and visit; Extending the lifecycle of state assets; reduction of backlog maintenance and operating costs; Sustainable design and implementation include energy conservation and the use of sustainable materials and means and methods; and the reduction of university waste and the promotion of reusable and recycled products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### **Project Type**

SubProject Number:30000572SubProject Title:Minor Works Preservation - Elevator Improvements

#### **Project Type**

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Fundi	lg Expenditures 201		2017-19 Fiscal Perio		Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
			Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000573

SubProject Title: Minor Works Preservation - Barrier Free Access

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000573 SubProject Title: Minor Works Preservation - Barrier Free Access

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the reduction of barriers to student access to facilities and activities. In the past the university has developed a survey of our Access Compliance needs with regard to Life Safety and Code Compliance responses. This biennial request is a continuation due to changes in the building code and long term needs of the university to offer easy and appropriate access to the campus for student, faculty, staff and community members.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.

Along with requirement of the International Building Code (IBC), National Fire Protection Association (NFPA), local jurisdiction (City of Cheney Building Department and Fire Marshal), and Americans with Disabilities Act (ADA) the university is committed to provide access to all university programs and activities for all of staff, students and community members. This takes the form of minor works renovation projects to remove the physical barriers to persons with mobility and access issues, and includes programs for spaces and pedestrian travel to meet the broader need of all campus users.

Barrier Free Access is a design philosophy that does not depend on equipment and technology but more on programming and the design of the physical space to meet the needs of access and mobility. This allows for a more cost effective response to the challenges of accessibility.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Barrier Free projects requested under this project will design and modify access systems to existing university buildings. Minor Works projects of this nature will begin design as soon as appropriations are approved and the budget is available. All work will be completed in the 2017-19 biennium unless circumstances, bidding and contract execution, scheduling work in buildings, or impact on the students require a modified or extended schedule for completion. As with many Minor Works requests the installation of new access controls system can be phased by building. A list of buildings that currently do not have these systems is developed and when funding is received the top priorities on the list are the projects that are phased. Additional projects that are not funded would be deferred until such time as funding is available.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

These projects were identified through the evaluation of our current system by engineering consultants, regulatory agencies, and plant staff, they also capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

Deferring these types of projects may have several affects including: violation of regulatory requirements, safety issues related to access, and increased difficulty for those requiring special access routes to access campus facilities.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000573 SubProject Title: Minor Works Preservation - Barrier Free Access

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The clients of Eastern Washington University, the students, faculty, staff, and community members will experience better customer service delivery and a quality environment when we manage our long and short term facilities goals properly. Better and more cost effective control of our building environments and monitoring and evaluation of our utility use are critical to facilities. When operating cost are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No IT related costs are anticipated for this project.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds will be used for the implementation of this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of facilities has been a priority of government for many years. Eastern responds by balancing long term goals and short term implementations to provide stewardship of these state assets. Minor Works projects like these respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

Benefits include increasing and expanding cost effective accessibility to university programs and activities. Consistent with Eastern Strategic Master Plan and Comprehensive Campus Master Plan are Minor works projects that extend the life of larger program spaces, systems, and equipment, and captures and resolves current and pending regulatory issues.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

There are no impacts linked to the Puget Sound Action Agenda in this request.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Prioritization and implementation of these types of projects are the best option because they; reduce the total replacement costs and defer major capital request by extending the lifecycle of facility; address deferred backlog; review upgrades for potential cost reducing initiatives; and meet university mission and goals.

Projects are affecting many of the other state programs such as sustainability and cost effective utility management. All projects related to Minor Works relate to Eastern's strategic goal of "an institution of innovation" which means the consideration of high quality cost effective improvements and replacements, and consideration of greenhouse gas emission and reduction of the carbon footprint. These projects also address reducing deferred backlog maintenance which is a priority of the state and the university.



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000573 SubProject Title: Minor Works Preservation - Barrier Free Access

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

<u>Fundir</u>	ng		Expenditures			Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	650,000				650,000
	Total	650,000	0	0	0	650,000
		Future Fiscal Periods				
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000574

SubProject Title: Minor Works Preservation - Exterior Lighting Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000574 SubProject Title: Minor Works Preservation - Exterior Lighting Improvements

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the replacement and improvement of exterior lighting on the university campus. Exterior lighting of the campus, pedestrian pathways and parking lots is a critical life safety system for our students, faculty, staff and community members. Along with providing safe areas for our customers the university also design these lighting improvement to be energy efficient and night sky compliance. In previous projects we have seen from 20-40% energy savings but lighting equipment improvements and reduced our relamping needs substantial with longer lifecycle materials.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

As part of Eastern's 2014 Comprehensive Campus Master Plan the existing exterior site lighting was reviewed and found to be deficient in regards to pedestrian safety, with many areas not sufficiently being lit. Additionally the exterior lighting systems that are in place are relatively old and do not provide sufficient lighting. However they do expend a lot of energy in providing light to the locations where they are.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

The project will consist of installation of new lighting poles and bases to bring some of the exterior lighted areas up to current codes and standards. The project will commence as soon as funds are approved. Because there are numerous areas in which the exterior has been defined as a need, these can be phased.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Replacement of existing lights and adding more lights to other areas will provide a more energy efficient and safe pedestrian experience. Because this is a life safety type project not completing this work puts our customers in potentially dangerous situations and requires the university police to utilize stretched resources by increasing their patrols to these darker areas of campus. New lighting will allow for the police to focus their work elsewhere, reduce energy consumption and provide safely lit walkways throughout various areas of the campus.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Students, faculty, staff, and university guests will be impacted by this request as would those wishing to do harm to others. The university is required to provide a safe campus environment at all times, day and at night, to protect campus users and visitors.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000574

SubProject Title: Minor Works Preservation - Exterior Lighting Improvements
No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The goals for the university under our current Strategic Plan are: Student success; innovation and opportunity; and community engagement. We cannot meet these goals without a safe and comfortable campus for our students, faculty, staff, and community guests. This project promotes basic needs for a public institution to operate in a safe and productive manner for all constituents to enjoy.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for the facilities' projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; The third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation; and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Funding			Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	650,000				650,000	
	Total	650,000	0	0	0	650,000	
			Future Fiscal Pe	riods			
		2019-21	2021-23	2023-25	2025-27		
057-1	State Bldg Constr-State						
	Total	0	0	0	0		

OFM

## 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569 Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000574 SubProject Title: Minor Works Preservation - Exterior Lighting Improvements

**Operating Impacts** 

**No Operating Impact** 

SubProject Number:30000575SubProject Title:Minor Works Preservation - Emergency Generator/UPS Replacement

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000575 SubProject Title: Minor Works Preservation - Emergency Generator/UPS Replacement

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the replacement of emergency generators and uninterrupted power sources for facilities and major equipment back up. This equipment is critical for emergency response and recovery from power outages that are occasionally experience on campus. They back up life safety systems, building emergency lighting, telecommunication, informational technology, plant and building operations and are Life Safety and in many cases required by regulatory agencies.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Continuous and uninterrupted electrical power is a necessity in modern life and is also extremely important for the many mission critical functions and systems on the university campus.

Our life-safety systems such as fire protection, access control, and security depend on continuous power to communicate within their respective networks. In the event of a power outage on campus the need for uninterrupted power to these and other mission critical systems is especially important to assist in providing safety and security to our students, faculty, staff, and visitors. While we have two separate electrical feeds from the City of Cheney, history has shown that power will be interrupted from time to time.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will install new generators, Uninterruptible Power Supply (UPS) systems and support systems for emergency power at numerous locations across campus. There are a number of projects encompassing this request and a number of start/completion dates planned.

A phased project prioritization list based on evaluation by our engineering consultants, regulatory agencies, and plant electrical and generator maintenance staff has been developed. These projects are prioritized and impact to the university and existing conditions of each particular installation site to develop a hierarchy for execution.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project reduces the risk of loss of university data within our Information Technology System, which includes personal information of students, faculty and staff, and financial information. Archived records are critical to the university's long term operations, as well as adhesive to state and federal requirements related to retention of records and data. Uninterrupted power also backs up operations of all of our fire and life safety equipment that provides detection, reporting, and communication for the life safety component to the university.

By not taking action to replace existing systems, needed clients of the university can expect that during a loss of power on campus even minimal emergency systems may not continue to operate and keep our facility users safe. Secondly, mission critical data and communication may not be operational, and financial data and electronic records of the university may be lost.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000575 SubProject Title: Minor Works Preservation - Emergency Generator/UPS Replacement

The clients of Eastern Washington University will experience better customer service and enjoy a quality environment when we manage our long and short term facility's goals properly. These types of projects also address critical life safety systems such as fire detection and reporting, and access controls. Generators and uninterrupted power sources are essential for many mission critical systems and need to be continually monitored and updated. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in a cost effective and high quality manner.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

As this project is a part of the facilities infrastructure all students, faculty, staff and university guests would be impacted by this request. During the course of a normal day many standard functions would be impacted in some manner by a loss of power event.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Preservation of the facilities is a priority of government (POG). Eastern responds by balancing long term goals and short term implementations to provide stewardship for these state assets. Minor Works projects like this one respond quickly to meet the programmatic needs of the facilities and the preservation needs of the university and the state. Even when budgets are cut, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Priorities for the facilities' projects are focused on our base goals which are: First, the safety for our customers/clientele; Second, the protection of university assets; Third, to provide a comfortable and attractive place for our clients to work, learn, play, and visit; Fourth, to extend the lifecycle of state assets, reducing the maintenance backlog and operating costs; Fifth, sustainable design and energy conservation; and lastly, reduction of waste and promoting reusable and recyclable products.

#### Location

City: Cheney

County: Spokane



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### **Project Type**

SubProject Number:30000575SubProject Title:Minor Works Preservation - Emergency Generator/UPS Replacement

#### **Project Type**

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Fundi	ng Expenditures			2017-19 Fiscal Per		
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	800,000				800,000
	Total	800,000	0	0	0	800,000
		Future Fiscal Periods				
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Ор	erating Impact					

SubProject Number: 30000576

SubProject Title: Minor Works Preservation - Interior Lighting Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000576 SubProject Title: Minor Works Preservation - Interior Lighting Improvements

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:7

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address indoor lighting system that are deteriorating and failing due to the age and reaching the end of their lifecycles. This renewal and replacement will address not only old and failing equipment but the replacements will increase the energy efficiency of the system from 20 to 40% percent and with new equipment reduced maintenance and operating costs on campus.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's Cheney campus contains approximately 2.7 million gross square feet of academic and student support facilities. Within these facilities are millions of lights and lighting circuits, much of which have not been altered since the facility was constructed.

Lighting standards have increased substantially over time and many of these facilities fall outside the current standard for safety, energy conservation, and instructional environment quality.

Lighting is an easy area to take advantage of recently developed energy saving technologies such as LED replacement lighting and this will help save money in our electrical consumption costs, while at the same time improving lighting levels for safety and instruction.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will replace existing lighting fixtures and install new lighting fixtures at several locations within the approximately 70 buildings located on the campus.

The project will start after funding is approved and be completed within the biennium.

The project will be phased and based on a pre-determined hierarchy with academic buildings being first.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This project provides for a safer and healthier campus environment as well as reduces energy consumption.

If this project is not funded our energy consumption would maintain the current levels thereby costing the university more in utility fees, increasing our carbon footprint and reducing our opportunity to act as good stewards to the environment.

Areas where lighting levels are sub-standard or un-safe will continue to be sub-standard and/or un-safe.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or
2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000576

SubProject Title: Minor Works Preservation - Interior Lighting Improvements communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and those attending events in our facilities as university guests would be impacted by this request. Additionally, the university budget as a whole would be impacted as the long term energy savings over time for the installation of more efficient light would not be realized. Monies that could be spent elsewhere will continue to be allocated to our lighting bill.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

No.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

This request supports the sequential implementation of Eastern's 2014 Comprehensive Campus Master Plan as well as one of the four pillars of Eastern's 2012-2017 Strategic Plan which is entitled an "Institution of Innovation". A substantial component of this pillar is the university's innovative goals in the support of natural resource conservation and sustainability. This request directly aligns with the goals of the State of Washington for the reduction of carbon footprint and conservation of natural resources. Lastly, in 2007 Dr. Rodolfo Arevalo, president of EWU signed the American College and University Presidents'Climate Commitment (ACUPCC), which supports the reduction of greenhouse gas emissions and promotes energy and natural resource conservation.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

Is there additional information you would like the decision makers to know when evaluating this request?

No.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

**OFM** 

# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000576

SubProject Title: Minor Works Preservation - Interior Lighting Improvements

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	450,000				450,000
	Total	450,000	0	0	0	450,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Operat	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000577

SubProject Title: Minor Works Preservation - Chemical Storage Building Renovation

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000577 SubProject Title: Minor Works Preservation - Chemical Storage Building Renovation

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University requests Minor Works Preservation funding to improve and expand our current Chemical Storage Facility. This Health Safety and Code compliance facility is used to process chemical used for study and research as well as operations and maintenance. Other hazardous equipment and material will use this facility before they are appropriately disposed of or recycled. This facility is a holding area until these materials can be disposed of in an appropriate manner.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University's Chemical Storage Building is located in the EWU industrial area, it facilitates the safe management, storage and containment of toxic & hazardous materials. The facility and infrastructure has exceeded its lifecycle and is now undersized to manage the universities current requirements.

The project is a priority to meet the state & universities commitment to the community's health, safety, sustainability and the protection of our environment.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce engineering and design for the chemical storage building and infrastructure. The project will commence as soon as funds are approved. Once the design is complete the project will be advertised, bid and scheduled to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU would address the problem by renovating and expanding on the existing structure or replace the building.

EWU is responsible for addressing environmental issues in order to provide a safe educational and work place on campus. The chemical storage building can no longer support and manage the universities functions to safely store and contain hazardous and toxic materials as the building no longer holds the capacity and has surpassed its lifecycle expectancy. No renovation or replacement of this facility will result in unsafe conditions, manageability of; and incompliance with regulatory agency requirements.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request as building upgrades and improvements effect the campus community as a whole.

#### Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000577

# SubProject Title: Minor Works Preservation - Chemical Storage Building Renovation review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project would be supported and controlled through the existing building automation system and campus network. There will be no new software purchased for this project, no enhancement to the university data center or will require no oversight by the Office of the Chief Information Officer (OCIO)

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The goals for the university under our current Strategic Plan are: student success; innovations and opportunity and community engagement. Installation of new and cost effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

#### Chapter 43.21c RCW - STATE ENVIRONMENTAL POLICY

#### 43.21C.010 - Purposes.

"To declare a state policy which will encourage productive and enjoyable harmony between humankind and the environment; (2) to promote efforts which will prevent or eliminate damage to the environment and biosphere; (3) and [to] stimulate the health and welfare of human beings; and (4) to enrich the understanding of the ecological systems and natural resources important to the state and nation."

EWU Campus Infrastructure Renewal

EWU Climate Actions Plan

#### EWU Energy Efficiency Sustainability Report

This project is designed to address the necessary replacement of buildings, infrastructure systems and components that are past their effective lifecycle, are costly to operate because of age and technology, and are at risk of failure. Completion of these projects will update compliance with various state and local jurisdictional requirements.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

The Campus Chemical Storage Building project will support in carrying EWU closer to our commitment to management of hazardous and toxic materials, recycling commitments and sustainability goals. Consideration of this project will ensure EWU's response to state Dept. of Ecology as well as other state and local regulatory requirements.

It is vital to improve systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

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Version: A6 Eastern Washington University

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Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

 SubProject Number:
 30000577

 SubProject Title:
 Minor Works Preservation - Chemical Storage Building Renovation

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

<u>Fundir</u>	ng		Expenditures		2017-19	Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	850,000				850,000
	Total	850,000	0	0	0	850,000
			Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000578

SubProject Title: Minor Works Preservation - Arc Flash Implementation

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000578 SubProject Title: Minor Works Preservation - Arc Flash Implementation

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Current changes related to Arc Flash detection, reporting and facilities improvement are being mandated by regulatory agencies such and Washington State Labor and Industries. This request will provide updates and improvement to facilities that currently do not meet the new standard. This will ensure protection of staff and preservation of state assets that may be at risk without the appropriate upgades.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Arc flash labeling on electrical equipment helps provide a safer working environment for staff and contractors working on energized electrical systems owned and operated by EWU. Arc flash labeling is being required by the Washington State Department of Labor & Industries.

What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

The request is for calculations required to identify the magnitude of incident energy at each piece of electrical equipment. Incident energy levels are an indication of the potential for both shock and flash hazards associated with work on energized electrical equipment. The request is also for installing the appropriate warning labels on EWU-owned electrical equipment.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The request will provide the required incident energy calculations and the application of labeling containing the energy calculations on individual electrical equipment. The labeling will also provide information on safe working distances.

The result of not taking action would be that the university would be out of compliance in a very important area in which the Washington State Department of Labor & Industries has regulatory authority. This will in the future result in some type of action by L&I if corrective actions are not taken.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

EWU Electric Shop personnel and contractors working for the University will benefit from the request. EWU's liability exposure will be reduced by incorporating the arc flash information into its electrical safety program.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no associated IT costs.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000578

SubProject Title: Minor Works Preservation - Arc Flash Implementation Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The project supports EWU's mission by directly improving staff safety. Indirectly, the project supports the EWU mission by supporting a reliable electrical power infrastructure.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

The Department of Labor & Industries is requiring EWU to proceed with the arc flash study and related labeling.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

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# 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number:30000579SubProject Title:Minor Works Preservation - Ambient Air Quality Improvements

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

SubProject Number: 30000579 SubProject Title: Minor Works Preservation - Ambient Air Quality Improvements

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	7

#### Project Summary

Eastern Washington University Requests Minor Works Preservation funding to address the high priority need of improving Ambient Air Quality in various facilities on campus. Due to age and lifecycle deterioration of some system renewal and upgrade are require to meet the air quality needs for academic instruction and student activities. It is critical provide quality spaces and environments for our students, faculty and staff.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University is responsible for providing a healthy and safe learning environment for the campus community. Ambient air quality (AAQ) refers to the air quality within facilities and around buildings. Areas on campus and numbers of aging facilities and systems on campus that need modern systems and infrastructure upgrades that will greatly improve their air quality within and outdoors.

EWU prioritizes this air quality action of building improvements in support of our commitment to providing positive, healthy & safe environments. EWU deems Life Safety as a top priority issue. Ambient air pollution is the most serious environmental threat in Washington State, poor air quality can cause illness and adverse symptoms to students, guests, teachers, and staff that results in illness, absences, missed schoolwork, and lower test scores.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This project will produce professional inspections and testing in areas that have been reported on, compromised, and in aging buildings on campus, followed by engineering & design efforts for repair & improvement. Upon design completion the project will be advertised, bid and scheduled for the improvements and upgrades to be completed through the 2017-19' biennium during a time that least impacts the students and instruction on the campus.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

EWU would address the problem by acting on and implementing the recommendations of the AAQ professional services provider.

Not taking action or mitigating the existing problems and reports will result in an unhealthy and unsafe environment for the students, and campus community as a whole. EWU's knowledge of problem areas that could be improved upon and not mitigating or making improvements would put EWU in a position of operating out of state regulation.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

All students, faculty, staff and university guests would be impacted by this request as these AAQ upgrades and improvements

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Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000579

SubProject Title: Minor Works Preservation - Ambient Air Quality Improvements effect the campus community as a whole.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not include IT related costs. There will be no enhancement to the university data center or will require and oversight by the Office of the Chief Information Officer (OCIO).

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The campus AAQ project would leave EWU positioned in compliance with Washington State Department of Health and Indoor Air Quality code.

#### Chapter 70.94 RCW - WASHINGTON CLEAN AIR ACT

"It is declared to be the public policy to preserve, protect, and enhance the air quality for current and future generations. Air is an essential resource that must be protected from harmful levels of pollution. Improving air quality is a matter of statewide concern and is in the public interest."

"The legislature finds that ambient air pollution is the most serious environmental threat in Washington State. Air pollution causes significant harm to human health; damages the environment, including trees, crops, and animals; causes deterioration of equipment and materials; contributes to water pollution; and degrades the quality of life.

Over three million residents of Washington State live where air pollution levels are considered unhealthful. Of all toxic chemicals released into the environment more than half enter our breathing air. Citizens of Washington State spend hundreds of millions of dollars annually to offset health, environmental, and material damage caused by air pollution. The legislature considers such air pollution levels, costs, and damages to be unacceptable."

The goals for the university under our current Strategic Plan are: student success, innovations and opportunity, and community engagement. Installation of new, cost-effective systems and equipment will produce reduction of university costs related to these systems and will improve the learning environment for the campus as a whole.

#### EWU Climate Actions Plan

EWU Energy Efficiency Sustainability Report

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:39AM

#### Project Number: 30000569

Project Title: Minor Works Preservation - Life Safety Code Compliance

#### **SubProjects**

#### SubProject Number: 30000579

#### SubProject Title: Minor Works Preservation - Ambient Air Quality Improvements

"Indoor Air Quality" is exceptionally important and moreover EWU strives to comply with Washington State regulatory requirements and is committed to the safety of the campus community. It is vital to improve upon systems as they age and deteriorate. The cost of maintenance and operations will be less effective and cause a substantial impact on state operating resources for their entire operation. Prioritization and implementation of these types of projects are the best option as they reduce the total replacement costs and defer major capital request by extending the lifecycle of the facility, address deferred maintenance backlog, and help meet the university's mission and goals.

#### Location

City: Cheney

**No Operating Impact** 

County: Spokane

Legislative District: 006

#### **Project Type**

Health, Safety and Code Requirements (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with these projects

Funding			Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	600,000				600,000	
	Total	600,000	0	0	0	600,000	
		F	Future Fiscal Pe	riods			
		2019-21	2021-23	2023-25	2025-27		
057-1	State Bldg Constr-State						
	Total	0	0	0	0		
<u>Operat</u>	ting Impacts						

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# **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000569	30000569
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### Description

Starting Fiscal Year:2018Project Class:PreservationAgency Priority:9

#### Project Summary

Per RCW 43.88 Eastern Washington University is required to develop and submit a strategic plan for reducing the university's facility maintenance backlog. This request reflects specific funding to address the growing backlog. The intent of this funding is to reduce backlog, extend life cycle of equipment and systems and overall reduce maintenance and operating cost of facilities.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern's facilities are complex and costly resources to maintain and operate. These minor projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvement and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

The results of these identified projects will be:

Reduction of backlog maintenance

Reduction of operating cost including the cost of utilities to operate

Replacement of obsolete equipment with new and higher efficiency equipment and systems

Improved operations and indoor air quality and health safety related operations

Reduction in costs associated with building cleaning

Higher level of comfort for building customers and improved environment for teaching and student learning.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This requests will address high priority maintenance issues that are of high cost and critical need on the campus. These projects are developed and requested to address campus wide facilities deterioration and operational failure due to lack of funding for normal operational maintenance on buildings and building systems on campus. Projects include all facilities preservation and infrastructure preservation projects. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). This work is specifically listed as repairs and replacements that cannot be completed due to lack of manpower or lack of operational resources.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

These projects reduce total replacement costs and defer major capital requests over a longer period of time. Implementing these projects extends the overall lifecycle of our facilities and aligns with our university's mission and goals by managing our maintenance backlog and reducing cost.

The university continues to capture and prioritize Minor Works so that when funds become available we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **Description**

Unfortunately the results of not taking any action would be that deferred maintenance would increases and related operation cost would also increase. The potential for high cost catastrophic failures of system and equipment could mean emergency repairs and replacement would be necessary impaction campus operation having higher costs the planned improvements or replacements.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The clients of Eastern Washington University, the students, and faculty, staff and community members will experience better customer service delivery and a quality environment when we manage our long and short term facilities goals properly. This also reduces operating costs long-term. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are not IT related costs associate with this funding request.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Eastern aims to be good stewards of state assets by aligning ourselves with the government's priorities to preserve our facilities. We balance our long and short term goals to ensure these priorities are met. Two of Eastern's own priorities are student success and access to higher education. Our physical campus is an integral part of developing and sustaining student progress. Minor works projects like these respond quickly to meet the programmatic needs of our facilities and the preservation needs of the university and the state. Even during budget cuts, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Good planning, system renewal and minor capital improvements allow for long-term reduction of operating costs, reduction of emergency or catastrophic failures and extend the lifecycle of mission critical systems for the university.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

**Project Type** 

Facility Preservation (Minor Works)



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#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **Description**

#### **Growth Management impacts**

There are no Growth Management Impacts associate with this funding request.

#### Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Current Biennium	2017-19 Reapprops	Fiscal Period New Approps
061-1	EWU Capital Projects-State	2,217,000				2,217,000
	Total	2,217,000	0	0	0	2,217,000
		Fu	uture Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Iotai	0	0	0	0	

### Operating Impacts

#### No Operating Impact

#### **SubProjects**

SubProject Number: 30000616 SubProject Title: Part 1: Preventative Maintenance/Backlog Reduction

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **SubProjects**

SubProject Number: 30000616 SubProject Title: Part 1: Preventative Maintenance/Backlog Reduction

Starting Fiscal Year:	2018
Project Class:	Preservation
Agency Priority:	9

#### **Project Summary**

Per RCW 43.88 Eastern Washington University is required to develop and submit a strategic plan for reducing the university's facility maintenance backlog. This request reflects specific funding to address the growing backlog. The intent of this funding is to reduce backlog, extend life cycle of equipment and systems and overall reduce maintenance and operating cost of facilities.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern's facilities are complex and costly resources to maintain and operate. These minor projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvement and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

The results of these identified projects will be:

Reduction of backlog maintenance

Reduction of operating cost including the cost of utilities to operate

Replacement of obsolete equipment with new and higher efficiency equipment and systems

Improved operations and indoor air quality and health safety related operations

Reduction in costs associated with building cleaning

Higher level of comfort for building customers and improved environment for teaching and student learning.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This requests will address high priority maintenance issues that are of high cost and critical need on the campus. These projects are developed and requested to address campus wide facilities deterioration and operational failure due to lack of funding for normal operational maintenance on buildings and building systems on campus. Projects include all facilities preservation and infrastructure preservation projects. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). This work is specifically listed as repairs and replacements that cannot be completed due to lack of manpower or lack of operational resources.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

These projects reduce total replacement costs and defer major capital requests over a longer period of time. Implementing these projects extends the overall lifecycle of our facilities and aligns with our university's mission and goals by managing our maintenance backlog and reducing cost.

The university continues to capture and prioritize Minor Works so that when funds become available we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects

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Version: A6 Eastern Washington University

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#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **SubProjects**

#### SubProject Number: 30000616

#### SubProject Title: Part 1: Preventative Maintenance/Backlog Reduction

could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

Unfortunately the results of not taking any action would be that deferred maintenance would increases and related operation cost would also increase. The potential for high cost catastrophic failures of system and equipment could mean emergency repairs and replacement would be necessary impaction campus operation having higher costs the planned improvements or replacements.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The clients of Eastern Washington University, the students, and faculty, staff and community members will experience better customer service delivery and a quality environment when we manage our long and short term facilities goals properly. This also reduces operating costs long-term. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are not IT related costs associate with this funding request.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Eastern aims to be good stewards of state assets by aligning ourselves with the government's priorities to preserve our facilities. We balance our long and short term goals to ensure these priorities are met. Two of Eastern's own priorities are student success and access to higher education. Our physical campus is an integral part of developing and sustaining student progress. Minor works projects like these respond quickly to meet the programmatic needs of our facilities and the preservation needs of the university and the state. Even during budget cuts, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Good planning, system renewal and minor capital improvements allow for long-term reduction of operating costs, reduction of emergency or catastrophic failures and extend the lifecycle of mission critical systems for the university.

Starting Fiscal Year: 2018 Project Class: Preservation

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **SubProjects**

SubProject Number:30000617SubProject Title:Part 2: Preventative Maintenance/Backlog ReductionAgency Priority:9

#### **Project Summary**

Per RCW 43.88 Eastern Washington University is required to develop and submit a strategic plan for reducing the university's facility maintenance backlog. This request reflects specific funding to address the growing backlog. The intent of this funding is to reduce backlog, extend life cycle of equipment and systems and overall reduce maintenance and operating cost of facilities.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern's facilities are complex and costly resources to maintain and operate. These minor projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the improvement and maintenance needs of our facilities and arranged for these projects to be completed within one renovation or improvement phase.

The results of these identified projects will be:

Reduction of backlog maintenance

Reduction of operating cost including the cost of utilities to operate

Replacement of obsolete equipment with new and higher efficiency equipment and systems

Improved operations and indoor air quality and health safety related operations

Reduction in costs associated with building cleaning

Higher level of comfort for building customers and improved environment for teaching and student learning.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This requests will address high priority maintenance issues that are of high cost and critical need on the campus. These projects are developed and requested to address campus wide facilities deterioration and operational failure due to lack of funding for normal operational maintenance on buildings and building systems on campus. Projects include all facilities preservation and infrastructure preservation projects. These projects were identified through evaluation of our current systems by engineering consultants, regulatory agencies and plant staff. We captured the costs to maintain and operate the existing structures through our computerized maintenance management systems (CMMS). This work is specifically listed as repairs and replacements that cannot be completed due to lack of manpower or lack of operational resources.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

These projects reduce total replacement costs and defer major capital requests over a longer period of time. Implementing these projects extends the overall lifecycle of our facilities and aligns with our university's mission and goals by managing our maintenance backlog and reducing cost.

The university continues to capture and prioritize Minor Works so that when funds become available we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **SubProjects**

#### SubProject Number: 30000617

#### SubProject Title: Part 2: Preventative Maintenance/Backlog Reduction

Unfortunately the results of not taking any action would be that deferred maintenance would increases and related operation cost would also increase. The potential for high cost catastrophic failures of system and equipment could mean emergency repairs and replacement would be necessary impaction campus operation having higher costs the planned improvements or replacements.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The clients of Eastern Washington University, the students, and faculty, staff and community members will experience better customer service delivery and a quality environment when we manage our long and short term facilities goals properly. This also reduces operating costs long-term. When operating costs are controlled, limited budgets are allocated more broadly across the university so that all facilities are maintained and operated in cost effective and high quality manner.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are not IT related costs associate with this funding request.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Eastern aims to be good stewards of state assets by aligning ourselves with the government's priorities to preserve our facilities. We balance our long and short term goals to ensure these priorities are met. Two of Eastern's own priorities are student success and access to higher education. Our physical campus is an integral part of developing and sustaining student progress. Minor works projects like these respond quickly to meet the programmatic needs of our facilities and the preservation needs of the university and the state. Even during budget cuts, it is critical that we continue to support the value of our facilities so that the maintenance backlog is kept under control and higher replacement costs are not projected forward into the next and subsequent biennia.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Good planning, system renewal and minor capital improvements allow for long-term reduction of operating costs, reduction of emergency or catastrophic failures and extend the lifecycle of mission critical systems for the university.

#### Location

City: Cheney City: Cheney County: Spokane County: Spokane Legislative District: 006 Legislative District: 006

**Project Type** 



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:40AM

#### Project Number: 30000615

Project Title: Preventative Maintenance/Backlog Reduction

#### **SubProjects**

#### **Project Type**

#### SubProject Number: 30000616

SubProject Title: Part 1: Preventative Maintenance/Backlog Reduction Facility Preservation (Minor Works) Facility Preservation (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associate with this funding request.

#### **Growth Management impacts**

There are no Growth Management Impacts associate with this funding request.

Funding			Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
061-1 061-1	EWU Capital Projects-State EWU Capital Projects-State	1,500,000 717,000				1,500,000 717,000	
	Total	2,217,000	0	0	0	2,217,000	
		F	Future Fiscal Pe	riods			
		2019-21	2021-23	2023-25	2025-27		
061-1	EWU Capital Projects-State						
	Total	0	0	0	0		
<u>Opera</u>	ting Impacts						
No Op	erating Impact						
No Op	erating Impact						

# OFM

# **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As	
Biennium	2017-19	2017-19	
Agency	370	370	
Version	A6-A	A6-A	
Project Classification	*	All Project Classifications	
Capital Project Number	30000615	30000615	
Sort Order	Project Priority	Priority	
Include Page Numbers	Y	Yes	
For Word or Excel	Ν	Ν	
User Group	Agency Budget	Agency Budget	
User Id	*	All User Ids	

# Eastern Washington University Major Capital Project Summary



To accommodate continued growth in high-demand STEM majors, EWU requests capital funding for the following three related projects:

- 1. Construction New Interdisciplinary Science Center (ISC)
- 2. **Design** The existing <u>Science Building</u>
- 3. **Pre-design** For a new <u>Engineering Building</u>

These projects are necessary due to increasing demand for sciences at EWU, lack of capacity in the current facilities, and significant deficiencies in the existing Science Building, constraining the University's capacity for growth.

### EASTERN WASHINGTON UNIVERSITY

## **PROJECT DATA**

Institution - Eastern Washington University Project Title – Interdisciplinary Science Center Project Location – Cheney, Washington

### **PROBLEM STATEMENT**

Construction of a new Interdisciplinary Science Center will allow Eastern Washington University to enhance student success by accommodating continued growth in high demand majors and improving the current learning environment.

This is a request for Construction funds for a proposed Interdisciplinary Science Center (ISC) in the Growth category, as described in the project update report submitted to OFM prior to July 1, 2016.

This amount requested for this design/bid/build construction phase of the project in 2017-19 is \$67,009,000.

Since 2008, the number of STEM graduates at EWU have nearly doubled—from 320 students in 2007-08 to over 600 this past academic year. STEM graduates have grown to be fully one-quarter of all degrees produced by EWU and represent highest share of STEM graduates annually by any of the regional comprehensives in the state. Yet, we are the only regional university to not add any additional capital capacity for STEM programs in the last decade. At our current growth rate in STEM programs, EWU has exceeded the capacity of current science facilities and we anticipate being unable to meet future demand without the construction of additional science lab space.

We expect that over the next ten years, our student population will grow by approximately 20 percent, and a disproportionately large share of the additional students will be seeking STEM related degrees. EWU has made meeting state and regional workforce demands for additional healthcare professionals as well as engineering and computer science a primary focus of growth in the next decade. In order to meet these state and regional workforce needs we must substantially increase our course offerings in basic science courses, which include Biology, Chemistry/Biochemistry, Geology and Physics. In addition, the modern day STEM workforce now expects a strengthened interdisciplinary approach to STEM education that will not be possible without this new space. Without an improvement in the quantity and quality of science teaching labs, research labs, and lab support space, EWU will not be able to meet the increased demand for basic sciences and the STEM workforce as a whole.

The existing Science Building is the only facility at EWU that contains laboratories capable of accommodating Biology, Chemistry/Biochemistry, Geology and Physics teaching and research. Lower division science courses are currently running at or beyond the capacity of the available teaching laboratories in the Science Building. The limited research laboratory space in the existing Science Building is not capable of serving the research needs of

science students and faculty. Space for safely storing scientific instruments, preparation space for teaching labs, and specialized storage space for science equipment and reagents used in teaching and research are all lacking.

The existing Science Building has serious deficiencies\* that are at odds with the university's mission to provide an excellent student-centered learning environment and exceptional resources and facilities. Deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and very high-energy costs.

\* See Appendix E, 2:4 Existing Science Building Condition for a detailed breakdown from Science I pre-design.

The Interdisciplinary Science Center is necessary because of increasing demand for sciences at EWU, lack of capacity in the current science facilities, and significant deficiencies in the existing Science Building. Additionally, EWU trails markedly behind peer institutions in the State of Washington considering the age, quality, and size of science facilities, constraining our ability for growth—despite student and workforce demand.

#### Vision for EWU Science Center

The new Eastern Washington University Science Center will be comprised of the new Interdisciplinary Science Center and the newly renovated Science Building. Our current science facility presents three major problems that we propose solving through both the construction of the new Interdisciplinary Science Center and the renovation of our existing science building:

### The need for additional modern lab capacity

The new interdisciplinary science center will be primarily teaching and research lab space to meet the needs of Biology, Chemistry/Biochemistry, Geology and Physics. Current labs do not meet modern building codes and have multiple deficiencies that prevent the types or teaching and research necessary in modern STEM fields.

### A current lack of capacity for interdisciplinary STEM work

The current segmented science building provides little opportunity for cross-disciplinary work as many labs and classrooms are discipline specific and are too outdated to accommodate modern lab needs and equipment. The new facility will provide opportunities for learning and research across disciplines as well as interdisciplinary faculty cooperation that is not possible in the current science building.

### Outdated classroom and technology infrastructure

The primary purpose of the renovation of the existing science building is to modernize current classroom infrastructure, provide new opportunities for advanced STEM education, and distance learning. Both the Interdisciplinary Science Center and the Renovated Science Building will expand current infrastructure supporting the virtual campus and provide the Science departments with currently non-existent teaching lab facilities that support the virtual campus.

Across the two buildings, the new Science Center will provide:

- State of the art teaching and research laboratory space
- Additional laboratory capacity to accommodate growth across the science disciplines
- Modern classroom space to enable the delivery of distance learning science courses and collaboration with our programs at other EWU locations including Bellevue College and Lower Columbia College
- Additional faculty office space to enable to hiring of new faculty positions to support our growing programs

### **HISTORY OF THE PROJECT OR FACILITY**

The existing Science Building currently houses all aspects of the science disciplines: Biology, Chemistry/Biochemistry, Geology and Physics. The existing Science Building was constructed in 1962 as a two-story structure at 109,000 gross square-foot. An addition of 39,200 gross square-foot was completed in 1989 and primarily utilized by Biology, which increased the total building area to 148,149 gross square feet. Additional minor cosmetic renovations were undertaken between 1990 and 1994.

Between 2009 and 2014, predesign studies were completed for Eastern Washington University's Science I (Physics and Chemistry) and Science II (Biology) facilities, which were originally envisioned as replacements for the existing 54-year old Science Building. To make the upgrade of science facilities more feasible, and to meet the modern workforce demands calling for more interdisciplinary work in the sciences, the predesign studies evolved into a single Interdisciplinary Science Center housing all four disciplines' teaching labs and support functions. The new facility will be attached, by enclosed walkways, to the existing Science building. This adjacency and connection to the existing science building is critical to maintain access to research labs, classrooms, storage, faculty offices and other support functions.

### UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECTS

The teaching labs and support spaces for the departments of Biology, Chemistry/Biochemistry, Geology and Physics will be housed in the Interdisciplinary Science Center. The Interdisciplinary Science Center will also include a 100-seat classroom, science displays, student spaces for group study and collaboration, and a new nuclear magnetic resonance spectroscopy facility.

### INTEGRAL TO ACHIEVING STATEWIDE POLICY GOALS

Provide degree targets, and describe how the project promotes improvements on 2014-15 degree production totals in the OFM four-year public dashboard.

EWU expects that over the next ten years, its student population will grow by approximately twenty percent. Increased regional demand for STEM students, especially in the engineering, computer science, and environmental fields has created and will continue to create a high demand for undergraduates with STEM degrees. Additionally,

#### 2017-19 Biennium INTERDISCIPLINARY SCIENCE CENTER | CONSTRUCTION

an increased need for healthcare professionals and growing opportunities for undergraduate and graduate healthcare education in the Spokane region results in a large number of students seeking healthcare-related degrees. All of this will translate to a substantial increase in the demand for basic and advanced science courses that lead to STEM and healthcare degrees. It is also expected that in disproportion to the increase in student population, more students will choose to major in these science areas, as exemplified by the College of Science Health and Engineering, which has shown a 20.6% growth in the number of majors in the past 3 years.

Growth in the engineering programs with accredited degrees in both Mechanical, Electrical, and Civil Engineering have mandatory science prerequisites that will increase the demand on the Science departments. Increasing numbers of Pre-Med students has also increased the demand for science courses.

Indicate the number of bachelor's degrees awarded at the close of the 2014-15 academic year.

Undergraduate total: 2,374

Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2014-15 academic year.

High demand degrees: 623

Indicate the number of advanced degrees awarded at the close of the 2014-15 academic year.

Graduate degrees: 443

## **DESCRIBE HOW THE PROJECT PROMOTES ACCESS FOR UNDERSERVED REGIONS AND PLACE-BOUND ADULTS THROUGH DISTANCE LEARNING AND/OR UNIVERSITY CENTERS.**

Core to EWU's Strategic Plan is student success and access. EWU's virtual campus is a program that allows a variety of online courses for students in underserved regions and place-bound adults considering a college degree. The Interdisciplinary Science Center will expand current infrastructure supporting the virtual campus and provide the Science departments with currently non-existent teaching lab facilities that support the virtual campus. Eastern continues to promote and expand distance learning classes, programs, and degrees to support the goals of the State of Washington.

# Is distance learning or a university center a large and significant component of the total project scope? If yes, to what degree of percentage?

A Key Strategy of EWU's Strategic Plan under the goal of "Institution of Innovation" is to create the EWU Virtual Campus, which provides a premier learning environment for place-bound students and professionals seeking to improve their skills and potential for promotion within their workplace. Interdisciplinary Science Center enhances and expands the university's distance learning opportunities for the science department and the general campus. The

### 2017-19 Biennium INTERDISCIPLINARY SCIENCE CENTER | CONSTRUCTION

facility will provide instructional and lab space with distance learning capability. It is EWU's goal to have at least 30% of the instructional spaces support the virtual campus.

# Is the project likely to enroll a significant number of students who are place-bound or residents of underserved regions?

Students are at the center of all that Eastern does. EWU defines student success as students' ability to fulfill their goals in education, career, and life. EWU can meet evolving community and societal needs through innovative programs and new types of collaborations that make effective use of resources and extend the university's reach and impact.

#### Successful Progress Between Fall 2009 and Fall 2014:

- Overall headcount enrollment increased 19 percent from 11,302 to 13,453.
- The first-year student population increased in diversity from 27.1 percent to 31.2 percent.
- The entering transfer population increased in diversity from 22 percent to 28 percent (including international).
- Freshman to sophomore retention improved from 72.4 percent to 77.4 percent.
- Passing rates for developmental math classes increased from 49 percent to more than 70 percent.
- Fall occupancy in residence halls increased 18 percent from 1,758 to 2,071 students.
- The EWU Foundation endowment increased 40 percent to an all-time high of \$17.6 million in 2014.
- The EWU Foundation endowment portion dedicated to scholarships increased 60 percent to \$14.02 million.

#### **Indicators of Success Being Reached by 2017:**

- Increase first-year to second-year retention rates from 75 percent in 2011 to 82 percent by 2017.
- Increase six-year graduation rates from 46 percent for the 2011 graduating class to 54 percent for the 2017 graduating class.
- Increase pass rate of developmental math from 48 percent in 2011 to 70 percent.
- Increase minority, underrepresented, and international freshman student enrollment from 28 percent in 2011 to 36 percent.
- Engage all first-year students in dynamic general education and first-year experience programming that is continually assessed for successful outcomes.
- Increase privately funded scholarship endowments by more than 15 percent to \$16 million.
- Maintain average of less than 25:1 student-faculty ratio.
- Improve utilization of student support services.

EWU's Interdisciplinary Science Center will also offer opportunities for expanding and enhancing program deliveries between the Cheney campus and other campuses supporting EWU place-bound students. This facility will support programs delivered in other Eastern locations around the state such as Bellevue Community College

(psychology), Clark College (applied technology), Lower Columbia Community College (interdisciplinary studies and applied technology), and South Seattle Community College (electrical engineering).

### INTEGRAL TO CAMPUS/FACILITIES MASTER PLAN

The mission of Eastern Washington University is to prepare broadly educated, technologically proficient, and highly productive citizens to attain meaningful careers, to enjoy enriched lives, and to contribution to a culturally diverse society. Eastern Washington University will achieve its mission by providing:

- An excellent student-centered learning environment.
- Professionally accomplished faculty who are strongly committed to student learning.
- High quality, integrated, and interdependent programs that build upon the region's assets and offer a broad range of choices as appropriate to the needs of the university's students and the region.
- Exceptional student support services, resources, and facilities.

The Interdisciplinary Science Center (ISC) will allow EWU to meet the increased demand for science courses due to growing enrollment and the increased focus on STEM. It will provide the sciences with significant improvements in teaching laboratory quality, technology, HVAC, and student spaces. By locating the laboratories in an energy-efficient structure, ISC is expected to experience significant energy savings relative to the existing Science Building.

# Describe the proposed project's relationship and relative importance to the institution's Campus/Facilities Master Plan

2014 Comprehensive Campus Master Plan: In 2013-14, EWU updated its Comprehensive Campus Master Plan. The project supports the goals and objectives of the master plan. The ISC replaces Science I as the first step in the planned improvement of science facilities. In Planning Horizon 1 - 2013 to 2023, Science I & II shown in Phases 1.2.3 & 1.3.2. The ISC and the renovation of the existing Science Building replace the need for a  $3^{rd}$  Science phase for the remaining Geology department left out of the Science II program.

### LINK: Eastern's Facilities Master Plan

### Master Plan 10-Year Capital Outlay

Science I & Science II had been identified as a critical part of a long-term development plan described in the 2014 update of the Master Plan. Replacing Science I, the construction of the ISC will be the predecessor to the renovation of the existing Science building. Closely tied to each other, programmatically and physically, the renovation of the existing Science Building will rely on construction of the Interdisciplinary Science Center in order to occur.

### **Strategic Plan**

### 2017-19 Biennium INTERDISCIPLINARY SCIENCE CENTER | CONSTRUCTION

The University's strategic goals, outlined in the EWU Mission Statement/Strategic Plan, include:

- We will grow resources and capacity to enhance Eastern's academic quality.
- We will allocate resources, capacity, and people in support of our mission and academic goals.
- We will manage resources, capacity, and people effectively and efficiently.

This project supports the university's strategic goals by growing, allocating, and managing resources that enhance the academic quality in support of the mission and goals effectively and efficiently. The ISC provides additional and expanded teaching laboratory space and will be equipped with current technology and audio-video capabilities, allowing opportunities for higher levels of student engagement in collaboration and learning. Spaces that foster student interaction, which are lacking in the existing Science Building, will be included in the ISC. The strategic goals of Eastern Washington University are listed at http://goo.gl/OQN9tO. Additional elements of the EWU Strategic Plan are listed Appendix F, Table 2, with a description of how the ISC will support these goals.

#### Does the project follow the sequencing laid out in the Master Plan? If not, explain why it is being requested now.

Yes. As previously described, ISC is critical to the sequence in the plan to update the science facilities. See page 52 of the 2014 Comprehensive Campus Master Plan.

#### LINK: Eastern's Comprehensive Master Plan

### INTEGRAL TO INSTITUTION'S ACADEMIC PROGRAMS PLAN

Describe the proposed project's relationship and relative importance to the institution's most recent Academic Programs Plan.

The ISC supports the university current Academic Program Plan as highlighted below:

#### **Student Success**

Goal: To create an environment where students succeed at their highest level. Students are at the center of all that Eastern does. EWU defines student success as students' ability to fulfill their goals in education, career, and life.

#### **Key Strategies**

- Improve retention and graduation rates.
- Create greater access to, and increased utilization of, student support services.
- Support EWU faculty and staff in their ability to foster student success.

- Expand campus wide commitment to student success.
- Create a system that improves performance of students in developmental courses to accelerate their progress toward degree.

#### Indicators of Success (revised and enhanced from the 2012 Strategic Plan)

- Increase first-year to second-year retention rates from 75 percent in 2011 to 82 percent by 2017.
- Increase six-year graduation rates from 46 percent for the 2011 graduating class to 54 percent for the 2017 graduating class.
- Increase pass rate of developmental math from 48 percent in 2011 to 70 percent.
- Increase minority, under-represented and international freshman student enrollment from 28 percent in 2011 to 36 percent.
- Engage all first-year students in dynamic general education and first-year experience programming that are continually assessed for successful outcomes.
- Increase privately funded scholarship endowments by more than 15 percent to \$16 million.
- Maintain average of less than 25:1 student-faculty ratio.
- Improve utilization of student support services.

This project supports the university's strategic goals by growing, allocating, and managing resources that enhance the academic quality in support the mission and goals effectively and efficiently. The construction of the ISC will provide high quality instructional space and student spaces that are not currently available in the existing Science Building, and will be equipped with current information technology and audio-video capabilities, allowing opportunities for higher levels of student engagement, collaboration and learning.

#### Must the project be initiated soon in order to meet academic certification requirements?

Yes. There are three distinct programs where EWU needs to meet the needs of the community, which are specifically dependent on the new Interdisciplinary Science Center.

- Biology's biotechnology program is limited for space. To meet demands in our community (i.e. companies), EWU needs more laboratory and research space for students in this area.
- With the expansion of Sacred Heart Hospital's medical technology program, more space is created for additional students (1 year of training for potential hiring into their large medical testing and analysis facility

at the hospital), and EWU needs to increase its laboratory space to train students to be prepared for this expanded program.

- Increases the capacity of teaching general biology, general chemistry, organic chemistry, and anatomy/physiology to both science majors and non-majors.
- Providing new dedicated teaching laboratories for cellular biology, biochemistry/forensics, physiology, and earth materials. These lab types do not currently exist on campus.
- The chemistry portion of material sciences curriculum connects with an area of growth in mechanical engineering.
- Provides adequate laboratory support spaces for all the teaching labs.

EWU requires additional laboratory space of the ISC to achieve success in these program areas.

# Must the project be initiated soon in order to permit enrollment growth and/or specific quality improvements in current programs?

Yes. The Interdisciplinary Science Center and Science renovation relate to the University's Strategic Plan. July 2014 revisions to the indicators for the major planning pillars of Students Success and Institution of Innovation contain specific metrics related to the number of STEM majors, number of STEM degrees awarded, and growth in undergraduate student research that are directly related and influenced by these projects (see below). In order to achieve these metrics, it will be essential to have the additional laboratory instruction spaces that the new building project supplies in order to handle the increased number of students to reach the targets specified by these sets of indicators.

### Indicators for EWU Strategic Plan (July 9, 2014)

- 1. Student Success:
  - a. Grow undergraduate STEM degrees by 30%.
  - b. Grow undergraduate STEM majors by 40%.
- 2. Institution of Innovation:
  - a. Increase the number of students involved in the undergraduate research and creative works symposium by 50%.
  - b. Increase the number of faculty mentors involved in the undergraduate research and creative works symposium by 20%.
  - c. Increase the number of students who submit abstracts for consideration by the National Conference on Undergraduate Research (NCUR) by 50%.
  - d. Increase the number of faculty who mentor students that submit abstracts for consideration by the National Conference on Undergraduate Research (NCUR) by 50%.

### Must the project be initiated soon in order to permit initiation of new programs?

Yes, the new facility will create opportunities to expand existing and develop new academic programs in all four Science programs. It will provide the Biology, Chemistry, Geology and Physics with significant improvements in laboratory quantity, quality, and technology. The new facility will be critical to the support of the programs being offered in its own College of Science, Technology, Engineering and Mathematics and the recently formed College of Health, Sciences, and Public Health, as well as the general support of other college's majors.

### **ENROLLMENT GROWTH**

Identify the number of additional full-time equivalent (FTE) state-supported students the project is expected to enable the institution to serve when the space is fully occupied. Describe the method by which the number of additional FTEs who can be accommodated by the proposed space has been calculated, and provide and explain the enrollment analysis indicating probable student demand and enrollment from project completion to full occupancy.

Identify how many of the additional FTE enrollments are expected to be in high-demand fields (identified in the <u>OFM statewide public four-year dashboard</u>) and the particular fields in which such growth is expected to occur.

EWU has consistently increased degree production in STEM and high demand programs since the original 2009 Science I pre-design. EWU expects that over the next ten years, this trend will continue as projected by the state anticipate 14.39% yearly increase through 2021.

The degrees awarded projection model was constructed using a three year weighted average of growth in highdemand majors as designated by the State of Washington for the academic years of 2012, 2013 and 2014, which has been calculated as 14.39 percent. Please see the table below:

Academic Year	Projected Enrollment	Projected Growth (%)		
2015	1,035	14.39%		
2016	1,184	14.39%		
2017	1,355	14.39%		
2018	1,550	14.39%		
2019	1,773	14.39%		
2020	2,028	14.39%		
2021	2,319	14.39%		

Additionally, the population of students graduating in high demand areas who were also Pell Grant recipients (as a measure of low social economic status) grew significantly during this time. Using the same methodological approach given above, the three-year weighted averages for the same time period for these students was approximately 20.37

percent. See the table below for projections of Pell Grant recipients in high-demand fields through the academic year 2021:

Academic Year	Projected Enrollment	Projected Growth (%)		
2015	589	20.37%		
2016	709	20.37%		
2017	853	20.37%		
2018	1,027	20.37%		
2019	1,236	20.37%		
2020	1,487	20.37%		
2021	1,790	20.37%		

These calculations show significant growth in these areas critical to the state's future success. These data also show that more than half of the students participating in these program are low income with a greater growth projected for them in the future.

## **AVAILABILITY OF SPACE**

Describe the institution's plan for improving space utilization.

Eastern's 2013 Comprehensive Campus Master Plan identified that the university has available classroom space to meet it current growth goals. The master plan also identified that the university lacks suitable student support space to meet it current growth goals. The strategic plan for space will evaluate the current classroom inventory to assess the correct mix of classrooms seats required for maximum utilization. The areas that do not meet university pedagogical standards will be taken offline and repurposed to meet the needs for student support space.

The 2014 Master Plan identifies two action lines that will specifically help to increase the utilization rate of general and laboratory classroom space on the Cheney campus. The first action is the long-term strategic increase in FTES enrollment to 14,000 (2023-33 projected). The second is programmed demolition of outdated, inefficient classroom buildings. The combination of higher total contact hours and lower total classroom seating capacity will significantly improve overall utilization rates.

Describe how the project will impact the utilization of classroom space.

Contact Hrs per Week: 93,975 Seating Capacity (Seats): 6,712 Seat Utilization Hrs/wk 14.3

Describe how the project will impact the utilization of class laboratory space.

Contact Hrs per Week: 18,386 Seating Capacity (Seats): 2,433 Seat Utilization Hrs/wk 7.7

#### **EFFICIENCY OF SPACE ALLOCATION**

For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facilities Evaluation and Planning Guide (FEPG) standards, explain the alternative standard that has been used, and why.

Reference materials used in creation of the program for Interdisciplinary Science Center include:

- Facilities Evaluation and Planning Guide (FEPG), Inter-institutional Committee of Space Officers representing the public four-year colleges and university in the state of Washington, 1994
- Post-Secondary Education Facilities Inventory and Classification Manual (FICM), National Center for Education Statistics, 2006

All major functions comply with the above FEPG and/or FICM standards. Detailed breakout of spaces by classification and applicable standard are provided in Appendix F, Table 3.

Identify the (a) assignable square feet in the proposed facility; (b) the gross square feet; and the net building efficiency.

Usable square feet (USF)*	=	56,535	
Gross Square Feet (GSF)	=	102,370	
Building efficiency (USF/GSF)	=	55.2%	

\* See Appendix I for a detailed breakout of assignable/non-assignable space
### **REASONABLENESS OF COST**

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5.0 of the Higher Education Capital Project Scoring Process Instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

### COST SUMMARY ESCALATED MIDPOINT CONSTRUCTION SEPT 2018

Facility Construction:		Sub-Total Facility Construction	\$38,554,377	
Foundations	\$1,132,16	)	Site Construction:	
Basement Construction	\$207,475		Site Preparation	\$548,735
			Site Improvements	\$1,305,479
Superstructure	\$4,986,203	3	Site Civil / Mechanical Utilities	\$374,875
Exterior Closure	\$5,327,33	1	Site Electrical Utilities	\$1,113,639
Roofing	\$557,259		Sub-Total Site Work	\$3,342,728
Interior Construction	\$2,633,62	3		
			General Requirements	\$3,063,750
Stairs	\$230,588		Contractor's Overhead & Profit	\$2,471,637
Interior Finishes	\$2,467,463	3		
Conveying	\$645,000		Unescalated MACC	\$47,547,556
Plumbing Systems	\$2,778,844	1	Escalated MACC	\$50,559,167
HVAC Systems	\$7,923,83	5		
Fire Protection Systems	\$427,762			
Electrical Systems		\$4,574,471		
Equipment (built in)		\$4,165,279		
Furnishings (built in)		\$497,084		

### EASTERN WASHINGTON UNIVERSITY

The table in Chapter 5.0 of the Capital Project Scoring Process Instruction provides a single cost of \$309/SF for a teaching laboratory building. Using the cost index factor of 1.237 (Mid-Construction Date 8/16/2018) results in an expected cost of \$309 x 1.237 = \$382/SF. This single number does not adequately address numerous factors that increase the cost of the ISC above a generic teaching laboratory project:

- The program for the science complex locates the most technical of EWU's teaching laboratories in the ISC. The labs will house 27 teaching laboratories with prep, storage and other support spaces. Those labs include advanced spaces such as microbiology, molecular biology, cellular biology, biochemistry/forensics, and geochemistry that have special equipment requirements. When not in teaching mode, these labs provide essential research space for student projects and faculty investigations, effectively creating dual usage for the spaces.
- The building is dense with laboratory casework and equipment. Each of the two organic chemistry labs has 12 fume hoods for student safety and each of the four general chemistry labs has seven fume hoods. In total the equipment for the ISC includes 115 laboratory sinks, 71 fume hoods, 2 laminar flow hoods, 4 biological safety cabinets, a cold room, two scientific glassware washers, and two autoclaves.
- The building systems that support state-of-the-art, fume hood intensive laboratories are substantial. Structure is made more robust to provide fire protection and to abate vibration that would adversely affect imaging and measuring equipment. HVAC, plumbing and fire protection systems are sized up to meet the high demand of creating a safe environment for using the use of hazardous materials in a teaching and research environment.
- The construction market in the state of Washington is currently very busy. Premium prices as being charged by numerous trades due to the high demand. For example, the current cost of elevators in our region is nearly double what would have been expected just two years ago. The estimate for the ISC reflects these realistic costs.
- The site for the ISC, which was selected for its ability to connect to the existing Science Building, has steep topography and a number of important existing campus utilities that require relocation. The costs associated with site preparation and sub-grade conditions at this site are significant.
- The connection to the existing Science Building is formed by one two-level enclosed bridge and one singlelevel enclosed bridge. These bridges are a vital to making the old and new science buildings function as an integrated complex and they are a cost that is not recognized by a stand-alone generic new building.

We would propose that the ISC be evaluated at the cost level of a research lab building, which it more closely resembles. This makes the expected cost from Chapter 5.0 equal to  $440 \times 1.237 = 544$ /SF. The ISC is currently estimated to cost 494/SF.

If applicable, provide Life Cycle Cost Analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.



See Appendix H: LCCT Executive Summary

#### **Interdisciplinary Science Center LCCA**

#### **Baseline** Description

Meets the minimum requirements of the Washington State Energy Code. Campus steam is used to generate building hot water and the domestic hot water. The laboratory fumes hoods are variable volume to reduce the exhaust and makeup requirements by a minimum 50%.

#### Baseline for energy cost savings calculations in Alternatives 1 and 2

*Alternative 1 Description:* Envelope improvements over the baseline include improved glazing at all glass application and improved insulation in the brick cavity. HVAC improvements over the baseline include heat pipe heat recovery units, fume hood shutdown controls in fume hood intensive labs, and reduced ventilation airflow in labs with an indoor air quality sensing system.

\$6.3 million dollar energy cost savings from baseline code minimum design over 50 years.

**Alternative 2 Description:** Couples the envelope system from Alternative No 1 with a higher performance energy system. In addition to the HVAC improvements in Alternative 1, chilled beams will be utilized in selective laboratories where fume hood usage is low and where dusty operations are not present. A heat recovery chiller will also be added.

\$7.8 million dollar energy cost savings from baseline code minimum design over 50 years.

Alternative 2 is reflected in the current cost estimate for the Interdisciplinary Science Center.

### **Interdisciplinary Science Center funds are requested per biennium as follows:**

Funding Phase	Biennium	Amount
Predesign	2009 - 2011	\$400,000
Design	2015 - 2017	\$4,791,000
Design/Bid/Build (all portions)	2017 - 2019	\$67,009,000
Total		\$76,200,000

### Method of Construction Delivery

Eastern Washington University proposes to use the Design/Bid/Build

### **APPENDIX A**

### Availability of Space/Campus Utilization

AVAILABILITY OF SPACE						
Project Name: Interdisciplinary Science Center			REQUIRED FOR ALL CATEGORIES EXCEPT ACQUISITION AND	INFRASTRUCTURE.		
Campus location: Cheney, Washington						
Identify the average number of hours per week ea the proposed project's campus. Please fill in the	ach (a) classrooi blue shaded cel	n se Is fo	at and (b) classroom lab is expected to be utilized r the <b>campus</b> where the project is located.	in Fall 2016 on		
(a) General University Classroom Utilization			(b) General University Lab Utilization			
Fall 2015 Weekly Contact Hours	93,975		Fall 2015 Weekly Contact Hours	18,386		
Multiply by % FTE Increase Budgeted	2.00%		Multiply by % FTE Increase Budgeted	2.00%		
Expected Fall 2016 Contact Hours	95,854		Expected Fall 2016 Contact Hours	18,754		
Expected Fall 2016 Classroom Seats	6,712		Expected Fall 2016 Class Lab Seats	2,433		
Expected Hours per Week Utilization	14.3		Expected Hours per Week Utilization	7.7		
HECB GUC Utilization Standard	22.0		HECB GUL Utilization Standard	16.0		
Difference in Utilization Standard	-35%		Difference in Utilization Standard	-52%		
If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.						
university is currently evaluating the numbers and condition of classroom and laboratory spaces and seats. The university is planning						
on taking classroom seats and converting them into student support spaces, which was identified as a current and future need of the						
university's utilization rate for laboratory spaces h	as improved by	appr	oximately 7%.	201110		
Note: Fall 2016 utilization should be estimated by	increasing the f	all 20	015 actual enrollment by the fiscal growth factor by	which		
	Project Name: Interdisciplinary Science Center Campus location: Cheney, Washington Identify the average number of hours per week ea the proposed project's campus. Please fill in the (a) General University Classroom Utilization Fall 2015 Weekly Contact Hours Multiply by % FTE Increase Budgeted Expected Fall 2016 Contact Hours Expected Fall 2016 Classroom Seats Expected Fall 2016 Classroom Seats Expected Hours per Week Utilization HECB GUC Utilization Standard Difference in Utilization Standard If the campus does not meet the 22 hours per cla any institutional plans for achieving that level of ut Based upon evaluation of overall campus space university is currently evaluating the numbers and on taking classroom seats and converting them i university. This process will decrease our classr university's utilization rate for laboratory spaces f Note: Fall 2016 utilization should be estimated by	AVAILABIL   Project Name: Interdisciplinary Science Center   Campus location: Cheney, Washington   Identify the average number of hours per week each (a) classroor   the proposed project's campus. Please fill in the blue shaded cel   (a) General University Classroom Utilization   Fall 2015 Weekly Contact Hours 93,975   Multiply by % FTE Increase Budgeted 2.00%   Expected Fall 2016 Contact Hours 95,854   Expected Fall 2016 Classroom Seats 6,712   Expected Hours per Week Utilization 14.3   HECB GUC Utilization Standard 22.0   Difference in Utilization Standard -35%   If the campus does not meet the 22 hours per classroom seat an any institutional plans for achieving that level of utilization.   Based upon evaluation of overall campus space requirement duri university is currently evaluating the numbers and condition of cla on taking classroom seats and converting them into student suppuniversity is utilization rate for laboratory spaces has improved by   Note: Fall 2016 utilization should be estimated by increasing the for laboratory spaces has improved by	AVAILABILITY   Project Name: Interdisciplinary Science Center   Campus location: Cheney, Washington   Identify the average number of hours per week each (a) classroom set   the proposed project's campus. Please fill in the blue shaded cells for   (a) General University Classroom Utilization   Fall 2015 Weekly Contact Hours 93,975   Multiply by % FTE Increase Budgeted 2.00%   Expected Fall 2016 Contact Hours 95,854   Expected Fall 2016 Classroom Seats 6,712   Expected Hours per Week Utilization 14.3   HECB GUC Utilization Standard 22.0   Difference in Utilization Standard -35%   If the campus does not meet the 22 hours per classroom seat and/or any institutional plans for achieving that level of utilization.   Based upon evaluation of overall campus space requirement during o university is currently evaluating the numbers and condition of classroo on taking classroom seats and converting them into student support suniversity. This process will decrease our classroom seat inventory a university's utilization should be estimated by increasing the fall 20   Note: Fall 2016 utilization should be estimated by increasing the fall 20	AVAILABILITY OF SPACE     Project Name: Interdisciplinary Science Center Campus location: Cheney, Washington   REQUIRED FOR ALL CATEGORIES EXCEPT ACQUISITION AND Campus location: Cheney, Washington     Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized the proposed project's campus. Please fill in the blue shaded cells for the campus where the project is located.     (a) General University Classroom Utilization   (b) General University Lab Utilization     Fall 2015 Weekly Contact Hours   93,975     Fall 2015 Weekly Contact Hours   93,975     Fall 2016 Contact Hours   95,854     Expected Fall 2016 Contact Hours   95,854     Expected Fall 2016 Classroom Seats   6,712     Expected Hours per Week Utilization   14.3     HECB GUC Utilization Standard   22.0     HECB GUL Utilization Standard   22.0     HECB GUL Utilization Standard   22.0     HECB GUL Utilization Standard   22.0     If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standard     If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standard     If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standard	AVAILABILITY OF SPACE     Project Name: Interdisciplinary Science Center   REQURED FOR ALL CATEGORIES EXCEPT ACQUISITION AND INFRASTRUCTURE     Campus location: Cheney, Washington   Image: Cheney, Washington   Image: Cheney, Washington     Klentify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2016 on the proposed project's campus. Please fill in the blue shaded cells for the campus where the project is located.   Image: Cheney, Washington     (a) General University Classroom Utilization   (b) General University Lab Utilization   Image: Cheney, Washington     Fall 2015 Weekly Contact Hours   93,975   Fall 2015 Weekly Contact Hours   18,386     Multiply by % FTE Increase Budgeted   2.00%   Multiply by % FTE Increase Budgeted   2.00%     Expected Fall 2016 Contact Hours   95,854   Expected Fall 2016 Contact Hours   18,754     Expected Hours per Week Utilization   14.3   Expected Hours per Week Utilization   7.7     HECB GUL Utilization Standard   22.0   HECB GUL Utilization Standard   -52%     If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.   52%     Baseed upon evaluation of overall campus space requireme	

### **A**PPENDIX **B**

### **Program Related Space Allocation**

Type of Space	Points	Assignable Square Feet	Percentage of Total	Score = Points x %
Instructional Space (classroom/lab/library)	6	46,180	81.7%	4.9
Student Advising / Counseling Services	4	0	0.0%	0.0
Child Care	1	0	0.0%	0.0
Faculty Offices	4	759	1.4%	0.1
Administrative	3	0	0.0%	0.0
Maintenance/Central Stores/Student Center	4	9,596	17.0%	0.7
Totals	22	56,535	100%	5.7

### APPENDIX C

**Capital Project Report CBS002** 

### **A**PPENDIX **D**

**Project Cost Estimate Report C100** 

### **APPENDIX E**

#### **Adequacy of Space**

The existing Science Building is the only facility at EWU that contains laboratories capable of accommodating chemistry and physics teaching/research. Lower division chemistry courses are currently running at or beyond the capacity of the available teaching laboratories in Science Building. Introductory classes are offered as lecture only, without a full laboratory component, because of lack of space. The current facility lacks both an inorganic/physical chemistry teaching lab and an analytical chemistry teaching lab [Note: these two labs are not included in the ISC]. Additionally, the very limited research laboratory space in the existing Science Building is not capable of serving the research needs of additional science majors. Besides the insufficiency of laboratories, the most pressing need is for additional lab support space, including prep space for labs, space for scientific instruments, and specialized storage space for science equipment and reagents used in teaching and research.

Without an increase in science teaching labs, research labs, and lab support space, EWU will be unable to meet the increased demand for basic sciences. Lack of space to accommodate growth will equate to inadequate science training to serve the rapidly growing regional focus on health science programs in Spokane and the new engineering programs.

#### Pedagogical deficiencies include:

- **Technology deficiencies:** The existing Science Building is unsuitable for today's educational technology. Wireless internet connectivity is lacking, as are appropriate audio-video and data facilities. Additionally, the chemistry department lacks space for its informatics servers.
- Lack of student spaces: The existing Science Building completely lacks the non-classroom spaces that enable the "excellent student-centered learning environment" envisioned in the university's mission. Spaces for informal student gathering, collaboration, and study are currently non-existent. Open computer labs are sparingly provided, and there are no lounges or collaborative spaces. Even the corridors of Science Building, which might otherwise provide nooks and crannies for informal student use, have been retrofitted with large duct shafts that inhibit the opportunity.

#### Pedagogical deficiencies solutions:

- **Technology:** Spaces in Interdisciplinary Science Center are flexibly designed to support changing technologies and dynamic laboratory environments. Teaching laboratories will feature the latest technological tools to support teaching goals and science demonstrations, while remaining flexible enough to accommodate future changes to lab equipment and lab functions. Wireless internet access will be provided throughout the building.
- Interaction: The program includes areas outside of laboratories that provide opportunities for students to study and interact with one another. Commuters comprise 80% of EWU students, so it is vital that new facilities incorporate study and lounge spaces, as well as enhanced technologies to support virtual study. This

goal requires that spaces that support interaction be created, and include, lounges, student study areas, casual spaces for student interaction, display and announcement boards, and outdoor gathering spaces.

### Appendix E (con't)

2:4 Exiting Science Building Condition (from Pre-Design)

- Health and Safety Deficiencies: Health and safety problems include unserviceable and insufficient number of fume hoods, chemical storage areas without proper ventilation, an inability to isolate gas burners in labs, lack of adequate distribution for inert gases, and emergency showers without tempered water.
- Accessibility Violations: A comprehensive, campus-wide survey identified over 400 separate accessibility deficiencies in the existing Science Building. The majority of deficiencies relate to inaccessible laboratory benches and sinks, doors, and restrooms.
- **Problematic HVAC:** The existing Science Building contains inefficient and noisy heating, ventilating, and air conditioning (HVAC) systems that cannot maintain the pressure differentials and air change rates demanded by the scientific activities that occur in the building. In some labs, noise levels from the HVAC system exceed acceptable decibel levels for instruction.
- **Technology deficiencies:** The existing Science Building is ill-suited for today's educational technology. Wireless internet connectivity is lacking, as are suitable audio-video and data facilities. The chemistry department lacks space for its informatics servers.
- Lack of student spaces: The existing Science Building completely lacks the non-classroom spaces that enable the "excellent student-centered learning environment" envisioned in the university's mission. Spaces for informal student gathering, collaboration and study are non-existent. Open computer labs are sparingly provided. Lounges are unheard of. Even the corridors of Science Building, which might otherwise provide nooks and crannies for informal student use, have been retrofitted with large duct shafts that inhibit this opportunity.
- **Building condition:** The 2009 State Facility Inventory System rates the existing Science Building's condition as "Needs Improvement: Limited Functionality". The current physical condition of the existing building is well below that of EWU's peer institutions and its age is more than double that of peer institutions. This puts EWU in the position of being less competitive in the current educational market.
- Cost of maintenance and repairs: Exclusive of custodial and grounds services, the maintenance and repair costs for the existing Science Building average over \$366,000 per year. In addition, almost \$400,000 is spent from the capital minor works accounts for facility preservation, health and safety code compliance and backlog reduction. The combined cost equates to \$4.92 per square foot per year. This is nearly three times the cost per square foot of maintenance and repairs for the 7-year old EWU Computing & Engineering Building, which requires \$1.68 per square foot per year. The cumulative effect on the annual operating budget may soon become unaffordable, resulting in increased deferral of critical maintenance and repair, which will lead to further deterioration of the building and its ability to support its science education functions.

• **Cost of energy:** The existing Science Building is the largest energy user on the EWU campus. Science Building accounts for 13.7% of the total campus energy use, even though it is only 5.4% of the total campus square footage. While it is normal for science buildings to have a disproportionately large use of

#### Appendix E (con't)

• campus energy, a new energy-conserving ISC, coupled with reuse of the existing Science Building for less energy intensive purposes, would have a very positive impact on campus energy costs.

#### Predesign Study EWU Science I

Available at the following website address; <u>http://goo.gl/7Meoob</u>

### **APPENDIX F**

#### Table 1: Comparable Framework Analysis; Detailed Scores

Below are the building system scores that were used by the consultant to produce the overall score for the existing Science Building. A score of 3 indicates that systems are operational with full functionality but are approaching end of useful life and should be replaced in the near future A score of 4 indicates that a system has reached the end of its useful life and has limited functionality. This system should be replaced immediately in order to prevent imminent failure.

#### **Comparable Framework Study 2014 Update**

**Overall Facility Condition Score** 3.4 **Exterior** Doors Comparable Framework Study 2008 **Overall Facility Condition Score** Roofing 3.4 **Roof Coverings** A Substructure: Roof Opening 2.0 Projections Foundations C Interiors: Standard Foundations 2 Interior Construction Slab on Grade 2 Fixed and Moveable Partitions B Shell: 2.8 Interior Doors Superstructure **Specialties** Floor Construction 2 Staircases Roof Construction 2 Stair Construction Exterior Closure 2 Exterior Walls 4 Stair Finishes Exterior Windows 3

4

3

3

3

3.7

4

4

3

2

	Wall Finishes	4		
	Floor Finishes	4		
	Ceiling Finishes	4	Fire Protection	
D Se	ervices:	3.8	Fire Protection Sprinkler Systems	3
Vert	ical Transportation		Stand-Pipe and Hose Systems	3
	Elevators and Lifts 4		Fire Protection Specialties 3	
Plun	nbing		Special Fire Protection Systems	3
	Plumbing Fixtures		Electrical	
	5 Domestic Water Distribution	3	Electrical Service and Distribution 4	
	Sanitary Waste	4	Lighting and Branch Wiring	4
	Rain Water Drainage	3	Communication and Security	4
	Special Plumbing Systems 4		Special Electrical Systems 4	
HV	AC		E Equipment and Furnishings:	4.0
	Energy Supply	3	Equipment and Furnishings	
	Heat Generating Systems	4	Fixed Furnishings and	4
	Cooling Generating Systems	4	Moveable Furnishings	4
	Distribution Systems	4	E Special Construction:	
	Terminal and Package Units	4	4.)	
	Controls and Instrumentation	5	Special Construction	
	Special HVAC Systems and	4	Integrated Constr. & Special	4
			Special Controls and	5

### APPENDIX F (CON'T)

### <u>Table 2</u>: Relevant institutional strategic goals, objectives, performance measures

EWU Strategic Plan Goals, Objectives, Performance	Interdisciplinary Science Center Supporting EWU Strategic Plan
Measures and Strategies	
Goal I: A rigorous and engaged student learning	
experience.	
<b>Objective 1:</b> Foster more engaged student	Interdisciplinary Science Center would
interaction by providing opportunities for student	be equipped with up to date information
student interaction immersion and integration	technology and audio-video capabilities
Strategy: Expand use of classroom technologies	allowing opportunities for higher levels of
that support learning that is more active.	student engagement in learning. Spaces that
Strategy: Support higher levels of student	foster student interaction, which are lacking
engagement in research.	in the existing Science Building, would be
00	included in the Interdisciplinary Science
	Center program.
Objective 2: Integrate general education with	Increased research space allows faculty
career preparation.	support of integration of student research
Strategy: Provide support to faculty to support	into the chemistry and physics curricula.
integration of diversity, service learning and	Increased introductory teaching laboratory
student research into new general education	spaces would allow for greater freshman
curriculum.	access to science courses.
Strategy: Expand the first year experience course	
for freshman.	
"high-demand" fields.	labs and research labs, Interdisciplinary
Performance Measure: Increased numbers of	Science Center would allow greater capacity
bachelor degrees awarded in engineering, health	to provide science training for students
or life sciences, mathematics, and secondary	pursuing engineering and science education
teacher education in mathematics, life sciences or	bachelor degrees.
Spanish.	
<b>Objective 5:</b> Provide an environment supportive	Interdisciplinary Science Center should be
of learning and teaching excellence.	equipped with building-wide wireless
Performance Measure: Increase the number of	capability. Each teaching laboratory should
classrooms that have been technology-enhanced.	have up-to-date information technology and
Strategy: Complete implementation of campus- wide wireless capability.	audio-video systems.

Goal II: An academic community culture that	
supports and engages faculty and staff	
throughout their careers.	
Objective 2: Support teaching, research and	By increasing research laboratory space,
service activities.	Interdisciplinary Science Center would
Performance Measure: Increase support for	provide greater opportunities for faculty,
faculty, staff and student research/creative works.	staff and student research.
Goal III: An institution-wide commitment to	
community engagement that benefits the	
university, the region and the world.	
<b>Objective 2:</b> Integrate community engagement	By increasing research laboratory space,
into learning and discovery.	Interdisciplinary Science Center would
Performance Measure: Increased numbers of	allow for increased numbers of students to
faculty and students participating in	participate in undergraduate research.
undergraduate research, service learning,	Experiential learning would be enhanced by
experiential learning and internship programs.	increased teaching and research laboratories.

## APPENDIX F (CON'T)

### **<u>Table 3</u>**: Detailed Breakout of Building Functions and Applicable Standards

FEPG recommendations for spaces and the corresponding areas used in the Interdisciplinary Science Center program are shown in the following table:

FEPG Room Classificatio n Number	FEPG Room Classification Type	FEPG Recommendatio n (ASF/Station)	FEPG Standard	Meets Standard (Y/N))	Program Area Applied to Project (ASF/Station)
110	Classroom	20	16 – 22	Y	22 (includes space for science demonstration)
210	Class Laboratory – Physical Sciences	80	40-90	Y	53 - 80
215	Class Laboratory Service	Depends on need	Depends on need	N/A	Based on identified need

311	Faculty Office	140	140	Y	140
316 & 317	Staff & Other Office	120	120	Y	120
760	Hazardous Materials Storage	Depends on need	Depends on need	N/A	Based on identified need
770	Hazardous Waste Storage	Depends on need	Depends on need	N/A	Based on identified need

Explanatory Notes; Table 4:

### **A**PPENDIX **F** (CON'T)

Laboratory Module: To provide a baseline planning module for programming of teaching and research laboratories, a standard laboratory module was established based on industry standards and applicability to the types of laboratories included in the Interdisciplinary Science Center project. The proposed laboratory planning module for the Science II building was derived by analyzing the laboratory bench, equipment, and circulation space required for the scientific functions. The module is based on the bench space required for technical workstations, instruments, and procedures. The space required between benches is designed to allow people to work back-to-back at adjacent benches, to allow for accessibility for disabled and still allow for movement of people and laboratory carts in the aisle.

The preliminary planning module utilized for the project is 10'-8" wide by 30'-0" deep = 320 Assignable Square Feet. This module will provide adequate bench space plus space for floor standing equipment and fume hoods, and can be divided for smaller support spaces such as storage or instrument rooms.

**Laboratory Service:** The program size of lab support spaces was based on a comparison of existing spaces to identified needs. Areas were rounded to the nearest laboratory module or appropriate fraction of a module. **Offices Spaces:** Program areas adhered to the recommendations of the FEPG.

### **APPENDIX G**

#### **Supplemental Information**

#### **Overarching Evaluation Criteria**

• Increases number of bachelor's degrees - Yes

The pre-design study completed for this project is based on an identified need driven by a projected twenty-percent growth of the student population at EWU and the anticipated increase in students seeking engineering or healthcare-related undergraduate and graduate degrees.

• Increases number of bachelor's degrees awarded in high-demand fields - Yes

The project supports a disproportionately larger increase in the demand for science courses as well as a significant increase in the number of science and pre-medical majors. Additionally, the growth of the student population and the initiation of new engineering degrees will cause an increase in the demand for science courses. For all the above reasons, there will be a significantly larger number of high-demand bachelor's degrees awarded.

• Increases number of advanced degrees - Yes

There will be an indirect contribution to the number of advanced degrees awarded within the State of Washington as the increased number of graduates from EWU's chemistry, biochemistry, geology and physics programs continue their graduate work at other Washington Institutions of Higher Education.

• Promotes access - <u>Yes</u>

Eastern Washington is an underserved region and expansion of the available university science programs will extend more opportunities for access to quality higher education to the region. Moreover, distance education programs will be conducted from the new Interdisciplinary Science Center building that will focus on high school Running Start students, representing a segment of place-bound young adults in rural eastern Washington. Finally, it will build on medical sciences and services growing in Eastern Washington because of EWU's involvement with the Interuniversity Nursing Alliance through the Washington State University College of Nursing.

• Integral to campus/facilities master plan – <u>Yes</u>

This project is part of EWU's Comprehensive Campus Master Plan 2014 and the Ten-Year Capital Plan.

• Integral to institution's academic plan – Yes

See Academic Strategic Plan. https://www.ewu.edu/inspiringthefuture/strategic-plan

Student Success – Key Strategies.

### **APPENDIX H**

#### **LCCT Executive Summary**

Office of Financial Management Olympia, Washington - Version: 2016-A Life Cycle Cost Analysis Tool **Executive Report** 

Project Information	
Project:	EWU Interdisciplinary Science Center
Address:	526 5th Street, Cheney, 99004
Company:	LMN Architects
Contact:	Dean Clark
Contact Phone:	206-682-3460
Contact Email:	dclark@LMNArchitects.com

Key Analysis Variables		Building Cha	racteristics	
study Period (years)	53	Gross (Sq.Ft)	102,370	-
Nominal Discount Rate	3.46%	Useable (Sq.Ft)	56,535	-
Vlaintenance Escalation	1.00%	Space Efficiency	55.2%	
Zero Year (Current Year)	2016	Project Phase	0	
Construction Years	3	Building Type	0	_

Life Cycle Cost Analysis						BEST
Alternative		Baseline		Alt 1		Alt 2
Energy Use Intenstity (kBtu/sq.ft)	1.0	216.6		124.9		109.5
1st Construction Costs	\$	46,229,338	\$	47,038,459	\$	47,148,723
PV of Capital Costs	\$	71,570,472	\$	72,794,295	\$	72,958,420
PV of Maintenance Costs	\$	41,030,816	\$	41,568,212	\$	41,211,260
PV of Utility Costs	\$	13,324,227	\$	7,997,126	\$	7,098,950
Total Life Cycle Cost (LCC)	\$	125,925,515	\$	122,359,633	\$	121,268,629
Net Present Savings (NPS)		N/A	\$	3,565,882	\$	4,656,886
Societal LCC takes into consideration t	he social	cost of carbon dioxide	emissio	ons caused by operatic	nal ene	rgy consumption
(GHG) Social Life Cycle Cost				10.2		BEST
GHG Impact from Utility Consumption	1	Baseline		Alt 1		Alt 2
Tons of CO2e over Study Period	10	93,588		62,571		58,280
% CO2e Reduction vs. Baseline	100	N/A		33%		38%
Present Social Cost of Carbon (SCC)	\$	8,325,959	\$	5,566,588	\$	5,184,849
Total LCC with SCC	\$	134,251,474	\$	127,926,221	\$	126,453,479
NPS with SCC		N/A	\$	6,325,253	\$	7,797,995



#### **Baseline Short Description**

Meets the minimum requirements of the Washington State Energy Code, utilizing code minimum insulation values for walls, slabs and roofs and code minimum R-value requirements for windows and curtain walls. The baseline HVAC system is a variable volume entral station air handling unit with zone level single duct variable volume boxes with hot water reheat. AHU's are equipped with 100% outside air dry bulb economizers. Building cooling is generated by the campus central plant water cooled chillers. Campus steam is used to generate building hot water and the domestic hot water. The laboratory fumes hoods are variable volume to educe the exhaust and makeup requirements by a minimum 50%.





Alternative 2 Short Description Couples the envelope system from Alternative No 1 wih a higher performance energy system. In addition to the HVAC improvements in Alternative 1, chilled beams will be utilized in selective laboratories where fume hood usage is low and where dusty operations are not present. A heat recovery chiller will also be added.

ntensive labs, and reduced ventilation airflow in labs with an indoor air quality sensing system

Appendices

### **APPENDIX**

Interdisciplinary Science Center – Schematic Design Narrative

Available at the following website address: <u>https://goo.gl/r5foZG</u>



### Predesign Study EWU Science I

Available at the following website address: <u>http://goo.gl/7Meoob</u>

Predesign Study EWU Science II

Available at the following website address: <u>http://goo.gl/GPxscH</u>

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:42AM

#### Project Number: 30000558

Project Title: Interdisciplinary Science Center

#### **Description**

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:1

#### Project Summary

This request is for Construction funds for a proposed Interdisciplinary Science Center (ISC) in the Growth Category.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Construction of a new Interdisciplinary Science Center will allow Eastern Washington University to enhance student success by accommodating continued growth in high demand majors and improving the current learning environment.

This is a request for Construction funds for a proposed Interdisciplinary Science Center (ISC) in the Growth category, as described in the project update report submitted to OFM prior to July 1, 2016.

This amount requested for this design/bid/build construction phase of the project in 2017-19 is \$67,009,000.

Since 2008, the number of STEM graduates at EWU have nearly doubled—from 320 students in 2007-08 to over 600 this past academic year. STEM graduates have grown to be fully one-quarter of all degrees produced by EWU and represent highest share of STEM graduates annually by any of the regional comprehensives in the state. Yet, we are the only regional university to not add any additional capital capacity for STEM programs in the last decade. At our current growth rate in STEM programs, EWU has exceeded the capacity of current science facilities and we anticipate being unable to meet future demand without the construction of additional science lab space.

We expect that over the next ten years, our student population will grow by approximately 20 percent, and a disproportionately large share of the additional students will be seeking STEM related degrees. EWU has made meeting state and regional workforce demands for additional healthcare professionals as well as engineering and computer science a primary focus of growth in the next decade. In order to meet these state and regional workforce needs we must substantially increase our course offerings in basic science courses, which include Biology, Chemistry/Biochemistry, Geology and Physics. In addition, the modern day STEM workforce new expects a strengthened interdisciplinary approach to STEM education that will not be possible without this new space. Without an improvement in the quantity and quality of science teaching labs, research labs, and lab support space, EWU will not be able to meet the increased demand for basic sciences and the STEM workforce as a whole.

The existing Science Building is the only facility at EWU that contains laboratories capable of accommodating Biology, Chemistry/Biochemistry, Geology and Physics teaching and research. Lower division science courses are currently running at or beyond the capacity of the available teaching laboratories in the Science Building. The limited research laboratory space in the existing Science Building is not capable of serving the research needs of science students and faculty. Space for safely storing scientific instruments, preparation space for teaching labs, and specialized storage space for science equipment and reagents used in teaching and research are all lacking.

The existing Science Building has serious deficiencies\* that are at odds with the university's mission to provide an excellent student-centered learning environment and exceptional resources and facilities. Deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and very high-energy costs.

The Interdisciplinary Science Center is necessary because of increasing demand for sciences at EWU, lack of capacity in the current science facilities, and significant deficiencies in the existing Science Building. Additionally, EWU trails markedly behind peer institutions in the State of Washington considering the age, quality, and size of science facilities, constraining our ability for growth—despite student and workforce demand.

What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:42AM

#### Project Number: 30000558

Project Title: Interdisciplinary Science Center

#### **Description**

The new Eastern Washington University Science Center will be comprised of the new Interdisciplinary Science Center and the newly renovated Science Building. Our current science facility presents three major problems that we propose solving through both the construction of the new Interdisciplinary Science Center and the renovation of our existing science building:

#### The need for additional modern lab capacity

The new interdisciplinary science center will be primarily teaching and research lab space to meet the needs of Biology, Chemistry/Biochemistry, Geology and Physics. Current labs do not meet modern building codes and have multiple deficiencies that prevent the types or teaching and research necessary in modern STEM fields.

#### A current lack of capacity for interdisciplinary STEM work

The current segmented science building provides little opportunity for cross-disciplinary work as many labs and classrooms are discipline specific and are too outdated to accommodate modern lab needs and equipment. The new facility will provide opportunities for learning and research across disciplines as well as interdisciplinary faculty cooperation that is not possible in the current science building.

#### Outdated classroom and technology infrastructure

The primary purpose of the renovation of the existing science building is to modernize current classroom infrastructure, provide new opportunities for advanced STEM education, and distance learning. Both the Interdisciplinary Science Center and the Renovated Science Building will expand current infrastructure supporting the virtual campus and provide the Science departments with currently non-existent teaching lab facilities that support the virtual campus.

Across the two buildings, the new Science Center will provide:

· State of the art teaching and research laboratory space

· Additional laboratory capacity to accommodate growth across the science disciplines

• Modern classroom space to enable the delivery of distance learning science courses and collaboration with our programs at other EWU locations including Bellevue College and Lower Columbia College

· Additional faculty office space to enable to hiring of new faculty positions to support our growing programs

Schedule:

Bidding and Award: 4/16/17 to 7/15/17 Construction: 7/16/17 to 4/15/19

Site constraints and building program would make the project difficult to phase. Interior shelled spaces would be the only avenue for phasing opportunities.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The program for the Science Complex locates the most technical of EWU's teaching laboratories in the ISC. The labs will house 27 teaching laboratories with prep, storage, and other support spaces. Those labs include advanced spaces such as microbiology, molecular biology, cellular biology, biochemistry/forensics, and geochemistry that have special equipment requirements. When not in teaching mode, these labs provide essential research space for student projects and faculty investigations, effectively creating dual usage for the spaces.

The building is dense with laboratory casework and equipment. Each of the two organic chemistry labs have 12 fume hoods for student safety; each of the four general chemistry labs has 7 fume hoods. In total the equipment for the ISC includes 115 laboratory sinks, 71 fume hoods, two laminar flow hoods, four biological safety cabinets, a cold room, two scientific glassware washers, and two autoclaves. HVAC, plumbing, and fire protection systems are sized up to meet the high demand of creating a safe environment for the use of hazardous materials in a teaching and research environment.

The connection to the existing Science Building is formed by one two-level enclosed bridge and one single-level enclosed bridge. These bridges are a vital to making the old and new science buildings function as an integrated complex.

If the Science Building renovation would does not receive State capital funding, Instruction quality would be compromised in order to safely house the Chemistry, Biology, Geology, and Physics departments within a building that has inadequate infrastructure and outdated teaching and research labs. The existing Science Building has serious deficiencies that are at odds

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:42AM

Project Number: 30000558 Project Title: Interdisciplinary Science Center

#### **Description**

with the university's mission to provide an excellent student-centered learning environment and exceptional resources and facilities. As stated before, deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and very high-energy costs. Without the ISC the university will not be able to meet the growing demands for STEM and healthcare based degrees.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The Biology, Chemistry, Geology, and Physics departments will predominantly be housed in the Interdisciplinary Science Center with direct multi-level connection to the existing Science Building. The building will accommodate 27 teaching laboratories with prep, storage and other support spaces, a 100-seat classroom with science demonstration capability.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the criteria for OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

Non-state funds are not currently be considered for this project

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The mission of Eastern Washington University is to prepare broadly educated, technologically proficient, and highly productive citizens to attain meaningful careers, to enjoy enriched lives, and to contribution to a culturally diverse society. Eastern Washington University will achieve its mission by providing:

· An excellent student-centered learning environment.

· Professionally accomplished faculty who are strongly committed to student learning.

• High quality, integrated, and interdependent programs that build upon the region's assets and offer a broad range of choices as appropriate to the needs of the university's students and the region.

· Exceptional student support services, resources, and facilities.

The Interdisciplinary Science Center (ISC) will allow EWU to meet the increased demand for science courses due to growing enrollment and the increased focus on STEM. It will provide the sciences with significant improvements in teaching laboratory quality, technology, HVAC, and student spaces. By locating the laboratories in an energy-efficient structure, ISC is expected to experience significant energy savings relative to the existing Science Building.

2014 Comprehensive Campus Master Plan: In 2013-14, EWU updated its Comprehensive Campus Master Plan. The project supports the goals and objectives of the master plan. The ISC replaces Science I as the first step in the planned improvement of science facilities. In Planning Horizon 1 – 2013 to 2023, Science I & II shown in Phases 1.2.3 & 1.3.2. The ISC and the renovation of the existing Science Building replace the need for a 3rd Science phase for the remaining Geology department left out of the Science II program.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:42AM

### Project Number: 30000558

Project Title: Interdisciplinary Science Center

#### **Description**

Located on the Cheney campus of Eastern Washington University, this project is not linked to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Between 2009 and 2014, predesign studies were completed for Eastern Washington University's Science I (Physics and Chemistry) and Science II (Biology) facilities, which were originally envisioned as replacements for the existing 54-year old Science Building. To make the upgrade of science facilities more feasible, the space programs from the predesign studies evolved into a single Interdisciplinary Science Center housing all four disciplines' teaching labs and support functions. The new facility will be attached, by enclosed walkways, to the existing Science building. This adjacency and connection to the existing science building is critical to maintain access to research labs, classrooms, storage, faculty offices, and other support functions.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

New Facilities/Additions (Major Projects)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: Yes

#### How does this fit in master plan

In 2013-14 EWU updated its Comprehensive Campus Master Plan. This project supports the goals and objectives of the master plan. The ISC replaces Science I as the first step in the planned improvement of science facilities. In Planning Horizon 1 – 2013 to 2023, Science I & II shown in Phases 1.2.3 & 1.3.2. The ISC and the renovation of the existing Science Building replace the need for a 3rd Science phase for the remaining Geology department left out of the Science II program.

#### Funding

			Expenditures		2017-19	<b>Fiscal Period</b>
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	67,009,000				67,009,000
	Total	67,009,000	0	0	0	67,009,000
		Fu	uture Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Oper	rating Impacts					

#### No Operating Impact

### OFM

## **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000558	30000558
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

### STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY

	•	
Agency	Eastern Washington University	
Project Name	Interdisciplinary Science Center	
OFM Project Number	30000558	

Contact Information			
Name	Shawn King		
Phone Number	(509) 359-6878		
Email	sking@ewu.edu		

Statistics					
Gross Square Feet	102,370	MACC per Square Foot	\$464		
Usable Square Feet	56,535	Escalated MACC per Square Foot	\$494		
Space Efficiency	55.2%	A/E Fee Class	А		
Construction Type	Other Sch. A Projects	A/E Fee Percentage	7.19%		
Remodel	No	Projected Life of Asset (Years)	50		
	Addition	al Project Details			
Alternative Public Works Project	No	Art Requirement Applies	Yes		
Inflation Rate	2.80%	Higher Ed Institution	Yes		
Sales Tax Rate %	8.70%	Location Used for Tax Rate	Cheney		
Contingency Rate	5%				
Base Month	May-16				
Project Administered By	Agency				

Schedule				
Predesign Start	January-14	Predesign End	June-14	
Design Start	October-15	Design End	June-17	
Construction Start	September-17	Construction End	August-19	
Construction Duration	23 Months			

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Project Cost Estimate				
Total Project	\$71,954,927	Total Project Escalated	\$76,200,288	
		Rounded Escalated Total	\$76,200,000	

### **S**TATE OF **W**ASHINGTON

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University
Project Name	Interdisciplinary Science Center
OFM Project Number	30000558

## **Cost Estimate Summary**

Acquisition					
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0		
	1-				

Consultant Services					
Predesign Services	\$698,330				
A/E Basic Design Services	\$2,523,889				
Extra Services	\$2,202,232				
Other Services	\$1,934,921				
Design Services Contingency	\$367,969				
Consultant Services Subtotal	\$7,727,341	Consultant Services Subtotal Escalated	\$7,910,563		

Construction				
Construction Contingencies	\$3,326,028	Construction Contingencies Escalated	\$3,543,551	
Maximum Allowable Construction	\$47 547 556	Maximum Allowable Construction Cost	\$50 550 167	
Cost (MACC)	\$47,547,550	(MACC) Escalated	\$30,339,107	
Sales Tax	\$4,426,002	Sales Tax Escalated	\$4,706,937	
Construction Subtotal	\$55,299,586	Construction Subtotal Escalated	\$58,809,655	

Equipment				
Equipment	\$5,670,000			
Sales Tax	\$493,290			
Non-Taxable Items	\$0			
Equipment Subtotal	\$6,163,290	Equipment Subtotal Escalated	\$6,566,370	

Artwork			
Artwork Subtotal	\$252,796	Artwork Subtotal Escalated	\$252,796

	Agency Proj	ect Administration	
Agency Project Administration Subtotal	\$1,886,915		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,961,915	Project Administation Subtotal Escalated	\$2,090,224

Other Costs			
Other Costs Subtotal	\$550,000	Other Costs Subtotal Escalated	\$570,680

Project Cost Estimate			
Total Project	\$71,954,927	Total Project Escalated	\$76,200,288
		Rounded Escalated Total	\$76,200,000

#### **PROJECT DATA**

Institution - Eastern Washington University	
Project Title – Science Building Renovation	
Project Location – Cheney, Washington	

#### **1. PROBLEM STATEMENT**

A complete renovation of the Science Building allows EWU to take strategic advantage of the areas vacated to accommodate needed program growth in the Chemistry, Biology, Physics, and Geology departments as well as resolving health, safety, welfare, and maintenance/repair deficiencies within the current Science Building.

EWU requests design funds for Phase I of a two-phase renovation of the existing Science Building as described in the Predesign report submitted to OFM prior to July 1, 2016.

#### Demand for Science Programs Increasing

Since 2008, the number of STEM graduates at EWU have nearly doubled—from 320 students in 2007-08 to over 600 this past academic year. STEM graduates have grown to be fully one-quarter of all degrees produced by EWU and represent highest share of STEM graduates annually by any of the regional comprehensives in the state. Yet, we are the only regional university to not add any additional capital capacity for STEM programs in the last decade. At our current growth rate in STEM programs, EWU has exceeded the capacity of current science facilities and we anticipate being unable to meet future demand without the construction of additional science lab space.

We expect that over the ten years, our student population will grow by approximately 20 percent, and a disproportionately large share of the additional students will be seeking STEM related degrees. EWU has made meeting state and regional workforce demands for additional healthcare professionals as well as engineering and computer science a primary focus of growth in the next decade. In order to meet these state and regional workforce needs, we will have to substantially increase our course offerings in basic science courses including Biology, Chemistry/Biochemistry, Geology and Physics. In addition, the modern day STEM workforce now expects a strengthened interdisciplinary approach to STEM education that will not be possible without this new space. Without an improvement in the quantity and quality of science teaching labs, research labs, and lab support space, EWU will not be able to meet the increased demand for basic sciences and the STEM workforce as a whole.

The existing Science Building is the only facility at EWU that contains laboratories capable of accommodating Biology, Chemistry/Biochemistry, Geology and Physics teaching and research. Lower division science courses are currently running at or beyond the capacity of the available teaching laboratories in the Science Building. The limited research laboratory space in the existing Science Building is not capable of serving the research needs of science students and faculty. Space for safely storing scientific instruments, preparation space for teaching labs, and specialized storage space for science equipment and reagents used in teaching and research are all lacking.

The existing Science Building has serious deficiencies\* that are at odds with the university's mission to provide an excellent student-centered learning environment and exceptional resources and facilities. Deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and very high-energy costs.

#### \* See <u>Appendix D, 2:4 Existing Science Building Condition</u> for a detailed breakdown from Science I pre-design.

The Science Renovation is necessary because of increasing demand for sciences at EWU, lack of capacity in the current science facilities, and significant deficiencies in the existing within the current Science Building. Additionally, EWU trails markedly behind peer institutions in the State of Washington considering the age, quality, and size of science facilities, constraining our ability for growth—despite student and workforce demand.

Vision for EWU Science Center: The new Eastern Washington University Science Center will be comprised of the new Interdisciplinary Science Center and the newly renovated Science Building. Our current science facility presents three major problems that we propose solving through both the construction of the new Interdisciplinary Science Center and the renovation of our existing science building:

- 1. *The need for additional modern lab capacity*: The new interdisciplinary science center will be primarily teaching and research lab space to meet the needs of Biology, Chemistry/Biochemistry, Geology and Physics. Current labs do not meet modern building codes and have multiple deficiencies that prevent the types or teaching and research necessary in modern STEM fields.
- 2. A current lack of capacity for interdisciplinary STEM work: The current segmented science building provides little opportunity for cross-disciplinary work as many labs and classrooms are discipline specific and are too outdated to accommodate modern lab needs and equipment. The new facility will provide opportunities for learning and research across disciplines as well as interdisciplinary faculty cooperation that is not possible in the current science building.
- 3. *Outdated classroom and technology infrastructure*: The primary purpose of the renovation of the existing science building is to modernize current classroom infrastructure, provide new opportunities for advanced STEM education, and distance learning. Both the Interdisciplinary Science Center and the Renovated Science Building will expand current infrastructure supporting the virtual campus and provide the Science departments with currently non-existent teaching lab facilities that support the virtual campus.

Across the two buildings, the new Science Center will provide:

- State of the art teaching and research laboratory space
- Additional laboratory capacity to accommodate growth across the science disciplines
- Modern classroom space to enable the delivery of distance learning science courses and collaboration with our programs at other EWU locations including Bellevue College and Lower Columbia College
- Additional faculty office space to enable to hiring of new faculty positions to support our growing programs

A study of the potential budget impacts undertaken during the predesign process found that a capital budget request to address the renovation of the Science Building was too large as a single request. As a result, the project has been proposed to be funded in two separate biennia. This phased method of construction and funding over multiple biennia allows the project to move forward with two smaller capital budget requests.

Phasing Approach	Est. MACC	Est. Total Project	Construction Duration	Final Occupancy
Phase 1	\$ 32,989,005	\$ 50,897,000	16 months	January 2021
Phase 2	\$ 35,053,230	\$ 51,708,000	16 months	January 2023
TOTAL	\$ 68,042,235	\$102,605,000	(See schedule)	

In order to have a comprehensive understanding of the project and an efficient approach, it is important to conduct an initial entire building study to vet program locations and system needs. For this reason, it is important to provide design funding through Design Development for Phase I and Phase II in the initial Phase I budget request. For a graphic representation of the time line, see the Predesign Report Appendix J for project schedule (the link to the Predesign Report is in Appendix A of this document).

#### **2. HISTORY OF THE PROJECT OR FACILITY**

EWU requested funding for a Chemistry/Biochemistry and Physics building (Science I) in 2010. This building ranked first priority in its category, but did not receive funding. EWU resubmitted the request in 2012 and 2014., receiving minimal predesign funding in each biennium. Through the detailed programming and cost analysis of the predesign study, it was determined that Alternative IV, the Interdisciplinary Science Center (ISC), in the Chemistry / Physics predesign would be the option moving forward in terms of funding. This option provided an addition to the north of the existing Science Building that included teaching laboratories and classrooms for chemistry, physics, biology, and geology.

Thought of as the second half of the Science Complex on the Eastern Washington University campus, this request seeks to complete the renovation of the existing Science Building in two phases. Working in tandem with the programmatic functions and layout of the ISC, the Science Renovation will house classrooms, research laboratories, teaching laboratories, administration, and offices for the chemistry, biology, physics, and geology programs. It is critical that the Science renovation receives State capital funding as the project provides additional space needed to meet the growing demands for STEM and healthcare based degrees.

#### 3. UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECT

The Science Building will accommodate the Biology, Chemistry, Geology, and Physics departments. The building will include teaching laboratories, research laboratories, lab support facilities, student project and study areas, some faculty offices, and classrooms with science demonstration capability that support the lecture needs of the departments.

#### 4. INTEGRAL TO ACHIEVING STATEWIDE POLICY GOALS:

Provide degree targets, and describe how the project promotes improvement on 2014-15 degree production totals in the OFM four-year public dashboard.

- a. Indicate the number of bachelor's degrees awarded at the close of the 2014-15 academic year Undergraduate degrees awarded = 2399
- b. Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2014-15 academic year.

STEM/High Demand Undergraduate degrees awarded = 901 (37.56%)

c. Indicate the number of advanced degrees awarded at the close of the 2014-15 academic year. Graduate degrees awarded = 415 STEM(Uith Damaged Conditionant and Conditionant and Conditionant and Conditionant and Conditional Academic year)

STEM/High Demand Grad degrees awarded = 115 (27.71%)



#### 5. INTEGRAL TO CAMPUS/FACILITIES MASTER PLAN

Describe the proposed project's relationship and relative importance to the institution's most recent Campus/Facilities Master Plan or other applicable strategic plan.

In 2014, the university update the Cheney Campus Comprehensive Master Plan. In Horizon 1 (2013 to 2023) 1.4.1, the plan states: Significantly renovate or replace the Science Building. With the anticipated construction of the Interdisciplinary Science Building, several spaces within the existing building will be vacated allowing for growth within the remaining science departments without the potential of making significant additions. The current Comprehensive Campus Master Plan can be seem in its entirety at <a href="https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU-CCMP\_All%20Sections\_Web\_optimized.pdf">https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU-CCMP\_All%20Sections\_Web\_optimized.pdf</a>

# Does the project follow the sequencing laid out in the Master Plan (if applicable)? If not, explain why it is being requested now.

In the 2014 comprehensive master plan, the Interdisciplinary Science Building was to be constructed in two phase, locating both in the southeast quadrant of the Cheney campus. Since then, the university has shifted their plan to construct the Interdisciplinary Science Building on a site immediately adjacent to the existing Science Building to house Chemistry and Biology teaching laboratories and to remodel the existing building to provide all other necessary science academic and support functions. In both scenarios, the sequence of construction remained the same where the remodeling of the existing building follows the construction of the Interdisciplinary Science Building.

#### 6. INTEGRAL TO INSTITUTION'S ACADEMIC PROGRAMS PLAN

Describe the proposed project's relationship and relative importance to the institution's most recent Academic Programs Plan.

#### a. Meet academic certification requirements?

The academic certification requirements for STEM curriculum is largely dependent on the facilities associated with then, particularly in the areas of laboratory sciences. Given that the Science Renovation project provides space for the majority of research in chemistry, biology, microbiology and geology, certification hinges on the facility's ability to accommodate these functions that certification is hinged upon.

#### b. Permit enrollment growth and/or specific quality improvements in current programs?

The degrees awarded projection model uses a three year weighted average of growth in high demand majors as designated by the State of Washington for the academic years of 2012, 2013 and 2014 calculated as 14.39 percent. Additionally, of students graduating in high demand areas who were also Pell Grant recipients (as a measure of low social economic status) grew significantly during this time. Using the same methodological approach given above the three year weighted averages for the same time-period for these students was approximately 20.37 percent.

The spaces created in this renovation greatly enhances the University's ability to conduct research. Research is critical for recruitment, accreditation and retention of tenured faculty as well as incoming and upper class students.

#### c. Permit initiation of new programs?

Yes, the renovation of this facility will create opportunities to expand existing and develop new academic programs in all four science programs. It will provide the Biology, Chemistry, Geology and Physics with significant improvements in laboratory quantity, quality, and technology. The new facility will be critical to the support of the programs being offered in its own College of Science, Technology, Engineering and Mathematics and the recently formed College of Health, Sciences, and Public Health, as well as the general support of other college's majors.

#### 7. Age of Building Since Last Major Remodel

Identify the number of years since the last substantial renovation of the facility or portion proposed for renovation. If only one portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple

wings of a building that were constructed or renovated at different times, calculate and provide a weighted average facility age, based upon the gross square feet and age of each wing.

The existing Science Building was constructed in 1962 as a two-story 109,000 gross square-foot structure. A 39,200 gross square-foot addition was completed in 1989, and increased the total building area to 148,149 gross square feet. Additional minor cosmetic renovations were undertaken between 1990 and 1994. The weighted age of the building is 46.8 years, calculated as follows:

	Original Building	'89 Wing	Average Building Age
Wing Age	54	27	
Wing GSF	109,000	39,200	
Total GSF	148,149	148,149	
Wing GSF/	0.736	0.264	
Total GSF	0.750	0.204	
	Wing Weighted Age	Original Weighted Age	Total Weighted Age
	39.7	+ 7.1 =	= 46.8

#### 8. CONDITION OF BUILDING

Provide the facility's condition score (1 - superior, 5 - marginal functionality) from the 2016 Comparable Framework Study, and summarize the major structural and systems conditions that resulted in that score.

The current physical condition of the Science Building ranks well below that of EWU's peer institutions and its age is more than double that of buildings at peer institutions. The 2015 State Facility Inventory System rates the existing Science Building's condition as "4 - Limited Functionality." This appears to be accurately coded given the significant issues with worn-out systems that require limited facility manpower to be scheduled to react to systems that are performing poorly or not at all.

Many of the critical systems that sustain the operation of the existing Science Building received individual condition scores of 4 with one (Controls and Instrumentation) received a 5. The average score of the building services section which includes HVAC, Electrical, and Plumbing systems, was 3.4. This indicates that systems critical to health and safety, like fume hood ventilation, chemical storage ventilation, emergency showers, and uninterruptable power supply, are in desperate need of replacement, are near failure, or have already partially failed.

The average score of the equipment and furnishings section, which includes laboratory cabinetry and laboratory equipment, was 3.0. This score indicates that systems critical to accessibility and pedagogy like sinks, gas and air supply, and countertops are also in desperate need of replacement and are near failure or have already partially failed. A detailed score sheet is provided in Appendix B.

(In Predesign Report - Appendix H – Building Mechanical Assessment, Appendix I – Building Electrical Assessment).

Identify whether the building is listed on the Washington Heritage Register, and if so, summarize its historic significance.

The Science Building is not listed on the Washington Heritage Register. In accordance with 2014 OFM Predesign requirements, an initial review of the project has been conducted by the Department of Archeology and Historic Preservation (DAHP) and a determination of "NOT ELIGIBLE" has been provided for the Science Building.

#### 9. SIGNIFICANT HEALTH, SAFETY, AND CODE ISSUES

It is understood that all projects that obtain a building permit will have to comply with current building codes. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), or energy code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it. (Provide selected supporting documentation in appendices, and reference them in the body of the proposal.)

Applicable Building Codes for the project include: 2015 International Building, Mechanical, and Fire Codes, ICC A117.1-2003, 2015 Uniform Plumbing Code, National Electrical Code NFPA 70, Washington State Energy Code, NFPA 13 and NFPA 72.

#### The Science Building's deficiencies are numerous, including:

*Accessibility (ADA) Violations* - Over 400 separate accessibility deficiencies were found in the existing Science Building during a comprehensive, campus-wide survey when comparing the project to ICC

A117.1-2003, as required by WAC 51-50. While most of the deficiencies are related to laboratory benches, sinks, doors, and restrooms, there are also large aquatics tanks located in a basement without elevator access or adequate accessible circulation space.

*Health and Safety Issues* - Health and safety problems are rampant throughout the building including: chemical storage without adequate ventilation and spill containment, an inability to isolate gas burners in labs, a lack of adequate distribution for inert gasses, and emergency showers without tempered water. Some fume hoods are not ventilated at night, some do not maintain acceptable face velocity, and pressures cannot be maintained in the labs during set back modes risking contamination to non-lab spaces.

*HVAC Problems* - Systems are 25-30 years old and beyond the normally expected service life. The Science Building contains noisy and inefficient heating, ventilating and air conditioning (HVAC) systems that cannot cope with the demands of air pressure differentials and air change rates required for the science activities that occur in the building. Air intakes are located at grade, drawing debris and insects into the inhabited areas of the building. Inadequate air flow, cooling, and humidification from the mechanical system prevents spaces such as the Vivarium from utilizing modern ventilated cages which would protect animal health. Additionally, current use of individual exhaust fans for each fume hood has created numerous roof penetrations which have contributed to leaks in the building. Past roof leaks have impacted the use of teaching and research spaces until they can be restored and have increased the maintenance costs of the building.

*Vibration Control* - VAC systems vibrate the building's structure, radiating noise throughout teaching spaces; noise levels in some labs were so high, they exceeded the acceptable decibel level for instruction.

*Electrical Issues* - Due to the age of the existing electrical distribution equipment in the existing Science Building, it has become difficult to obtain parts. Additionally, safety standards have changed in the 25 years since the existing equipment was installed and improvements have been made since that time.

Some locations in below grade mechanical rooms show signs of water damage and some of the original 1960 service equipment still in use is no longer safe to service. Replacement of the distribution system, lighting systems, audio visual, communications, and emergency distribution systems are required. Fire alarm systems will need to be modified to accommodate the renovated space needs. Also, the existing emergency generator does not meet the 2015 National Electric Code for separation of emergency and standby loads, thereby requiring modification to the system.

*Seismic Issues* - Several items were in an ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings Tier 1 Analysis. It is recommended that the following deficiencies be corrected with a significant renovation:

The structural walls parallel to the roof framing are not properly attached to the roof diaphragms. Historical data shows that improperly anchored walls can fall away from a building during an earthquake. Several of the interior shear walls do not extend the full width of the building, and drag struts should be added to the roof to collect and deliver lateral forces from the roof diaphragm to the shear walls. Proper drag struts should be added to the roof diaphragm around openings/discontinuities at the

planetarium, and around the mechanical penthouse. The original building currently has two seismic joints which are approximately 2" wide. This gap does not meet recommended building separation. Further analysis is necessary, but the joint may need to be widened to prevent the buildings from pounding on one another during an earthquake. Any equipment used to power or control life safety systems must be properly anchored or braced.

*Energy Code Requirements/Cost of Energy* - The existing Science Building is currently the largest energy user on the campus at EWU at 13.7% of the total campus energy used, which is large considering the building only accounts for 5.4% of the total campus square footage. While it is normal for science buildings to have a large use of campus energy, renovating the existing Science Building would have a very positive impact on campus energy costs. It is anticipated that the new programmed uses in the Science Building will require less than half of the current exhaust currently provided in the facility so equipment replacement and upgraded control systems will significantly improve the energy performance of this building. Reprogramming the uses within the building will result in modifications to most of the above ceiling mechanical systems such as ductwork, branch piping and air terminal units.

Renovation of the Science Building will address the health, safety, accessibility, welfare, and energy code issues currently present in the facility.

#### **10. REASONABLENESS OF COST**

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5.0 of the Higher Education Capital Project Scoring Process Instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

The Science Renovation project will be delivered via the Design-Bid-Build methodology.

The University requests \$51,344,000.00 in State Capital funds for the total project cost for Phase I of the Science Renovation Project. See Predesign report, Appendix A for project budget for a detailed breakdown of costs and associated C-100 forms.

OFM provides guidelines for facility types that are incorporated in the Science Renovation project. The following table apportions expected costs for each facility type in proportion to their percentage of the total program:

Facility Type	Construction Cost/GSF Best Fit *	Cost Index To Mid- Construction (5-15- 2020) **	Expected Construction Cost/GSF	Percentage of Total Program	Weighted Value
Classrooms	\$297	1.301	\$386	18.9%	\$73
Science Labs (Teaching)	\$309	1.301	\$402	16.2%	\$65
Research Facilities	\$440	1.301	\$572	51%	\$292
Administrative	\$218	1.301	\$284	13.9%	\$40
TOTAL				100%	\$470

\* Reference: OFM's 2017-19 Capital Projects Evaluation System, Page 20

\*\*Reference: OFM's Construction Cost Index 2016

#### 2017-19 Biennium SCIENCE RENOVATION | DESIGN

The detailed construction cost estimate for Phase I of the Science Renovation, escalated to the midpoint of construction (May 2020), predicts the escalated maximum allowable construction cost be \$32,989,005, which equates to a unit cost of **\$449 per** gross square foot. This falls BELOW OFM's expected cost of \$470 per gross square foot for escalated construction cost as calculated in the table above.

Funding Phase	Biennium	Amount
Predesign, Phase I and II	2015 – 2017	\$231,457
Phase I Design	2017 – 2019	\$7,592,440
Phase I Construction	2019 – 2021	\$43,073,560
Phase II Design	2019 – 2021	\$6,255,036
Phase II Construction	2021 - 2023	\$45,452,964
TOTAL		\$102,605,457

Science Renovation funds for Phase I are requested over four biennia as follows:

If applicable, provide Life Cycle Cost Analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.

The Life Cycle Costs Analysis (LCCA) was completed using the Life Cycle Cost Tool (LCCT) Excel spreadsheets issued with the July 2014 State of Washington Predesign Manual. The design team worked collaboratively to estimate construction costs of the three items with associated energy performance and maintenance of the systems studied. The tool computes the total economic life cycle costs (LCC) of the system options as well as the Societal Life Cycle Costs, which considers the tons of CO2 production over the 50 year study period. A complete summary of the options studied, as well as a narrative of associated findings, can be found in the Predesign Report. See Predesign Report, Appendix G for the Executive Summary from the Life Cycle Cost Analysis process.

#### **11. AVAILABILITY OF SPACE/ UTILIZATION ON CAMPUS**

Describe the institution's plan for improving space utilization and how the project will impact the following:

a. The utilization of classroom space

Contact Hrs per Week: 93,975	Seating Capacity (Seats): 6,712	Seat Utilization Hrs/wk 14.3
The utilization of class laborato	ry space	
Contact Hrs per Week: 18,386	Seating Capacity (Seats): 2,433	Seat Utilization Hrs/wk 7.7

#### **12.EFFICIENCY OF SPACE ALLOCATION**

b.

For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facility Evaluation and Planning Guide (FEPG) assignable square feet standards. To the extent any proposed allocations exceed FEPG standards, explain the alternative standard that has been used, and why. See Chapter 4.0 of the Project Evaluation Guidelines for an example. Supporting tables may be included in an appendix.

Reference materials used in creation of the program for the Science Building Renovation include:

- Facilities Evaluation and Planning Guide (FEPG), Inter-institutional Committee of Space Officers representing the public four-year colleges and university in the state of Washington, 1994
- Post-Secondary Education Facilities Inventory and Classification Manual (FICM), National Center for Education Statistics, 2006

<u>All major functions comply with the above FEPG and/or FICM standards.</u> Detailed breakout of spaces are provided in the Predesign Report, Appendix B.

Identify the following on form CBS002: Usable square feet (USF) in the proposed facility, Gross square feet (GSF), and Building efficiency (USF divided GSF).

	Science Renovation - Phase I
Assignable Square Feet	50,787
Gross Square Feet	73,498
Net Building Efficiency	69.1%

#### **13.** ADEQUACY OF SPACE

Describe whether and the extent to which, the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

*Lack of Student Space* – The existing Science Building has none of the non-classroom space that would "create an environment where students succeed at their highest level" as seen in the University's strategic plan. Open computer labs are few in number and are a highly sought after resource for students. Informal student gathering spaces which promote collaboration and study are completely absent from the building. Reasonable corridor widths, which could ordinarily provide areas of informal student use, have been retrofitted with obtrusive duct shafts and display scientific collections - both uses which inhibit the ability to utilize the space for gathering and create overcrowding conditions during the transition time between classes.

*Building Condition* – The current physical condition of the Science Building ranks well below that of EWU's peer institutions and its age is more than double that of buildings at peer institutions. This puts EWU at a competitive disadvantage in the current educational market.

*Technology Deficiencies* – The current building is inadequate for supporting the technology needs of EWU. Some of these issues are inherent in the design of a building that could not predict network connectivity. Access to cable infrastructure is more difficult than a modern lab building limiting the flexibility to make quick changes. Research labs are heavily data driven and the importance of integrating technology into research is only increasing.

The Science Renovation project reflects efforts to increase instructional productivity, leverage existing square footage, optimize the use of existing facilities, and create the potential for collaboration between students and academic departments. The project will also directly foster excellence in learning by improving and expanding research and teaching facilities, thereby increasing opportunities for undergraduate and graduate student research. Additionally, the project fosters individual student-faculty interaction through the incorporation of collaboration/informal learning spaces, and through the building's connection to the adjacent Interdisciplinary Science Center (ISC).

#### Upon Completion of Phase I and Phase II, the Science Renovation Project will Achieve the Following Goals:

- Meet EWU's and the Science Programs projected growth in STEM and Healthcare related professions.
- Address a shortage of suitable classroom, office, research and lab space within the science department, and create student interaction/collaborative spaces throughout the new Science Renovation project.
- Teaching, research and lab support spaces need to be updated to meet current programmatic needs.
- Encourage collaboration and synergy across departments, promote increased flow and movement between the Science Building Renovation and new Interdisciplinary Science Center Building.
# APPENDICES

# Supporting Reference Data

#### **APPENDIX A**

Predesign Study EWU Science Building Renovation

Available at the following website address: <u>https://goo.gl/xGpYQG</u>



#### **APPENDIX B**

#### Availability of Space/Campus Utilization

AVAILABILITY OF SPACE					
Project Name: Science Renovation	REQUIRED FOR ALL CATEGORIES EXCEPT ACQUISITION AND INF			CTURE.	
Campus location: EWU- Cheney, WA					

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2016 on the proposed project's campus. Please fill in the blue shaded cells for the **campus** where the project is located.

	(b) General University Lab Utilization	
93,975	Fall 2015 Weekly Contact Hours	18,386
2.00%	Multiply by % FTE Increase Budgeted	2.00%
95,855	Expected Fall 2016 Contact Hours	18,754
6,712	Expected Fall 2016 Class Lab Seats	2,433
14.3	Expected Hours per Week Utilization	7.7
22.0	HECB GUL Utilization Standard	16.0
-35%	Difference in Utilization Standard	-52%
	93,975 2.00% 95,855 6,712 <b>14.3</b> 22.0 -35%	(b) General University Lab Utilization93,975Fall 2015 Weekly Contact Hours2.00%Multiply by % FTE Increase Budgeted95,855Expected Fall 2016 Contact Hours6,712Expected Fall 2016 Class Lab Seats14.3Expected Hours per Week Utilization22.0HECB GUL Utilization Standard-35%Difference in Utilization Standard

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

Based upon evaluation of overall campus space requirement during our last Comprehensive Campus Master Plan (2014), the university is currently evaluating the quantity and condition of classroom and laboratory spaces and seats. The process will evaluate those classroom and laboratory spaces that do not meet current needs, either quality or seat numbers. Those that cannot be scheduled at a high utilization rate will be taken off-line and used for student support spaces, faculty offices and other areas of need that were identified and our space analysis. This process will decrease the classroom and laboratory seating inventory to improve utilization rates. Since

Note: Fall 2016 utilization should be estimated by increasing the fall 2015 actual enrollment by the fiscal growth factor by which academic vear 2016-2017 state-supported enrollments is budgeted.

## **A**PPENDIX **C**

## Ceiling Photo



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 12:57PM

Project Number: 30000549 Project Title: Science Renovation

#### **Description**

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:2

#### Project Summary

A complete renovation of the Science Building allows EWU to take strategic advantage of the areas vacated to accommodate needed program growth in the Chemistry, Biology, Physics, and Geology departments as well as resolving health, safety, welfare, and maintenance/repair deficiencies within the current Science Building.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Recently Eastern Washington University has seen twelve percent growth in student population; within the next ten years, another twenty percent growth in student population is expected. The combined increase in student population, as well as an increased interest in STEM fields, has led to a disproportionate number of students seeking degrees in the sciences (20.6% growth in three years), when compared to past trends. Additionally, regional demand for students in STEM (Science, Technology, Engineering, and Math) related fields has also increased, especially in the engineering, computer science, environmental, and healthcare fields. The growth of healthcare in the Spokane region will mean that a larger number of students will seek related degrees to fill the increased need. Increasing numbers of pre-med students have pushed the need for chemistry and biology courses. Growth in accredited mechanical and electrical engineering programs put pressure on prerequisite chemistry and physics classes. Increasing student populations, more interest in STEM related fields, and a greater regional demand for graduates within STEM and healthcare fields have put pressure on the science program growth to fulfill the basic and advanced science courses - especially biology, chemistry, physics, and geology classes - which are prerequisites to completing degree requirements. Given the current facilities available, EWU will not be able to meet the increased demand for either quality or quantity of science classes available.

The existing Science Building is the only building on the EWU campus capable of supporting chemistry, physics, biology, and geology teaching and research. Lower division chemistry, general biology, anatomy, and physiology courses are at, or beyond, the capacity of the space available in the teaching laboratories of the Science Building. Many introductory classes are offered currently as lecture only, without a laboratory component, due to lack of space; this approach compromises the instructional program. Existing labs are insufficient in size to accommodate the increased number of students per section. Additionally, research lab space is not able to serve the research needs required to add faculty or address the requirements of the various science majors. Specialized resource areas lack space to accommodate student research projects. The program also lacks an inorganic/physical chemistry and an analytical chemistry teaching lab, which are key program components in the degree field. There is also a great need for adjacent support space, including preparation space for teaching labs and equipment storage. Utilization rates for teaching labs are reduced as lab support storage occurs within the classrooms and more time is required to prepare the lab for each class.

The Science Building contains serious deficiencies that are at odds with the university's strategies to achieve its mission of fostering excellence in learning through quality academic programs, undergraduate and graduate student research and individual student-faculty interactions with the existing Science Building. These deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and soaring energy costs.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

The Biology, Chemistry, Geology, and Physics departments will predominantly be housed in the Science Building. The building is envisioned to renovate the existing building to accommodate teaching laboratories, research laboratories, lab support facilities, student project and study areas, some faculty offices, and classrooms with science demonstration capability that will

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 12:57PM

Project Number: 30000549

Project Title: Science Renovation

#### **Description**

support the lecture needs of the departments.

As identified in the Predesign Study, the renovation of the entire building would be split into two phases. Phase I design would be occur during the 2017-2019 biennium and construction during the 2019-2012 biennium. Phase II design would be occur during the 2019-2021 biennium and construction during the 2021-2023 biennium. This request is for the Phase I design.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Thought of as the second half of the Science Complex on the Eastern Washington University campus, this request seeks to complete the renovation of the existing Science Building in two phases. Working in tandem with the programmatic functions and layout of the ISC, the Science Renovation will house classrooms, research laboratories, teaching laboratories, administration, and offices for the chemistry, biology, physics, and geology programs. If the Science Building renovation would not receive State capital funding, the university would not be able to meet the growing demands for STEM and healthcare based degrees.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The Biology, Chemistry, Geology, and Physics departments will predominantly be housed in the Science Building. The building is envisioned to accommodate teaching laboratories, research laboratories, lab support facilities, student project and study areas, some faculty offices, and classrooms with science demonstration capability that will support the lecture needs of the departments.

## Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

## Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds will be used for this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

In 2014, the university update the Cheney Campus Comprehensive Master Plan. In Horizon 1 (2013 to 2023) 1.4.1, the plan states: Significantly renovate or replace the Science Building. With the future construction of the Interdisciplinary Science Building, several spaces within the existing building will be vacated allowing for growth within the remaining science departments without the potential of making significant additions.

In the 2014 comprehensive master plan, the new science building was to be constructed in two phase, locating both in the southeast quadrant of the Cheney campus. Since then, the university has shifted their plan to construct the Interdisciplinary Science Building on a site immediately adjacent to the existing Science Building to house Chemistry and Biology teaching laboratories and to remodel the existing building to provide all other necessary science academic and support functions. In both scenarios, the sequence of construction remained the same where the remodeling of the existing building follows the construction of the new science facility.

The academic certification requirements for STEM curriculum is largely dependent on the facilities associated with them, particularly in the areas of laboratory sciences. Given that the Science Renovation project is planned to provide spaces for the

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 12:57PM

#### Project Number: 30000549

Project Title: Science Renovation

#### **Description**

majority of research in chemistry, biology, microbiology and geology, certification hinges on the facility's ability to accommodate these functions that certification is hinged upon.

The spaces created in this renovation would greatly enhance the University's ability to conduct research which is critical for recruitment, accreditation and retention of tenured faculty as well as incoming and upper-class students.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

Located on the Cheney campus of Eastern Washington University, this project is not linked to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

The existing Science Building was constructed in 1962 as a two-story 109,000 gross square-foot structure. A 39,200 gross square-foot addition was completed in 1989, and increased the total building area to 148,149 gross square feet. Additional minor cosmetic renovations were undertaken between 1990 and 1994. The weighted age of the building is 46.8 years.

The current physical condition of the Science Building ranks well below that of EWU's peer institutions and at a weighted age of 46.8 years, is more than double that of buildings at peer institutions. The 2015 State Facility Inventory System rates the existing Science Building's condition as "4 - Limited Functionality" because of the significant issues with worn-out systems that are performing poorly or not at all.

Many of the critical systems that sustain the operation of the existing Science Building received individual condition scores of 4 with one (Controls and Instrumentation) received a 5. The systems critical to health and safety, like fume hood ventilation, chemical storage ventilation, emergency showers, and uninterruptable power supply, are in desperate need of replacement, and are near failure, or have already partially failed.

The average score of the equipment and furnishings section, which includes laboratory cabinetry and laboratory equipment, was 3.0. This score indicates that systems critical to accessibility and pedagogy like sinks, gas and air supply, and countertops are also in desperate need of replacement and are near failure or have already partially failed.

Per Executive Order 05-05 the Science Building Renovation project, will comply with Department of Archeological and Historic Preservation (DAHP) and the Governor's Office of Indian Affairs (GOIA) requirements, as compulsory by the State of Washington. The university and our architectural consultant will consult with DAHP and GOIA, throughout the course of design and construction, so as to meet the requirements of Executive Order 05-05 on this major capital project. Documentation of this process will be provide by the university as required.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### Project Type

Remodel/Renovate/Modernize (Major Projects)



2017-19 Biennium

Version: A6 Eastern Washington University

**Report Number:** CBS002 **Date Run:** 9/15/2016 12:57PM

Project Number: 30000549

Project Title: Science Renovation

#### **Description**

#### **Growth Management impacts**

There are no Growth Management impact on this project

#### New Facility: No

How does this fit in master plan

This project is a renovation of an existing facility.

#### Funding

			Expenditures		2017-19	Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	102,374,000				7,592,000
	Total	102,374,000	0	0	0	7,592,000
		F	Future Fiscal Peri	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State	49,329,000	45,453,000			
	Total	49,329,000	45,453,000	0	0	
Oper	ating Impacts					

#### No Operating Impact

## OFM

## **Capital Project Request**

2017-19 Biennium

Parameter	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000549	30000549
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Science Renovation - Phase 1	
OFM Project Number	30000549	

Contact Information				
Name	Jeff Weaver / Roen Associates			
Phone Number	(509)838-8688			
Email	jeffw@roenassociates.com			

Statistics					
Gross Square Feet	73,498	MACC per Square Foot	\$400		
Usable Square Feet	50,787	Escalated MACC per Square Foot	\$444		
Space Efficiency	69.1%	A/E Fee Class	А		
Construction Type	Laboratories (Research)	A/E Fee Percentage	10.82%		
Remodel	Yes	Projected Life of Asset (Years)	50		
	Additiona	al Project Details			
Alternative Public Works Project	No	Art Requirement Applies	Yes		
Inflation Rate	2.80%	Higher Ed Institution	Yes		
Sales Tax Rate %	8.70%	Location Used for Tax Rate	3,202		
Contingency Rate	9%				
Base Month	July-16				
Project Administered By	Agency				

Schedule				
Predesign Start	January-16	Predesign End	July-16	
Design Start	January-18	Design End	June-19	
Construction Start	September-19	Construction End	January-21	
Construction Duration	16 Months			

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Project Cost Estimate			
Total Project	\$45,773,449	Total Project Escalated	\$50,666,162
		Rounded Escalated Total	\$50,666,000

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University
Project Name	Science Renovation - Phase 1
OFM Project Number	30000549

## **Cost Estimate Summary**

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services					
Predesign Services	\$231,457				
A/E Basic Design Services	\$2,394,846				
Extra Services	\$1,270,000				
Other Services	\$2,529,632				
Design Services Contingency	\$578,334				
Consultant Services Subtotal	\$7,004,269	Consultant Services Subtotal Escalated	\$7,592,440		

#### Construction

Construction Contingencies	\$2,643,076	Construction Contingencies Escalated	\$2,938,572
Maximum Allowable Construction Cost (MACC)	\$29,367,508	Maximum Allowable Construction Cost (MACC) Escalated	\$32,645,953
Sales Tax	\$2,784,921	Sales Tax Escalated	\$3,095,854
Construction Subtotal	\$34,795,505	Construction Subtotal Escalated	\$38,680,379

	Ec	uipment	
Equipment	\$1,836,000		
Sales Tax	\$159,732		
Non-Taxable Items	\$0		
Equipment Subtotal	\$1,995,732	Equipment Subtotal Escalated	\$2,218,856

Artwork			
Artwork Subtotal	\$163,230	Artwork Subtotal Escalated	\$163,230

	Agency Proj	ect Administration	
Agency Project Administration Subtotal	\$1,502,302		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,502,302	Project Administation Subtotal Escalated	\$1,670,259

Other Costs			
Other Costs Subtotal	\$312,412	Other Costs Subtotal Escalated	\$340,998

	Project C	ost Estimate	
Total Project	\$45,773,449	Total Project Escalated	\$50,666,162
		Rounded Escalated Total	\$50,666,000

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency Project Name OFM Project Number Eastern Washington University Science Renovation - Phase 1 30000549

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Science Renovation - Phase 2	
OFM Project Number	30000549	

	Contact Information	
Name	Jeff Weaver / Roen Associates	
Phone Number	(509)838-8688	
Email	jeffw@roenassociates.com	

	S	tatistics	
Gross Square Feet	73,498	MACC per Square Foot	\$400
Usable Square Feet	50,787	Escalated MACC per Square Foot	\$469
Space Efficiency	69.1%	A/E Fee Class	А
Construction Type	Laboratories (Research)	A/E Fee Percentage	10.82%
Remodel	Yes	Projected Life of Asset (Years)	50
	Additiona	al Project Details	
Alternative Public Works Project	No	Art Requirement Applies	Yes
Inflation Rate	2.80%	Higher Ed Institution	Yes
Sales Tax Rate %	8.70%	Location Used for Tax Rate	3,202
Contingency Rate	9%		
Base Month	July-16		
Project Administered By	Agency		

		chedule	
Predesign Start	January-16	Predesign End	July-16
Design Start	July-20	Design End	June-21
Construction Start	September-21	Construction End	January-23
Construction Duration	16 Months		

Green cells must be filled in by user

	Project C	ost Estimate	
Total Project	\$44,191,721	Total Project Escalated	\$51,708,462
		Rounded Escalated Total	\$51,708,000

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University
Project Name	Science Renovation - Phase 2
OFM Project Number	30000549

## **Cost Estimate Summary**

Acquisition					
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0		

Consultant Services					
Predesign Services	\$231,457				
A/E Basic Design Services	\$2,394,846				
Extra Services	\$1,270,000				
Other Services	\$1,123,699				
Design Services Contingency	\$451,800				
Consultant Services Subtotal	\$5,471,802	Consultant Services Subtotal Escalated	\$6,255,036		

Construction						

Construction Contingencies	\$2,643,076	Construction Contingencies Escalated	\$3,105,614
Maximum Allowable Construction Cost (MACC)	\$29,367,508	Maximum Allowable Construction Cost (MACC) Escalated	\$34,501,694
Sales Tax	\$2,784,921	Sales Tax Escalated	\$3,271,836
Construction Subtotal	\$34,795,505	Construction Subtotal Escalated	\$40,879,144

Equipment					
Equipment	\$1,836,000				
Sales Tax	\$159,732				
Non-Taxable Items	\$0				
Equipment Subtotal	\$1,995,732	Equipment Subtotal Escalated	\$2,344,986		

Artwork					
Artwork Subtotal	\$172,508	Artwork Subtotal Escalated	\$172,508		

Agency Project Administration					
Agency Project Administration Subtotal	\$1,443,761				
DES Additional Services Subtotal	\$0				
Other Project Admin Costs	\$0				
Project Administration Subtotal	\$1,443,761	Project Administation Subtotal Escalated	\$1,696,420		

Other Costs					
Other Costs Subtotal	\$312,412	Other Costs Subtotal Escalated	\$360,368		

Project Cost Estimate					
Total Project	\$44,191,721	Total Project Escalated	\$51,708,462		
		Rounded Escalated Total	\$51,708,000		

## AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency Project Name OFM Project Number Eastern Washington University Science Renovation - Phase 2 30000549

#### **PROJECT DATA**

Institution - Eastern Washington University

Project Title - Engineering Building

Project Location - Cheney, Washington

#### **1. PROBLEM STATEMENT**

# The current success and sustained growth of EWU's Engineering programs and degrees is being limited by the lack of appropriate space for STEM-related programs. EWU's current facilities infrastructure and technology are inadequate for continued student success. EWU's currently cannot accommodate additional growth due to space limitations.

Eastern is proud to offer a wide range of engineering and technical programs related to engineering and design, including conceptual Electrical Engineering and Mechanical Engineering programs. We have rigorous, but pragmatic Mechanical Engineering Technology degrees that offer hands-on and production-oriented Technology degrees, with options in Construction, Design, and Manufacturing. A major in Visual Communication Design educates and prepares students to conceive and produce creative solutions to satisfy the visual communication needs of society. EWU's Engineering classes are taught exclusively by faculty with industry experience.

Engineering is essential to solving Washington's most complex challenges, including efficient transportation, environmental sustainability, affordable housing, and economic security. Eastern continues to promote the growth of engineering programs and degrees that provide students the most affordable opportunity for this high level of technical education. In 2005, Eastern started the Electrical Engineering program; in 2010, the university started the Mechanical Engineering program. Since their inception, both accredited programs have experienced considerable growth and success in providing qualified graduates to the marketplace. Forecasted growth shows Engineering programs/degrees is one of the university fastest growing fields.

#### **Forecasted Growth**

Mechanical Engineering/Mechanical Engineering Technology	10% per year
Visual Communications Design	7% per year
Technology	10% per year
Electrical Engineering	5% per year

#### Programmatic Goals

This pre-design request is to fund a pre-design study to ultimately design and build a new engineering building on Eastern's Cheney campus to improve engineering facility infrastructure and accommodate additional program growth.

The Engineering programs currently reside in two buildings, the Computer and Engineering Building (CEB) and Cheney Hall. Engineering and other programs heavily use both facilities. Engineering faculty office space is currently located in various other buildings across campus. The growth of the programs and increasing program size requires additional program space that the CEB cannot accommodate, as well as technology and building systems of a quality that Cheney Hall, in its current condition, cannot provide. The growth of Eastern's engineering related programs is dependent on higher quality instructional and support space.

#### 2. HISTORY OF THE PROJECT OR FACILITY

Cheney Hall was originally designed and constructed in 1967 to house the Industrial Arts classes and office spaces that would move out of the old Manual Art building. This building, at 31,018 gross square feet, remained the center of the Industrial Arts Education program and home to the department as the focus of the program shifted toward engineering and took the name

Industrial Technology. By the late 1990s, the building was no longer a satisfactory home for the department, which needed new equipment and facilities to support its revised curriculum. The new Computing and Engineering Building (CEB), completed in 2005 became the home for program faculty, classrooms, labs, and shops; Cheney Hall was then used for classroom and office space for programs that were temporarily displaced to allow for remodeling or major repairs of other buildings.

In 2005, Eastern Washington University added a new Bachelor of Science in Electrical Engineering. When the program was accredited in 2006, several rooms in Cheney Hall were modified to the power laboratory, microelectronics, the circuits laboratory, and the Visual Communication Design lab. In 2010, a Bachelor of Science in Mechanical Engineering was added and the program was accredited in 2011.

Since 2010-11, Engineering and Design has grown approximately 60%. This requires the university to look for additional high-quality support, instructional and lab space. The focus of the pre-design study would be to quantify the space needs, as well as the technology required in those spaces.

#### 3. UNIVERSITY PROGRAMS ADDRESSED OR ENCOMPASSED BY THE PROJECT:

Current programs/degrees associated with this project are as follows:

#### Bachelor of Science in Electrical Engineering

This ABET accredited degree combines studies in physics, mathematics, electronics, electricity and science to prepare students to solve real-world problems in electrical engineering. The B.S. in EE prepares students to work in the research and development of ideas, products, and processes in electrical engineering positions in business, industry and government.

#### Bachelor of Science in Mechanical Engineering

The ABET accredited Mechanical Engineering degree builds on concepts studied in physics, math and the sciences. Its aim is to prepare students to be knowledgeable in their fields and be effective problem solvers. The senior capstone project allows students to combine theory and practice in order to solve a specific engineering problem.

#### Bachelor of Science in Mechanical Engineering Technology

This ABET accredited program combines the studies of mathematics, computer science, physics and engineering technology to emphasize design and manufacturing applications. The curriculum includes fundamental mechanical engineering technology course with an emphasis on applications. This degree prepares graduates for positions in areas such as mechanical design, industrial and manufacturing engineering technology, CADD/CAM; management; applied research, and sales and service.

#### Bachelor of Science in Technology/Manufacturing

This degree focuses focuses on selected areas of technology, science and business. Automated equipment, computer-aided drafting, and management are among the courses emphasized. This option prepares the student to enter and progress in industry in a variety of areas including quality assurance, inventory control, production line supervision, or process management.

#### Bachelor of Science in Technology/Construction

This degree focuses on selected areas of technology, physics, and math, emphasizing courses such as engineering graphics, materials and techniques, and construction internship. This degree prepares graduates to enter and progress in the construction industry in positions such as estimating, materials testing, inspecting, surveying, and management.

#### Bachelor of Science in Technology/Design

This degree program includes courses fundamental to industrial design with emphasis on applications, including metals technology, engineering graphics, industrial design, CAD, and other applied engineering courses. This option prepares graduates for employment in areas such as mechanical design manufacturing, CADD/CAM, management, applied research and sales and service.

#### Bachelor of Science in Applied Technology

This program is designed for students who have graduated with very specific associate degrees in Applied Science (AAS). This degree allows students to continue their education by taking additional advanced technology courses, general education coursework, and supporting courses to complete a Bachelor of Science degree. The program is offered both locally and as distance education. Please visit the Applied Technology page for a list of acceptable degrees.

#### Bachelor of Arts in Visual Communications Design

In this degree program, graduates are prepared for careers in graphic design, web design, multimedia design, advertising, printing, publishing or related fields.

#### 4. INTEGRAL TO ACHIEVING STATEWIDE POLICY GOALS:

Provide degree targets, and describe how the project promotes improvement on <u>2014-15 degree production totals in the OFM</u> <u>four-year public dashboard</u>.

Indicate the number of bachelor's degrees awarded at the close of the 2014-15 academic year.

Undergraduate degrees awarded = 2399

Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2014-15 academic year. STEM/High Demand Undergraduate degrees awarded = 901 (37.56%)

Indicate the number of advanced degrees awarded at the close of the 2014-15 academic year.

Graduate degrees awarded = 415

STEM/High Demand Grad degrees awarded = 115 (27.71%)

Program	2011-12	2012-13	2013-14	2014-15
Electrical Engineering	23	38	42	47
Mechanical Engineering/ME Technology	23	37	34	62
Visual Communications Design	45	32	48	51
Technology	37	48	44	43
Total	128	155	168	203





#### 5. DESCRIBE HOW THE PROJECT PROMOTES ACCESS FOR UNDERSERVED REGIONS AND PLACE-BOUND ADULTS THROUGH DISTANCE LEARNING AND/OR UNIVERSITY CENTERS

Is distance learning or a university center a large and significant component of the total project scope? If yes, to what degree of percentage?

Yes, one of Eastern's primary strategic goals is to be a national leader in developing multiple pathways for students to complete degrees. New programs and degrees are promoted for online/hybrid delivery that meet regional and statewide needs. Eastern is the best value in the state of Washington and our commitment to access is enhanced through a variety of type of program and

degree delivery opportunities. Targets for online and distance learning course that would be represented in this new facility would be approximate 20%.

Is the project likely to enroll a significant number of students who are place-bound or residents of underserved regions?

A primary goal in Eastern's strategic plan is to create the EWU Virtual Campus, which will provide a premier learning environment for place-bound students and professionals seeking to improve their skills and their own potential for promotion within the workplace. We are a university of opportunity and the programs housed in the facility would offer a high potential for a variety of technically oriented degrees to be completed by place-bound students through online offerings.

Additionally, students in certain technical fields, at no less than 24 community colleges, in the state and region have the option of completing a Bachelor of Science in Applied Technology with their AA degree through Eastern's transfer program. Graduates with specific Associate of Science degrees from the Spokane Community College System may also complete bachelor degrees in Applied Technology on the Cheney campus.

#### 6. INTEGRAL TO CAMPUS/FACILITIES MASTER PLAN

Describe the proposed project's relationship and relative importance to the institution's most recent Campus/Facilities Master Plan or other applicable strategic plan.

In 2014, the university update the Cheney Campus Comprehensive Master Plan. In Horizon 1 (2013 to 2023) 1.4.5, the plan states: Construct addition to the Computer and Engineering Building. The intention of the pre-design study is to asses this facility for its use to fulfil that part of the Comprehensive Campus Master Plan. The intent to evaluate the building for renewal, expansion or if those options are not cost effective and meet the university need request a building adjacent to Cheney Hall and the Computer Engineering Building that supports those needs. The current Comprehensive Campus Master Plan can be seem in its entirety at:

https://access.ewu.edu/Documents/Construction%20and%20Planning/Capital%20Planning/EWU-CCMP\_All%20Sections\_Web\_optimized.pdf

Does the project follow the sequencing laid out in the Master Plan (if applicable)? If not, explain why it is being requested now.

Eastern's planning process integrates comprehensive campus planning with our facilities masterplan and our ten-year capital plan. This process provides short and long range planning that are well thought out but still dynamic and flexible enough to meet current and future campus needs. Our planning process and reporting shows that growth in our engineering related programs and degrees are a high priority for current and future campus strategy.

#### 7. INTEGRAL TO INSTITUTION'S ACADEMIC PROGRAMS PLAN

Describe the proposed project's relationship and relative importance to the institution's most recent Academic Programs Plan.

Eastern's current Strategic plan in its entirety is located at <a href="https://www.ewu.edu/Documents/Strategicplanning/10453%20strategic%20plan%20booklet%202%203%2015.pdf">https://www.ewu.edu/Documents/Strategicplanning/10453%20strategic%20plan%20booklet%202%203%2015.pdf</a>

Students are at the center of all that Eastern does. EWU is a national leader for successfully attracting, retaining, graduating and transforming the lives of all students, including under-presented, first generation, non-traditional and diverse students of all backgrounds. Improving learning opportunities and educational outcomes in STEM-related areas is the primary goal of the nation and the state of Washington; this goal is integrated into Eastern's Strategic Plan. "Innovation and opportunity" in our 2014 Strategic and Academic program plan reflect the university's commitment to visibility as an outcome of successful work toward student success.

Academic program planning and review are embedded in the University's Policy under: Accountability, Program Improvement, and Program and Resource alignment (EWU Policy 303-40) located at <u>https://cfweb.ewu.edu/policy/PolicyFiles/AP\_303\_40.pdf</u>

Must the project be initiated soon in order to:

#### a. Meet academic certification requirements?

As previously stated, the sustained growth of engineering programs will continue as the university continues to provide proficient and high-level instructional support along with facilities that support our students' success. The opportunity is clear: to continue the trajectory of the programs that will not only change our student's lifelong potential but also solve some of the 21st century's most challenging issues.

At the core of this request is the lack of capacity that is impeding growth. The current capacity is an obstacle to growth in the Engineering disciplines. Currently there is not certification difficulty in the programs, but the ability to move forward with additional programs and degrees will be hindered without specific teaching and research laboratory spaces available. Programs that require flexible and multi-discipline collaboration spaces are key for future degree certification.

#### b. Permit enrollment growth and/or specific quality improvements in current programs?

Yes, currently our growth is restricted by lack of quality space and lack of faculty FTEs to instruct Engineering classes. The design and construction of a new engineering facility will allow continued program growth and degree production.

Eastern is currently seeing substantial growth in our Engineering program. We pride ourselves in providing highly technical degrees at the most affordable cost in the state. As mentioned above, the challenges are current space availability and the quality of the spaces that serve these programs. While we are the destination for students looking for affordable, highly technical, and industry-sought degrees, our current facilities cannot provide continued growth in engineering and other STEM related fields. A new facility would allow for continued growth in student FTEs and improve the quality of the teaching spaces supporting the Engineering program.

#### c. Permit initiation of new programs?

Degrees, certifications and programs that require new academic space to succeed are listed below. They are currently under review to enhance and expand engineering academic offering.

#### M.S. Engineering

The Master of Science in Engineering program is designed for students who currently hold a B.S. in Engineering and wish to expand their knowledge of Mechanical and/or Electrical Engineering with an emphasis on Engineering Management. The program combines senior level electives in ME or EE with courses focused on LEAN, Six Sigma, and developing more efficient engineering teams. In addition to the course work, students must complete a project related to their current work since the program is designed for working engineers.

#### M.S. Technology

The Master of Science in Technology program is designed for students who currently hold a B.S. in Technology (any option) at EWU or another university with a comparable Technology program and wish to expand their knowledge and experience directly tied to their work field. The program combines core classes with Technology electives with courses focused on applying principles and concepts that were initially taught in the students matching B.S program. Teamwork and critical problem solving methods are essential elements of this program. In addition to the course work, students will complete a project related to their current work field as the program is designed for applying technological solutions directly to the needs of the workplace.

#### Certification of the Construction Management Degree

A short-term goal for engineering is the certification of the Construction Managements program and degree. Once the Construction Management program is certified, the university will take the necessary steps to establish a *Bachelor of Science in Civil Engineering*.

#### **Computer Engineering**

Computer Engineering (CpE) represents the development and implementation of innovative solutions in software, hardware, application and product development in the landscape of current computer science. It is at the intersection of the Software Engineering and Digital Electronics Engineering areas. It is a fast growing field that has provided the world with completely

new products like smart phones, tablets, and even the ability to create a "smart" electric grid. It is in the CpE industry that today's technology companies most avidly define and protect their intellectual property, ultimately leading to some of the best paying and most exciting careers available. By drawing on the combined strengths of Software and Electrical Engineering, today's CpEs are changing the world, driving the innovation and economic growth that is so important to our region, our state, and our country. We are currently designing the curriculum for this exciting new major at EWU.

#### Program in Production Design/Industrial Design.

Production Design/Industrial Design students are prepared to effectively participate in a design environment, generate conceptual design sketches and drawings, create complex design layouts, perform static and dynamic analysis, create models and prototypes, define complex surfaces and shapes, and understand and integrate manufacturing principles into product designs.

#### 8. SUITABILITY OF EXISTING SPACE:

Identify space upgrades needed and/or lack of suitable space needed to address existing and/or future program standards and needs.

#### Pedagogical Deficiencies in the Computer Engineer Building (CEB)

*Teaching Lab and Research Space:* The current facilities that house the Engineering program lack the appropriate amount of instructional and research space. Current laboratory space is limiting growth and the current technology does not allow for multi-program collaborations in these spaces.

*Faculty Offices:* Locations for engineering faculty is problematic. Many faculty are located in available areas far from their programs. Hiring of new faculty is a challenge with no office space to provide for them.

#### Pedagogical Deficiencies in Cheney Hall include:

*Technology deficiencies:* The existing Cheney Hall building is unsuitable for today's educational technology. Data infrastructure—including wired and wireless connectivity—are lacking, as are appropriate audio-visual and data facilities. The building's primary and secondary electrical system are original (1967) and do not allow for the equipment associated with today's instruction delivery, in these programs especially. Building heating, ventilation, and air conditioning systems are of original design and installation. They do not meet current energy code and indoor air quality issues are prevalent in the facility. This facility's shortcomings have a substantial effect on instruction in the classrooms and laboratory spaces. The building does not meet current ADA requirements so it can be restrictive to students with mobility issues.

*Lack of student spaces:* The existing Cheney Hall completely lacks the non-classroom spaces that enable the "excellent studentcentered learning environment" envisioned in the university's mission. Spaces for informal student gathering, collaboration, and study are currently non-existent. The building is also lacking computer labs, lounges, and collaborative spaces as well as student spaces for informal and non-instructional interactions. Lack of appropriate faculty offices is an obstacle to program growth.

*Laboratory spaces:* The Mechanical Engineering, Mechanical Engineering Technology, Electrical Engineering, and Technology programs all use specialized computer software that runs on Windows based systems. The specific demands of both Engineering and Visual Communication Design curricula require a computer lab dedicated to the programs.

Faculty Offices: Cheney Hall has the same challenges as CEB with regard to spaces available for faculty offices.

#### Pedagogical deficiencies (solutions):

*Technology:* Spaces in the new Engineering building will support changing technologies and dynamic laboratory environments. Teaching laboratories will feature the latest technological tools to support teaching goals and engineering demonstrations while remaining flexible enough to accommodate future changes to equipment and lab functions.

*Interaction:* The pre-design study would include the assessment of areas outside of classrooms and laboratories that provide opportunities for students to study and interact with one another. Commuters comprise 80% of EWU students, so it is vital that new facilities incorporate study and lounge spaces, as well as enhanced technologies to support virtual study. One of the goals of the pre-design study is to develop program spaces that support interaction spaces that include conference rooms,

lounges, student study areas, casual spaces for student interaction, display and announcement boards, and outdoor gathering spaces.

*Teaching Laboratories:* The Mechanical Engineering, Mechanical Engineering Technology, and Technology (Manufacturing option) all make extensive use of the shops located in the basement of the Computer Engineering Building (CEB). In order to meet growth in programs, additional shops and labs need to be programmed and developed to support sustainability and growth. A new lab on embedded systems is required to deal with the increasing interest in this field from regional industries. Additionally significant safety issues arise in current laboratory spaces that are overcrowded and confined. The ability for the instructor to have sightlines to all laboratory participants is critical to student safety.

*Research Laboratories:* The Engineering programs at EWU have developed very successful Rocketry projects that expose students to real-world engineering over the past few years. These teams needed to borrowed space from off-site agencies due to lack of space. To continue these and similar project-based teams, dedicated space is required. A 2000 ft<sup>2</sup> lab with outside access could meet these needs. The lab would need to be equipped with a fume hood and ventilation for handling propellant and metal fabrication, as well as significant storage space and open floor workspace. Current laboratories do not have the vibration isolation and sound insulation that is required for high level experiments and research. The Engineering building will have portion of laboratory spaces that meet the industry standards for testing and instruction in engineering disciplines.

#### 9. AVAILABILITY OF SPACE/ UTILIZATION ON CAMPUS: (APPENDIX A)

Describe the institution's plan for improving space utilization and how the project will impact the following:

Currently the university does not require any additional classroom (110) in this project. Typical classroom assignments within the Engineering programs are accomplished in other classrooms across campus.

Eastern current has an abundance of classroom space and seats. Based upon the evaluation that was done during our last Comprehensive Campus Master Plan, growth projections show that we will need to increase the level of our non-classroom student support spaces. The current plan is to evaluate our current inventory and classrooms and renovate spaces that do not fit our classroom inventory needs to non-classroom support spaces. These renovations may be for faculty offices, student academic support space or other needs.

#### The Utilization of Class Laboratory Space

The current inventory of teaching lab space does not meet the specific technical needs of the engineering program. Available lab space does not have the infrastructure or equipment for many of the functions with the programs. In addition, there is a shortage of shop lab space with the current levels of need of programs such as engineering, technology and computer science. Programming for new lab space in this project will be assessed for how it supports the project and the goals of the department and university, and also how it affects the overall utilization rates for teaching labs for the university as a whole.

In 2014 the university revisited and revised its Comprehensive Campus Master Plan. Part of work on the CCMP was determining the need for a variety of space types on the Cheney campus and how forecast growth would affect those spaces. It was determined that the university in order to keep pace with annual growth of 2% would need to add addition square feet in the next 10 year planning horizon. Having established that, the university has adequate classroom seats to meet it growth goals. The spaces that are going to be in demand and lacking during that 10 year horizon are student support spaces.

Those spaces consist of faculty offices, student study spaces, nontraditional meeting and out of classroom spaces. Many of the university's classroom (110) spaces meet the needs of academic instruction and therefore they are not scheduled in the most efficient manner. A comprehensive plan for evaluating the classroom inventory and "right sizing" that inventory for better and more efficient class scheduling and utilization will soon be underway. This process will look at the long term need for increasing student support spaces to meet the university's need while using unfavorable classroom spaces as opportunities for those support spaces. This strategy will increase spaces that will be in higher demand in the next planning horizon with spaces (classrooms) in which we have a higher level of seats that need to respond to academic programming.

This strategy will offer a low cost solution that can be implemented during regular upgrades within our existing buildings and will not require new square feet to attain the goals of both square footage needs.

The same process will be undertaken with 210 Teaching Laboratory spaces. Many of the current spaces do not have the infrastructure or technology needed for our current level of instruction. The university will inventory both the spaces and the levels of support they offer. If they are not effective due to their age or working condition they will be upgraded, taken off line or renovated into other space types needed to support programs and student success.

Eastern feels that this is a comprehensive and low cost way to redistribute campus square footage to the best advantage of the campus and the students in to the future.

#### **10.** CONDITION OF BUILDING

Provide the facility's condition score (1 superior -5 marginal functionality) from the 2016 Comparable Framework study, and summarize the major structural and systems conditions that resulted in that score. (Provide selected supporting documentation in appendices, and reference them in the body of the proposal.)

As stated there are two facilities that are currently supporting the programming of engineering and STEM related programs. They are Computer and Engineering Building (CEB) and Cheney Hall. CEB was completed in 2005 and very soon thereafter lacked any expansion space for program growth.

Cheney Hall was originally completed in 1966 to house the Industrial Arts program. The building is 50 years old. There have been some minor renovations of the building in 2006 and 2016. The balance of the shell and space is of original construction and condition. The Overall Facility Condition Score for the building is 2.6. Many of the components are in the Fair-Systems approaching end of expected life cycles with some at critical level of Needs Improvement; Limited Functionality.

- Substructure 2.0.
- Shell 2.3.
- The substructure and the shell of the building rank in the category of "good", the roof and window on the facility are original installation and do not meet current state energy code. In addition, the exterior walls and roof are not insulated and affect the utility cost of heating and cooling the building. These systems will be updated during the renovation of the facility.
- Interiors 2.8.
- Most the interior walls, floors and ceiling are "worn" due to age with ceiling ranking the 4 or "poor".
- Services 3.0.

The systems of the building are what show the most decline. While the Plumbing and Electrical are in the "fair" range, the HVAC and Fire Protection components are at the level of 4 and 5 "poor" equipment marginal or "unsatisfactory" system non-functioning or seriously deficient. The building HVAC system does not meet current Washington State energy code and there are reported indoor air quality issues that can only be address by a new ventilation system.

The building has many Americans with Disability Act (ADA) deficits due to the age and the original design. The elevator does meet current square foot or controls location to meet ADA requirements.

The Computer Engineering Building was completed in 2005. The 2016 Facility Condition Assessment ranks the condition of the facility is "good/excellent" with and **overall Facility Condition Score of 1.6.** The challenge is that the programs have exceeded the space available. The addition and subsequent growth of a Bachelor of Science in Mechanical Engineering, a Bachelor of Science in Electrical Engineering have outpaced the available space in CEB to support these programs and degrees.

At the time of the construction of the Computer and Engineering Building, the accreditation significant growth of the Electrical Engineering and Mechanical Engineering programs was not anticipated in the square footage to the building. Additionally, potential programs like the Construction Management Certification the Masters of Science in Technology, Master of Science in Computer Science were anticipated in the building but was identified as a future project in our Comprehensive Campus Master Plan/Facilities Master Plan.

# APPENDICES

Supporting Reference Data

#### **APPENDIX A**

#### Availability of Space/Campus Utilization

AVAILABILITY OF SPACE						
Project Name: Engineering Building			REQUIRED FOR ALL CATEGORIES EXCEPT ACQUISITION AND	) INFRASTRUCTURE.		
Campus location: EWU- Cheney, WA						

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2016 on the proposed project's campus. Please fill in the blue shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		(b) General University Lab Utilization	
Fall 2015 Weekly Contact Hours	93,975	Fall 2015 Weekly Contact Hours	18,386
Multiply by % FTE Increase Budgeted	2.00%	Multiply by % FTE Increase Budgeted	2.00%
Expected Fall 2016 Contact Hours	95,855	Expected Fall 2016 Contact Hours	18,754
Expected Fall 2016 Classroom Seats	6,712	Expected Fall 2016 Class Lab Seats	2,433
Expected Hours per Week Utilization	14.3	Expected Hours per Week Utilization	7.7
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Difference in Utilization Standard	-35%	Difference in Utilization Standard	-52%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

Based upon evaluation of overall campus space requirement during our last Comprehensive Campus Master Plan (2014), the university is currently evaluating the quantity and condition of classroom and laboratory spaces and seats. The process will evaluate those classroom and laboratory spaces that do not meet current needs, either quality or seat numbers. Those that cannot be scheduled at a high utilization rate will be taken off-line and used for student support spaces, faculty offices and other areas of need that were identified and our space analysis. This process will decrease the classroom and laboratory seating inventory to improve utilization rates. Since

Note: Fall 2016 utilization should be estimated by increasing the fall 2015 actual enrollment by the fiscal growth factor by which academic year 2016-2017 state-supported enrollments is budgeted.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:50AM

#### Project Number: 30000556 Project Title: Engineering Building

#### Description

Project Phase Title:Pre DesignStarting Fiscal Year:2018Project Class:ProgramAgency Priority:4

#### **Project Summary**

Problem Statement: The current success and sustained growth of Eastern Washington University's engineering programs and degrees is being limited by the lack of appropriate space to house STEM related programs. This has become a function of lack of required space and the lack of quality space to support student success.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern is proud to offer a wide range of engineering and technical programs related to engineering and design. Eastern offers conceptual Electrical Engineering and Mechanical Engineering programs. We have rigorous, but pragmatic Mechanical Engineering Technology degrees. The university offers hands-on, and production orientated Technology degrees with options in Construction, Design, and Manufacturing. Exclusively, faculty with industry experience teaches our engineering classes. A major in Visual Communication Design educates and prepares students to conceive and produce creative solutions to satisfy the visual communication needs of society.

Engineering is essential to solving Washington's most complex challenges, including efficient transportation, environmental sustainability, affordable housing, and economic security. E2SHB 1872 is focused on increasing learning opportunities and improve educational outcomes in science, technology, engineering and mathematics (STEM) through multiple strategies and statewide partnerships. Eastern continues to promote and grow programs and degrees in STEM related areas to provide students the most affordable opportunity for this high level of technical education. In 2005, Eastern started the Electrical Engineering program. In 2010, the university started the Mechanical Engineering program. Since their inception, both programs have been accredited and seen considerable growth and success in providing qualified graduates to the marketplace. Forecasted growth in engineer programs/degrees is one of the university fastest emerging areas.

#### **Forecasted Growth**

#### Mechanical Engineering/Mechanical Engineering Technology - 10% per year

Visual Communications Design - 7% per year

TECH - 10% per year

#### Electrical Engineering - 5% per year

**Problem Statement:** "The current success and sustained growth of Eastern Washington University's engineering programs and degrees is being limited by the lack of appropriate space to house STEM related programs. This has become a function of lack of required space and the lack of quality space to support student success."

Currently engineering programs reside in two building. The Computer and Engineering Building (CEB) and Cheney Hall. Engineering and other programs use both these facilities heavily. Current Engineering faculty are located in various other buildings, across campus, some in makeshift locations. The growth of the programs and increasing degree production requires additional program space that CEB cannot accommodate, and requires technology and building systems quality that Cheney Hall, in its current condition, cannot provide. The growth of Eastern's engineering and STEM related programs is dependent upon new quality instructional and support space.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:50AM

#### Project Number: 30000556

Project Title: Engineering Building

#### Description

This Pre Design request is for financial resources to develop a Pre Design Study to ultimately design and build a new engineering building on Eastern's Cheney Campus.

#### Pedagogical deficiencies in The Computer Engineer Building (CEB).

**Teaching lab and Research Space:** Lack of appropriate teaching and independent research laboratory space. Current laboratory space is limiting growth and the current technology does not allow for multi-program collaborations in these spaces.

**Faculty Offices:** Locations for engineering faculty is problematic. Many faculty are located in available areas far from their programs. Hiring of new faculty is a challenge with no spaces for them to reside.

#### Pedagogical deficiencies in Cheney Hall include:

**Technology deficiencies:** The existing Cheney Hall Building is unsuitable for today's educational technology. Data infrastructure including wired and wireless connectivity are lacking, as are appropriate audio-video and data facilities. The building primary and secondary electrical system are the original (1967) and do not allow for the equipment associated with today's instruction delivery, in these programs. Building heating, ventilation and air conditioning systems are of original design and installation. They do not meet current energy code and indoor air quality issues are prevalent in the facility. These facilities shortcomings have a substantial effect on instruction in the classrooms and laboratory spaces. The building does not meet current ADA requirements so it can be restrictive to students with mobility issues.

Lack of student spaces: The existing Cheney Hall completely lacks the non-classroom spaces that enable the "excellent student-centered learning environment" envisioned in the university's mission. Spaces for informal student gathering, collaboration, and study are currently non-existent. The building is lacking computer labs and there are no lounges or collaborative spaces. Even the corridors of Cheney, which might otherwise provide nooks and crannies for informal student use, do not have the space available for the continuation of learning outside the classroom that faculty and student can benefit. Faculty are housed in many buildings across campus, in various buildings, and makeshift offices that are of low quality. This has several negative side effects, such as decreased interaction between faculty, lower morale among faculty in the "off" locations, logistical problems, etc. Lack of appropriate faculty offices is an obstacle for growth in these programs in the future.

Laboratory spaces: The Mechanical Engineering, Mechanical Engineering Technology, Electrical Engineering, and Technology program all use specialized computer software that runs on Windows based systems. Due to the demand in current labs and specific software requirements, a dedicated computer lab is required for engineering students as well as students in Visual Computer Design programs.

Faculty Offices: Cheney has the same challenges as CEB with regard to spaces available for faculty offices.

# What will the request produce or construct (i.e., design of a building, construction of additional space, etc.)? When will the project start and complete? Identify whether the project can be phased, and if so, which phase is included in the request.

This request is for a pre design study to assess the space and technology needs of engineering programs and degrees based upon the problems stated in #1 above. The intent is complete the pre design study in the 2017-19 biennium and subsequently design and construct a new facility in 2019-21 and 2021-23 respectively. Whether or not the project can be phased will be assessed and report in the pre design study.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

#### **Space Requirements**

Engineering is co-located in the Computer Engineering Building (CEB) and Cheney Hall. CEB does not have adequate space

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#### Project Number: 30000556

**Project Title: Engineering Building** 

#### Description

available for the growth that has taken place since the building opened in 2005. Cheney Hall also lacks the programming space for the growing and expanding engineering programs. In addition Cheney Hall is a 50 year old building that does not have the infrastructure to support the department's requirement for technology, vibration isolation, electrical requirements and heating and ventilation requirements. Cheney Hall also lacks the office and student support spaces for the programs.

#### Pedagogical deficiencies (solutions):

Technology: Spaces in the new Engineering building will support changing technologies and dynamic laboratory environments. Teaching laboratories will feature the latest technological tools to support teaching goals and engineering demonstrations, while remaining flexible enough to accommodate future changes to equipment and lab functions.

Interaction: The pre design study would include assessment of areas outside of classroom and laboratories that provide opportunities for students to study and interact with one another. Commuters comprise 80% of EWU students, so it is vital that new facilities incorporate study and lounge spaces, as well as enhanced technologies to support virtual study. The goals of the pre design study is to develop program spaces that support interaction spaces to be created; this includes conference rooms, lounges, student study areas, casual spaces for student interaction, display and announcement boards, and outdoor gathering spaces.

Teaching Laboratories: The Mechanical Engineering, Mechanical Engineering Technology, and Technology (Manufacturing option) all make extensive use of the shops located in the basement of the Computer Engineering Building (CEB). In order to meet growth in these programs additional shop labs need to programmed and developed to support sustainability and growth. A new lab on Embedded Systems is required to deal with the increasing interest in this field from regional industry. Additionally significant safety issues arise in current laboratory spaces that are overcrowded and confined. The ability for the instructor to have sightlines to all laboratory participants is critical to student safety.

Research Laboratories: The Engineering programs at EWU have developed very successful Rocketry and Mini-Baja projects that expose the students to real world engineering over the past few years. These teams have borrowed space from off-site agencies because of lack of space. To continue these and similar project based teams, dedicated space is required. A 2000 ft2 lab with outside access could meet these needs. The lab would need to be equipped with a fume hood and ventilation for handling propellant and metal fabrication; this includes welding as well as significant storage space and open floor workspace. Current laboratories do not have the vibration isolation and sound insulation that is required for high level experiments and research. The Engineering building will have portion of laboratory spaces that meet the industry standards for testing and instruction in engineering disciplines.

#### Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc. Be prepared to provide detailed cost backup.

#### Current programs/degrees associate with this project are as follows:

#### B. S. in Electrical Engineering

This ABET accredited degree combines studies in physics, mathematics, electronics, electricity and science to prepare students to solve real-world problems in electrical engineering. The B. S. in EE prepares students to work in research and the development of ideas, products, and processes in electrical engineering positions in business, industry and government.

#### B. S. in Mechanical Engineering

The ABET accredited Mechanical Engineering degree builds on concepts studied in physics, math and the sciences. Its aim is to prepare students to be knowledgeable in their fields and effective problem solvers. The Senior Capstone project allows students to combine theory and practice in order to solve a specific engineering problem.

#### B. S. in Mechanical Engineering Technology

This ABET accredited program combines the studies of mathematics, computer science, physics and engineering technology to emphasize design and manufacturing applications. The curriculum includes courses fundamental to mechanical engineering

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#### **Description**

technology with an emphasis on applications. This degree prepares graduates for positions in areas such as mechanical design, industrial and manufacturing engineering technology, CADD/CAM; management; applied research, and sales and service.

#### B. S. in Technology/Manufacturing

Focuses on selected areas of technology, science and business. Automated equipment, computer-aided drafting, and management are among the courses emphasized. This option prepares the student to enter and progress in industry in a variety of areas including quality assurance, inventory control, production line supervision, or process management.

#### B. S. in Technology/Construction

Focuses on selected areas of technology, physics, and math, emphasizing courses such as engineering graphics, materials and techniques, and construction internship. This major prepares graduates to enter and progress in the construction industry in positions such as estimating, materials testing, inspecting, surveying or in management or supervisory roles.

#### B. S. in Technology/Design

Includes courses fundamental to industrial design with emphasis on applications, including metals technology, engineering graphics, industrial design, CAD, and other applied engineering courses. This option prepares graduates for employment in areas such as mechanical design manufacturing, CADD/CAM, management, applied research and sales and service.

#### B. S. in Applied Technology

The Bachelor of Science in Applied Technology education programs are designed for students who have graduated with very specific associate degrees in Applied Science (AAS). This degree allows students to continue their education by taking additional advanced technology courses, general education coursework, and supporting courses to complete a Bachelor of Science degree. The program is offered both locally and as distance education. Please visit the Applied Technology page for a list of acceptable degrees.

#### **B.A in Visual Communications Design**

Graduates are prepared for careers in graphic design, web design, multimedia design, advertising, printing, publishing or related fields.

# The following are a list of degrees, certifications and programs that require new academic space to succeed. They are currently under review to enhance and expand engineering academic offering.

#### M.S. Engineering

The Master of Science in Engineering program is designed for students that currently have a B.S. in Engineering and wish to expand their knowledge of Mechanical and/or Electrical Engineering with an emphasis on Engineering Management. The program combines Senior level electives in ME or EE with courses focused on Lean, Six Sigma, and developing more efficient engineering teams. In addition to the course work, students must complete a project related to their current work since the program is designed for working Engineers rather than researchers.

#### M.S. Technology

The Master of Science in Technology program is designed for students that currently have a B.S. in Technology (any option) or have completed a B.S. program comparable to the Technology programs at EWU, and wish to expand their knowledge and experience directly tied to their work field. The program combines core classes with electives in TECH with courses focused on applying principles and concepts that were initially taught in the students matching B.S program. Team work and critical problem solving methods are essential elements of this program. In addition to the course work, students will complete a project related to their current work field, since the program is designed for applying technological solutions directly to the needs of the workplace.

#### Certification of the Construction Management degree.

A short-term goal for engineering is the certification of the Construction Managements program and degree. Once the Construction Management program is certified, the university will take the necessary steps to establish a B. S. in Civil Engineering.

#### **Computer Engineering**

Computer Engineering (CpE) represents the development and implementation of innovative solutions in software, hardware, application and product development in the landscape of current computer science. It is at the intersection of the Software Engineering and Digital Electronics Engineering areas. It is a fast growing field that has provided the world with completely new products like Smart Phones (iPhone/Android), tablets, and even the ability to create a smart electric grid. It is in the CpE realm that today's technology companies most avidly define and protect their intellectual property, ultimately leading to some of the best paying and most exciting careers available. By drawing on the combined strengths of Software and Electrical Engineering,

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#### **Description**

today's CpEs are changing the world, driving the innovation and economic growth that is so important to our region, our state and our country. We are currently designing the curriculum for this exciting new major at EWU. **Program in Production Design/Industrial Design.** 

Product Design Engineering Technology students are prepared to effectively participate in a design environment, generate conceptual design sketches and drawings, create complex design layouts, perform static and dynamic analysis, create models and prototypes, define complex surfaces and shapes, and understand and integrate manufacturing principles into product designs.

Does the request include IT-related costs? (See the IT Appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was the recommended alternative chosen?

This project does not meet the criteria for OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source, and could the request result in matching federal, state, local, or private funds?

Non-state funds are not currently be considered for this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enables the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Students are at the center of all that Eastern does. EWU is a national leader for successfully attracting, retaining, graduating and transforming the lives of all students, including under-presented, first generation, non-traditional and diverse students of all backgrounds. Improving learning opportunities and educational outcomes in STEM related areas is primary goal of the nation the state of Washington and strategically supported at Eastern through curriculum and the development of community partnerships. "Innovation and opportunity" in our 2014 Strategic and Academic program plan reflect the university's commitment to visibility as an outcome of successful work toward student success.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter 14.4 in the <u>2017-19 Operating Budget Instructions</u>

This project is not linked to the Puget Sound Action Agenda.

#### Is there additional information you would like decision makers to know when evaluating this request?

Eastern is currently seeing substantial growth in the engineering program. We pride ourselves in providing highly technical degrees at the most affordable cost in the state. As stated above the challenges are current spaces available and the quality of spaces that serve these programs. Whereas we are a destination for student looking for affordable, highly technical and industry sought degrees, our current facilities cannot provide continued growth in engineering and other STEM related fields. A new facility would allow for continued growth in student FTEs and improve the quality of the teaching spaces supporting the engineering program.

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Project Number: 30000556

Project Title: Engineering Building

#### Description

Location City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

New Facilities/Additions (Major Projects)

#### **Growth Management impacts**

There are no Growth Management Impacts related to this project.

#### New Facility: No

#### How does this fit in master plan

In 2014 the university update the Cheney Campus Comprehensive Master Plan. In Horizon 1 (2013 to 2023) 1.4.5, the plan states: Construct addition to the Computer and Engineering Building. We are currently looking at with Cheney Hall this planning consideration. The intention of the pre design study is to asses this facility for its use to fulfil that part of the Comprehensive Campus Master Plan. The intent to evaluate the building for renewal, expansion or if those options are not cost effective and meet the university need request a building adjacent to Cheney Hall and the Computer Engineering Building that supports those needs.

#### Funding

Acct <u>Code</u>	Account Title	Estimated Total	Expenditures Prior Biennium	Curren t	2017-19   Reapprops	Fiscal Period New Approps
057-1	State Bldg Constr-State	57,040,000				345,000
Total	57,040,000	0	0	0	345,000	
		F	Future Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1 State Bldg Constr-State	3,415,000	53,280,000				
	Total	3,415,000	53,280,000	0	0	

#### **Operating Impacts**

#### **No Operating Impact**

## OFM

## **Capital Project Request**

2017-19 Biennium

Parameter Entered As		Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000556	30000556
Sort Order	Project Priority	Priority
Include Page Numbers	Υ	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

## STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Eastern Washington University	
Project Name	Engineering Building	
OFM Project Number	30000556	

Contact Information			
Name	Shawn King		
Phone Number	509-359-6878		
Email	sking@ewu.edu		

Statistics				
Gross Square Feet	75,000	MACC per Square Foot	\$463	
Usable Square Feet	50,000	Escalated MACC per Square Foot	\$546	
Space Efficiency	66.7%	A/E Fee Class	В	
Construction Type	College classroom facilit	A/E Fee Percentage	6.55%	
Remodel	No	Projected Life of Asset (Years)	30	
	Additiona	al Project Details		
Alternative Public Works Project	No	Art Requirement Applies	Yes	
Inflation Rate	2.80%	Higher Ed Institution	Yes	
Sales Tax Rate %	8.70%	Location Used for Tax Rate	Cheney, WA	
Contingency Rate	5%			
Base Month	July-16			
Project Administered By	Agency			

Schedule			
Predesign Start	September-17	Predesign End	September-18
Design Start	September-19	Design End	September-20
Construction Start	September-21	Construction End	June-23
Construction Duration	21 Months		

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Project Cost Estimate			
Total Project	\$48,560,671	Total Project Escalated	\$57,040,113
		Rounded Escalated Total	\$57,040,000

# STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY Agency Eastern Washington University Project Name Engineering Building OFM Project Number 30000556

## **Cost Estimate Summary**

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services				
Predesign Services	\$345,000			
A/E Basic Design Services	\$1,649,053			
Extra Services	\$280,000			
Other Services	\$840,879			
Design Services Contingency	\$215,747			
Consultant Services Subtotal	\$3,330,678	Consultant Services Subtotal Escalated	\$3,760,066	

Construction				
Construction Contingencies	\$1 737 500	Construction Contingencies Escalated	\$2 053 204	
Maximum Allowable Construction	\$1,757,500	Maximum Allowable Construction Cost	\$2,035,204	
Cost (MACC)	\$34,750,000	(MACC) Escalated	\$40,943,521	
Sales Tax	\$3,174,413	Sales Tax Escalated	\$3,740,716	
Construction Subtotal	\$39,661,913	Construction Subtotal Escalated	\$46,737,441	

Equipment				
Equipment	\$4,000,000			
Sales Tax	\$348,000			
Non-Taxable Items	\$0			
Equipment Subtotal	\$4,348,000	Equipment Subtotal Escalated	\$5,138,032	

Artwork					
Artwork Subtotal	\$204,718	Artwork Subtotal Escalated	\$204,718		

Agency Project Administration					
Agency Project Administration Subtotal	\$1,015,364				
DES Additional Services Subtotal	\$0				
Other Project Admin Costs	\$0				
Project Administration Subtotal	\$1,015,364	Project Administation Subtotal Escalated	\$1,199,856		

Other Costs					
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0		

Project Cost Estimate				
Total Project	\$48,560,671	Total Project Escalated	\$57,040,113	
		Rounded Escalated Total	\$57,040,000	

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **Description**

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

These Program projects will significantly improve the spaces and their functionality. The request are a priority based upon ongoing assessment, review and prioritization of campus programs and the needs to support academic instruction and university operations. Program projects primarily achieve academic and student support goals. These projects include updating and improving space that are in need to improve the program delivery.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Program projects primarily achieve academic and student support goals. This project includes updating and improving spaces that are needed to improve program delivery.

Projects requesting this category for the 2017-19 request are: Teaching Laboratory Improvements, Campus Emission Reductions, Fire Lane and Service Drive Upgrades, Signage and Wayfinding, General Academic Space Improvements (Classrooms), Gender Equity space improvements, New Floor for PHASE, PHASE Lighting Improvements, Martin/Williamson ADA Upgrades, and Communication Building ADA upgrade.

These projects will significantly improve the spaces and their functionality. The requests are priority based upon on-going assessment, review and prioritization of campus programs and the needs to support academic instruction and university operations. These projects were identified through evaluation of our current systems by architectural engineering consultants, academic program departments and plant staff. From these requests and assessments, we compiled a list of projects and budgetary estimate costs for review and funding requests. These projects are the highest priority to align facilities improvement with the current and future needs of individual departments and general campus spaces. In many cases, the evaluation of these requests show the deteriorating condition of some of the spaces, systems and equipment. We captured the costs to maintain and operate these facilities through our computerized maintenance management systems (CMMS) and identify those that have the highest need for improvements.

Once staff had captured the needs and budgetary costs to respond, we prioritized these projects to improve and extend the lifecycle of our systems and equipment and to reduce the maintenance and operating cost for the university.

Eastern's facilities are complex and costly resources to maintain and operate. These program enhancing projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We work continually to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects to respond to the programs' student and staff needs and their ability to be maintained at a cost effective level. These type of projects allow us to meet programmatic need without major project resources.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

Each separate project will produce enhancements and improvements for the university's facilities. Once funding is approved, we will design and construct projects that will replace or improve the systems or equipment indicated in the proposal. Design on these project will start as soon as funding is approved in July of 2017. Construction will follow as soon as the design and bid for the project are completed. These projects will be scheduled for construction throughout the biennium in coordination with other departments to minimize disruptions, to work around seasonal weather conditions that are related to the scope of work, and finally depending upon the current workload of university staff, implement the projects or manage the contractor that installs the projects.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **Description**

Requests contained in Minor Works Preservation are already developed to be phased once funding is approved. The university understands that funding will not always be available at the level of the request therefore we plan project to be dynamic and flexible with the funding that is made available. We will either reduce the scope of specific project or reduce the facilities being addressed in this request.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The requests would address the following problems on current university facilities:

Improvement of teaching laboratory space to meeting academic need a sized to improve utilization rates.

The same assessment and improvements will be initiated in instructional spaces.

As a highly sustainable university we continually are looking for way to reduce greenhouse gas emissions and the university carbon footprint.

Improvement of wayfinding and direction signs with the replacement of the old system on the university campus

As a university of access we understand the providing safe and secure facilities that address gender neutrality and the rights of this portion of our community are critical

Replacement of the activity floor in Physical Education Building

Replacement of the failing light system in the same area with highly effective and energy efficient lighting.

ADA require upgrades in Martin Hall and the Communications Building

The result of taking no action will decrease the effectiveness of our instruction, general student spaces to meet our strategic needs, and cause the cause some upgrades related to accessibility and inclusion to not be completed. Some spaces that are deteriorating will continue to do so and their operating costs will continue to rise. This includes regular preventative action as well as demand maintenance. Most of the facilities and space upgrades would include more cost effective system and equipment upgrades. If this was to be deferred, the level of utility cost reduction that could be achieved wouldn't be attained. Deferring will also impact the ability to provide a safe, comfortable, and accessible campus for all that use it.

As is the case with reduction of approved funding, the university will prioritize the highest needed project and defer other as required. In many cases the will be an additional burden on our operation budgets.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup?

These request impact our university students, faculty, staff and community members that use our facilities on campus. This is our service area and it includes a variety of university and community activities on a daily basis. Some projects specifically address specific buildings but, these improvements are a benefit to the campus as a whole and our entire clientele.

Currently, our estimates for this project are based upon cost per square foot or budgetary estimate provided by paid consultants or internal staff generated estimates. Once funding is approved and the design is underway for a more detailed cost estimate that will be developed and reviewed to provide information for project implementation and good stewardship of state resources.

## Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no related IT cost in this request. These projects do not fall under the requirements of OCIO review or oversight.

## Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.
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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### Description

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

These project are developed and promoted to the request level based upon the needs stated in the university Academic Strategic Plan and our Comprehensive Campus Master Plan (2014).

The projects included here affect many other state programs such as sustainability and cost effective facilities management. These projects extend the lifecycle of our buildings' systems and respond to the normal life cycle deterioration that progress in all facilities.

Requested projects align with our Strategic Plan 2014 by supporting student success and providing innovation, opportunity, and community engagement. All projects related to Minor Works Program relate to Eastern's strategic goal to remain an "institution of innovation." We are a university of access for all and the improvement and modification with many of these projects are directly related to that strategy. As a priority to us, we consider the aspects relating to high quality/cost effective improvement and replacements, greenhouse gas emissions and the reduction of our carbon footprint. These projects also address the reduction of deferred backlog maintenance that stand as a priority of the state and university.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Minor Works Program projects allow for providing rapid response to programmatic changes and the dynamic needs of the university. While major projects are years in development, these smaller project offer the opportunity to make changes that positively affect students and the college environment in a shorter time frame. These projects also put in place improvements that will bridge department and programs until major project funding is available.

Good planning, system renewal, and minor capital improvements allow for long term reduction of operating costs, emergency or catastrophic failures and extend the lifecycle of mission critical systems for the university.

The university continues to capture and prioritize Minor Works so that when funds become available, we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding

Expenditures

**OFM** 

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Version: A6 Eastern Washington University

**Report Number:** CBS002 **Date Run:** 9/15/2016 9:52AM

#### Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

Fund	ding					
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	7,000,000				7,000,000
	Total	7,000,000	0	0	0	7,000,000
		Fu	iture Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
Oper	rating Impacts					

#### . . .

### No Operating Impact

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	LICO	IO OtC	
	<b>P</b> (0)		
998			

SubProject Number: 30000595

SubProject Title: Minor Works Program - 057 - Teaching Laboratory Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000595 SubProject Title: Minor Works Program - 057 - Teaching Laboratory Improvements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Works Program funding to upgrade, renew and enhance our current inventory of teaching laboratories. This project relates to on-going improvement and updates to university laboratory spaces required by age of equipment and systems and programmatic needs to improve the pedagogical delivery of university programs and academic instruction. Eastern continually monitors laboratories for their ability to respond to the needs of both specific programs and general campus use. This project addresses the efficiency of laboratory space on campus and allows for a variety of different lab sizes and configuration that meets a wide variety of academic needs. The long range intent is to correctly size the inventory of laboratories so that scheduling and use will build better overall utilization rates for the campus.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Most of the teaching laboratories at EWU are lacking the features and infrastructure necessary to support the pedagogical and program needs of the departments they serve. Many of these such facilities were constructed over 40 years ago, more than a generation before the advent of the technology currently available for teaching. Most of our facilities are not even constructed to the standards that the high schools from which our students came from were.

The improvements made to the spaces over the years were piecemeal at best, many no longer meeting a current standard for safety, operational efficiency, or educational functionality. The infrastructure systems needed for state-of-the-art instruction is simply lacking in our classrooms that have not received upgrades in the last decade.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Needed improvements to the spaces include instructional technology equipment and casework, plumbing fixtures, lighting fixtures and control, HVAC and temperature controls, acoustics treatment and enhancements, updated finishes, and comfortable and functional furnishings.

It is expected that the projects will proceed immediately of receiving funding in the biennium beginning with an assessment of needs and the determination of priorities. All work is expected to be achieved within the 2017 - 2019 biennium. Projects are likely to be divided by construction type (remodel, equipment, furnishings, etc.) and/or building.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Improving the teaching laboratories would greatly aid in our recruitment of both students and faculty, help maintain our accreditations, and enhance the educational experience for all students. Current conditions are deterrent to all of those points listed above, the adverse effects of which continue to be greater as the demands for higher technology increase with time.

#### Which clientele would be impacted by the budget request? Where and how many units would be added, people or

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Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000595

SubProject Title: Minor Works Program - 057 - Teaching Laboratory Improvements communities served etc. Be prepared to provide detail cost backup.

The departments that would benefit most by these improvements would be Science, Technology, Physics, Math, Art, Drama, Communications, Geology, Geography, Regional & Urban Planning, Physical Therapy, Occupational Therapy, Psychology, and Engineering. Improvements to the teaching laboratories would primarily serve programs currently in existence but would also benefit programs whose enrollments are limited the shortcomings of the current facilities.

## Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Three of the five pillars in EW's strategic plan are (1) provide a student centered learning environment, (2) achieve quality in everything we do, and (3) expand access and opportunity for the success of our students. This project would directly address those three points. By upgrading our laboratory instructional spaces, the quality of our education programs increases greatly, which has a direct effect on our students' pre-and post-graduation success.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Many spaces in this category will be improved when funding is received for the construction of the Interdisciplinary Science Center and the renovation of the existing science building. There are also laboratory spaces in the computing and engineering sciences building that do meet the current standard for facilities and instruction. This request is for spaces throughout campus that have not seen significant improvements in the past 10 years.

Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000595 SubProject Title: Minor Works Program - 057 - Teaching Laboratory Improvements

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures 24			2017-19	2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	950,000				950,000	
	Total	950,000	0	0	0	950,000	
		F	Future Fiscal Pe	riods			
		2019-21	2021-23	2023-25	2025-27		
057-1	State Bldg Constr-State						
	Total	0	0	0	0		
<u>Operat</u>	ing Impacts						
No Op	erating Impact						

SubProject Number: 30000596 SubProject Title: Minor Works Program - 057 - Campus Emissions Reductions

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000596 SubProject Title: Minor Works Program - 057 - Campus Emissions Reductions

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical need to reduce emission from campus into the environment. In 2011-12 Eastern worked with Energy Services consultant McKinstry on a campus wide sustainability plan which included developing projects that would reduce the university's greenhouse gas inventory and implement projects that reduced energy consumption and the impact on the environment. This project is requested to move forward with projects that have the best impact on greenhouse gas reduction and energy conservation. They may include alternate fuel sources, geotechnical opportunities, reduction initiatives and other types of projects. This request would develop working documents to proceed with a variety of project types aimed at sustainability and greenhouse gas reductions. Eastern's strategic plan states that the university is an institution of innovation which includes developing programs and projects that address the environmental concerns of climate change and greenhouse gas emissions.

#### Project Description

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

One of the sustainability goals of EWU is to reduce campus emissions caused by the consumption of fossil fuels. In addition to the five fuel fired boilers used to heat the entire Cheney campus, the maintenance and operations functions utilize a fleet of over 60 vehicles of various types. With only a few exceptions, these vehicles all consume gasoline. Many of them were manufactured 10 to 20 years ago when emission standards in automobile design were far below where they are today.

The boilers consume either natural gas or #2 diesel fuel to boil water into steam that is sent through underground tunnels to over 70 buildings throughout the Cheney campus. There are currently five boilers in the main steam plant, only one of which was manufactured less than 40 years ago. The emission standards in current steam plant design are far better than those in place at the time that our boilers were manufactured. Not only would it be beneficial to the environment, but it would also be more efficient, enabling us to maintain a more comfortable environment in classrooms, offices and support spaces; it would achieve a savings somewhere between 30% and 50% in annual fuel consumption.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will first be implemented by a campus-wide study to determine the full extent of the problem and to explore the myriad of solutions, identifying the costs of which to execute those solutions that would have the greatest benefit. Areas that would be targeted include the boiler plant, motor pool, the sciences buildings, the arts complex, and all items of equipment currently utilizing fossil fuel. It would also include the investigation of and research regarding off-gassing of materials used in construction as well as those materials that currently exist in buildings throughout campus.

The initial studies would commence as soon as funding is available with the goal of completing design prior to the end of the spring quarter 2018. Construction would be ongoing from the end the design until the end of the biennium. The project would likely be phased based upon scale, cost, and type (i.e. boiler plant, motor pool, interior finish materials, etc.).

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000596

#### SubProject Title: Minor Works Program - 057 - Campus Emissions Reductions

Depending upon the results of the study, the request would contribute greatly to the University achieving its goals of sustainability which are in alignment with State mandates and current practices. It is also likely to achieve greater efficiencies in fossil fuel usage, providing the same or greater benefits at substantially reduced environmental impacts.

The result of taking no action is to continue using fossil fuels at an increased rate while contributing nothing towards the reduction of environmental pollutants on our campus and in our region.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Where the projects that we envision being implemented would be mostly facilities oriented, the impact would be felt by the campus as a whole, the immediate area and region of the state, and (to some small degree) the entire nation. Not only would EWU seek greater alignment with the State's direction towards sustainability, it would also meet our goals to be an example to the region of how to implement best operating practices that are environmentally responsible.

## Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

EWU's sustainability goal is to promote environmental sustainability and reduce the impact of university operations on the environment. The University established a sustainability committee charged with being an instrument for the discussion of sustainability and energy conservation between the various campus and stakeholders the goals that they established and the timelines that were set were intended to meet the intent of the AASHE (Association for the Advancement of Sustainability in Higher Education) and with the ACUPCC (American Colleges and University Presidents Climate Commitment). Such goals include the reduction of the institutions carbon footprint, which can be most feasibly achieved through reduction of emissions.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Reduction of campus emissions is likely to also achieve a savings in future costs for energy usage. The long-term benefits not only include a healthier air quality for the area immediately surrounding our campus, but also lower energy consumption at a time when energy costs are expected to rise. It would not only be environmentally sustainable but economically sustainable as well.

City: Cheney

County: Spokane



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### **Project Type**

SubProject Number:30000596SubProject Title:Minor Works Program - 057 - Campus Emissions Reductions

#### **Project Type**

Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures			2017-19	2017-19 Fiscal Period	
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	750,000				750,000	
	Total	750,000	0	0	0	750,000	
		I	Future Fiscal Pe	riods			
		2019-21	2021-23	2023-25	2025-27		
057-1	State Bldg Constr-State						
	Total	0	0	0	0		
<u>Operat</u>	ting Impacts						
No Op	erating Impact						

SubProject Number: 30000597

SubProject Title: Minor Works Program - 057 - Fire Lane/Service Drive Upgrades

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000597 SubProject Title: Minor Works Program - 057 - Fire Lane/Service Drive Upgrades

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Preservation funding to address the critical need to upgrade, replace and renew portions or our Service Drives, Fire lanes and other vehicular routes that are not part of the city roadways. These transportation pathways are owned and operated by the university and periodic renewal is part of the long term facilities strategic plan.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The University completed a fire lane and service drive study in 2005 but not all of the work that was identified was completed at that time due to funding. In keeping with our commitment for student safety and in cooperation with the city of Cheney's fire and building departments, these upgrades are considered necessary to ensure emergency response vehicle access to all areas of campus.

To provide vehicular access to many of our buildings on campus for services and maintenance, sometimes it has been necessary to drive on pedestrian sidewalks. Many of them have been widened and structurally improved for this purpose. While it is a physical necessity at times, it presents an obvious safety hazard particularly during the most active times of the academic year.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will result in needed improvements to our campus walks, drives, parking and staging areas. Many of these areas are existing but are in a deteriorated state needing major repair or replacement. Depending upon its location, it will require work in the areas of concrete, brick pavers, asphalt, landscaping and irrigation.

Because most of the design work has been completed or requires little in the area of design consulting expertise, work is expected to start immediately after funding is obtained. The project is likely to be phased by area of campus, building served, type of construction, or extent of funding. Other parameters affecting schedule include conflicts with academic schedule, campus events, permissible weather, and logistical constraints.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Making improvements to our fire lanes would contribute to overall campus safety and our ability to respond in emergency situations. Making improvements to our service drives would increase manpower efficiency by providing quicker time response to address facility issues.

By taking no action, the University is not making strides towards a safer campus or achieving labor efficiencies in maintaining our facilities and addressing the needs that arise in emergency situations. Areas slated for improvement that are currently in a state of deterioration will continue to worsen, increasing the cost of its eventual replacement. In some cases, an inexpensive repair could result in a much more expensive replacement.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000597

SubProject Title: Minor Works Program - 057 - Fire Lane/Service Drive Upgrades

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

This request would serve the campus community as a whole and increasing safety and improving our maintenance workforce's ability to respond to issues that arise in most of our buildings. It would enable our current workforce to be more efficient and effective, reducing the need for added staff and other resources. It would also contribute to the University's ability to reduce our maintenance back load without increasing our labor workforce.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The 2014 Comprehensive Campus Master Plan, in reference to its parking and transportation, states that it is the University's intention to improve both safety and a pedestrian friendly character associated with the campus. The 2005 study of emergency vehicle access identified all areas currently utilized and new areas needing to be improved. The study took into account current codes and practices and applied them to the physical conditions and constraints of the entire campus such as tunnels, pedestrian walkways, proximity to local emergency services, and key points of access to all sites on campus.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

This study was done at the request of the city of Cheney who provide the University with fire and life safety services and who support our police services. Following this plan and continuing with the implementation of its recommendations would demonstrate the university's good faith with the authorities having jurisdiction over our campus.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000597 SubProject Title: Minor Works Program - 057 - Fire Lane/Service Drive Upgrades

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Eunding		Expenditures			2017-19 Fiscal Period			
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps		
057-1	State Bldg Constr-State	450,000				450,000		
	Total	450,000	0	0	0	450,000		
		F	Future Fiscal Periods					
		2019-21	2021-23	2023-25	2025-27			
057-1	State Bldg Constr-State							
	Total	0	0	0	0			
<u>Operat</u>	ing Impacts							
No Op	erating Impact							

SubProject Number:30000598SubProject Title:Minor Works Program - 057 - Signage/Wayfinding Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000598 SubProject Title: Minor Works Program - 057 - Signage/Wayfinding Improvements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical need to replace, enhance and improve wayfinding on the Cheney campus. Included are projects related to campus identification and marketing, signage that links the Cheney community with the university campus and also changes in signage and way finding required by local jurisdiction and code upgrades This project also includes the replacement of deficient and equipment at the end of it lifecycle. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems (CMMS). These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Many of the areas on our campus still lack necessary signage to identify buildings and sites, orient students and visitors, identify areas of restricted access, and differentiate between public and restricted vehicular pathways. Improvements have been made and passed biennia and standards have been established which the university has been following. To the extent that funding was available, improvements have been made to rectify these conditions in areas that were deemed critical. Many areas, however, have not been addressed due to lack of funding.

The areas of greatest concern have to do with those where life safety is a critical component. Without necessary signage, visiting motorists have often been found on pedestrian pathways, sometimes when pedestrian traffic is at its peak. To ensure the safety of our students and guests, these improvements would go a long ways towards avoiding this type of conflict in the future.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Following the standards that have been established in previous biennium, wayfinding signage would be installed to the remainder of the campus currently without such signage. It would also address the absence of building identification, lobby directories, room signage, and warnings for areas intended to have restricted access.

Because the need for programming, studies and design is minimal, construction is expected to begin as soon as funding is available. Most of this work can take place during the academic year and is not weather dependent like other construction projects. It is intended that all work that is funded would be completed within the funding biennium.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Installing signage where it is obviously needed would enhance the campus' appearance, help orient new and visiting students to their intended destinations, and prevent unauthorized access to restricted areas. It would enhance the University experience for both students and guests by aiding their understanding of our campus and assisting them in reaching their destinations in a timely manner.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000598

#### SubProject Title: Minor Works Program - 057 - Signage/Wayfinding Improvements

Our first implementation of creating a new wayfinding system for pedestrians was precipitated by student feedback, particularly new students. As our campus has grown and changed over the years, pedestrian flow across campus has sometimes caused our students delays in reaching class on time and fulfilling their commitment in the learning process. It has also caused some vehicular/pedestrian conflicts which present safety issues for our students, faculty and staff.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The addition of additional signage would benefit our students, faculty, staff, maintenance departments, visitors, vendors, and delivery services. It would make the pedestrian and vehicular flow across campus smoother, more efficient, and safer.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

The 2014 Comprehensive Campus Master Plan, in reference to its parking and transportation, states that it is the University's intention to improve both safety and a pedestrian friendly character associated with the campus. Pursuant to these goals, this project would directly affect the safety and character of our campus from a pedestrian standpoint.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

The wayfinding improvements that we envision as part of this project are not limited to exterior signage. Much of the signage on the interior of our buildings was created over time, reflecting changing standards and practices in the appearance, style, and type of signs installed. Most do not meet the ADA requirement for tactile characters or braille symbols. To the extent that funding will allow, EWU intends to correct this in a careful and systematic manner.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000598 SubProject Title: Minor Works Program - 057 - Signage/Wayfinding Improvements

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	350,000				350,000
	Total	350,000	0	0	0	350,000
		F				
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number:30000599SubProject Title:Minor Works Program - 057 - Academic Program Space Enhancements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number:30000599SubProject Title:Minor Works Program - 057 - Academic Program Space Enhancements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical need for upgrades and enhancement to our academic program spaces. This project relates to on-going improvement and updates to university classroom required by age of equipment and systems and programmatic needs to improve the pedagogical delivery of university programs and academic instruction. Eastern continually monitors classroom for their ability to respond to the needs of both specific programs and general campus use. This project addresses the efficiency of classroom space on campus and allows for a variety of different classrooms sizes and configuration that meets a wide variety of academic needs.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Many of the academic spaces in buildings that have not been renovated in the past 20 years lack the necessary tools to be effective in a modern university education environment. Deficiencies include inadequate lighting, HVAC and temperature controls, audio/visual equipment, acoustical treatments, functional furnishings, and upgrading finishes. Select academic spaces require certain features that were not common or possible in the year that their locations were built, such as marker boards versus chalkboards, video projection systems versus overhead projectors, and Internet-driven computer systems versus photo slides and map displays.

Pursuant to the University's goals of providing the highest quality education to its students, these enhancements would change the most updated learning environments on our campus to be state-of-the-art. Not only would it serve our current student population but would also assist in both student and faculty recruitment.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Receiving approval of this request would result in the renovation of key academic spaces in a number of buildings on our campus. Many of these improvements would require upgrades to the infrastructure systems serving the buildings that the spaces are located in. Such systems include HVAC, electrical, data and telecommunications.

Upon receiving funding approval, studies would be conducted to identify the greatest areas of need and the maximum benefits derived from remodeling. Depending upon the results of the studies, designs would be created prior to the implementation of construction. It is expected that studying design would take place in the early months of the 2017-2019 biennium. Construction would continue past the end of the 2019 biennium because of the conflicts with scheduling construction around the academic calendar.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Constructing the necessary improvements would not only correct the deficiencies identified above, but would also improve the learning environment to a degree that enhances the academic careers of our students and faculty. Taking no action places our degree programs at a disadvantage in the competition for highly sought after students and qualified faculty, not to mention that it perpetuates a less-than-optimum learning environment.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000599

SubProject Title: Minor Works Program - 057 - Academic Program Space Enhancements

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Some of the programs that would be most likely impacted by this project include geography, urban and regional planning, physical therapy, physical education (human mechanics), fine arts, music, communications, engineering, technology, and modern languages. Each of these programs require facilities that accommodate special needs and utilize proprietary equipment. If implemented carefully, it would enable our class sizes to increase thereby creating efficiencies and instruction that result in earlier graduation by many of our students.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

EWU is committed to providing the highest possible educational experience for all of our students regardless of their academic pursuits. It would enable our faculty to implement their pedagogical plans and reach a greater number of students by equipping them with the proper tools for modern instruction. From a student standpoint, it enhances the educational experience by removing the barriers and obstacles to learning and providing the visual aids which better communicate the concepts and ideas in their instruction.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

No.

Location City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number:30000599SubProject Title:Minor Works Program - 057 - Academic Program Space Enhancements

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding			Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
057-1	State Bldg Constr-State	1,000,000				1,000,000	
	Total	1,000,000	0	0	0	1,000,000	
		F	uture Fiscal Per	riods			
		2019-21	2021-23	2023-25	2025-27		
057-1	State Bldg Constr-State						
	Total	0	0	0	0		
<u>Operat</u>	ting Impacts						
No Op	erating Impact						

SubProject Number:30000600SubProject Title:Minor Works Program - 057 - Gender Equity Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000600 SubProject Title: Minor Works Program - 057 - Gender Equity Improvements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical needs for gender neutral facilities on the Cheney campus. The Washington Law Against Discrimination and the Human Right Commission require public agencies to address issue of access and availability for all for public campus. One of Eastern's strategic goals is "access for all" to the university and higher education. This project request relates to identified areas and facilities that the university feels are of high important to meet our requirements under that law as well as our goals as an institution of higher education.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

In keeping with statewide goals for gender equity, EWU is tasked with making facility improvements that facilitate the satisfaction of these goals. Where it is the University's practice in new facilities to make accommodations based on gender equity, most of the campus was constructed at the time when such considerations were not made. Some of the instances where inequity exists involve expansion of our infrastructure, as is the case with toilet facilities. In other instances, it deals with auxiliary services such as housing and dining facilities. The greatest impact, however, is felt in our recreation facilities (see below).

Considering that women are considered an underrepresented minority group while comprising a slight majority of students on our campus, it becomes an important priority for the University to address.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Improvements that are intended to be made under this project include renovation of existing toilet facilities, the creation of space for student interest groups and special programs, and the addition of space where there is an inequity in distribution and accommodation.

The project would start with the study of the situation to determine the areas of critical need and priority. Construction would begin following a brief design period but the schedule of which is dependent upon minimizing the disruption to current programs and operations. It is possible that the project could be phased depending upon areas/buildings such improvements will be made in or by types of construction, depending upon the results of the initial studies.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Were inequities based on gender are manifested by space allocation, additions and remodels will be necessary to address the problems identified in question #1. Where they manifest themselves in programs offered, it may be discovered that new construction is necessary.

Taking no action towards correcting the issues of gender equity would be a detriment to the university's reputation and would adversely affect the academic experience of the majority of our students. It would not move our institution to being in alignment with state and federal goals for gender equity.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567 Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000600

SubProject Title: Minor Works Program - 057 - Gender Equity Improvements

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Since this request would result in improvements made across campus, it would have an impact on the entire university population. In areas of public access, it would affect visitors from off-campus as well (i.e. toilet facilities). Considering that many of these improvements will be made for the benefit of specific programs (Women's Studies) is possible that it will be building-specific.

In the case of recreational activities, the state mandates that facilities and services must be offered for recreational sports without disparities based on gender. EWU's recreational facilities are heavily utilized and sometimes inadequate for the demand. To provide without gender discrimination sometimes results in non-accommodation to both male and female participants.

## Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Washington State's gender equity in higher education statute prohibits "discrimination on the basis of gender against any student in institutions of higher education in Washington." The law forbids discrimination and student assistance and services in academic programs, and in athletics, both intercollegiate and intramural.

The law also focuses on recreational activities, including intramural athletics in club sports, mandating that they be "offered to meet the interest of students," and facilities and services must be provided for recreational sports without disparities based on gender.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter 14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

Is there additional information you would like the decision makers to know when evaluating this request?

No.

Location

City: Cheney

County: Spokane

Legislative District: 006

**Project Type** 



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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### **Project Type**

SubProject Number: 30000600

SubProject Title: Minor Works Program - 057 - Gender Equity Improvements Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Fundir</u>	<u>ng</u>	Expenditures			2017-19	Fiscal Period
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	650,000				650,000
	Total	650,000	0	0	0	650,000
		I	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					

**No Operating Impact** 

SubProject Number: 30000601

SubProject Title: Minor Works Program - 057 - PHASE Floor Replacement

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000601 SubProject Title: Minor Works Program - 057 - PHASE Floor Replacement

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical need to replace flooring in our Physical Education Activities area. A large percentage of the university's indoor physical education and recreation space has hardwood floors. Annual maintenance is performed which adds new finishes and paint markings that have worn off through normal use. Given the popularity of our recreation programs, these floors see an abnormal amount of traffic and over many years' time, sustain damage that cannot be corrected with surface refinishing. Most of our indoor recreation facilities were constructed in the late 1960s. The expected life of these floors is 10 to 20 years, but some of these floors have either only been replaced once or not at all since they were originally installed

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The university's physical education, sports and recreation facilities were originally built in five phases between the mid-1960s and mid-1970s. The term "PHASE" refers to this five building complex.

A large percentage of the university's indoor physical education and recreation space has hardwood floors. Annual maintenance is performed which adds new finishes and paint markings that have worn off through normal use. Given the popularity of our recreation programs, these floors see an abnormal amount of traffic and over many years' time, sustain damage that cannot be corrected with surface refinishing.

Most of our indoor recreation facilities were constructed in the late 1960s. The expected life of these floors is 10 to 20 years, but some of these floors have either only been replaced once or not at all since they were originally installed. All of them have been, at some point in time, stripped and refinished requiring sanding the surface down to bare wood which reduces the overall thickness of the flooring. Once the thicknesses been reduced to approximately 70% of its original thickness, it requires replacement. Most of our floors have reached that point.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

The floors will be replaced based upon a brief analysis of which ones are the most critical in terms of their condition and frequency of use. All work will need to occur during the period of the year where the use is expected to be minimal, which falls in the time window of late July through mid-September.

The project is not likely to be phased due to the compressed schedule under which all work must be done. The university's goal would be to do as many floors as possible during this time, accomplishing all work in the early part of the biennium. If logistics prevent us from addressing every space during that time window, the remainder of work will be done in the late summer of 2018.

How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

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Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000601

#### SubProject Title: Minor Works Program - 057 - PHASE Floor Replacement

Replacement of the floors would extend the life and use of those facilities for about 40 years. The issues that would be corrected would not only be cosmetic but also structural as there are several instances where crushing, settlement, chipping, and deep gouges exist. The current conditions will worsen over time and, at some point, will present either a safety hazard or render the spaces unusable for their intended use.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Since all the locations of our hardwood floors are in the physical education, sports and recreation complex, it would most affect those departments and programs. The greatest impact, however, would be felt by the general student population participating in recreation programs. Currently, participation levels are extremely high, particularly for indoor programs held during times of inclement weather. Approximately 25% of our student population is enrolled in one of the many offerings for indoor recreation at some time during the academic year.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Maintenance of our facilities preserves and protects the investment made by the state for higher education. It is a goal of the University to provide the best university experience for our students, particularly for those who opt to live on or near campus. The recreational opportunities afforded to our students can only be as good as the facilities that support them. Considering the tremendous investment the state has made in our physical education, sports and recreation facilities, replacement of worn and damaged finishes would a most prudent course of action.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Considering these floors are an average of 45 years old, and that they have been maintained on an annual basis, it is surprising that they have lasted this long. It is not expected that they will last much longer. Replacement would not only extend their life, but improve their performance as the technology in their design has advanced since their original installations.

Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000601 SubProject Title: Minor Works Program - 057 - PHASE Floor Replacement

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures 2017-19			2017-19	<b>Fiscal Period</b>
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	850,000				850,000
	Total	850,000	0	0	0	850,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000602 SubProject Title: Minor Works Program - 057 - PHASE Lighting Improvements

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Version: A6 Eastern Washington University

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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000602 SubProject Title: Minor Works Program - 057 - PHASE Lighting Improvements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funds to respond to lighting needs within our student activity center (PHASE). Many of the lighting systems located in these buildings have not been replaced within the last 20 years, and some of them not since their original installation. In some cases, replacement parts for maintenance are no longer available. The energy usage in some of our larger spaces (i.e. the Pavilion) is abnormally high compared to what would be expected in a new building. Performance and efficiency has also diminished over time, particularly with our Mercury and halide lighting systems. The warm-up period for the halide system in the Pavilion can be as much as 30 minutes, which is problematic during unexpected power outages. In these situations, it goes beyond being a nuisance to being a safety problem.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The university's physical education, sports and recreation facilities were originally built in five phases between the mid-1960s and mid-1970s. The term "PHASE" refers to this five building complex.

Many of the lighting systems located in these buildings have not been replaced within the last 20 years, and some of them not since their original installation. In some cases, replacement parts for maintenance are no longer available. The energy usage in some of our larger spaces (i.e. the Pavilion) is abnormally high compared to what would be expected in a new building.

Performance and efficiency has also diminished over time, particularly with our Mercury and halide lighting systems. The warmup period for the halide system in the Pavilion can be as much as 30 minutes, which is problematic during unexpected power outages. In these situations, it goes beyond being a nuisance to being a safety problem.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

The lighting will be replaced based upon a brief analysis of which ones are the most critical in terms of their condition and frequency of use of the space they are located in. All work will need to occur during the period of the year where the use is expected to be minimal, which falls in the time window of late July through mid-September.

The project is not likely to be phased due to the compressed schedule under which all work must be done. The university's goal would be to do as many spaces as possible during this time, accomplishing all work in the early part of the biennium. If logistics prevent us from addressing every space during that time window, the remainder of work will be done in the late summer of 2018.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Replacement of select lighting systems in the PHASE complex would greatly reduce our maintenance effort to keep them functioning, but would also achieve substantial energy savings going forward. Not only would there be higher efficiencies but higher performance, achieving better light levels and coloration while reducing glare.

#### Which clientele would be impacted by the budget request? Where and how many units would be added, people or

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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000602

# SubProject Title: Minor Works Program - 057 - PHASE Lighting Improvements communities served etc. Be prepared to provide detail cost backup.

Since all the locations that are part of this request are in the physical education, sports and recreation complex, it would most affect those departments and programs. The greatest impact, however, would be felt by the general student population participating in recreation programs. Currently, participation levels are extremely high, particularly for indoor programs held during times of inclement weather. Approximately 25% of our student population is enrolled in one of the many offerings for indoor recreation at some time during the academic year.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Maintenance of our facilities preserves and protects the investment made by the state for higher education. It is a goal of the University to provide the best university experience for our students, particularly for those who opt to live on or near campus. The recreational opportunities afforded to our students can only be as good as the facilities that support them. Considering the tremendous investment the state has made in our physical education, sports and recreation facilities, replacement of inefficient and poorly performing lighting systems would be a prudent course of action.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

In addition to replacing the lighting, the University would investigate incorporating a lighting control system into the design. Such systems would provide automatic on and off to avoid conditions where large numbers of lights are on in an occupied spaces or during times that those spaces are not being used.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

**Project Type** 

Program (Minor Works)



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Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000602 SubProject Title: Minor Works Program - 057 - PHASE Lighting Improvements

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	600,000				600,000
	Total	600,000	0	0	0	600,000
		F	Future Fiscal Pe	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number: 30000603 SubProject Title: Minor Works Program - 057 - Martin/Williamson ADA Restrooms

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000603 SubProject Title: Minor Works Program - 057 - Martin/Williamson ADA Restrooms

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funds to respond to the need for new and compliance ADA (Americans with Disabilities) restroom in the adjoining Martin/Williamson building. Martin Williamson is a building that was constructed in two phases; Martin Hall in the 1940s and Williamson in the 1960s. Subsequent to Martin Hall's 1986 remodeling, the American Disabilities Act was adopted by most code authorities, including the city of Cheney who has jurisdiction over Eastern Washington University. Consequently, the toilet facilities throughout this building complex do not meet the current standard for accessibility.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Martin Williamson is a building that was constructed in two phases; Martin Hall in the 1940s and Williamson in the 1960s. Subsequent to Martin Hall's 1986 remodeling, the American Disabilities Act was adopted by most code authorities, including the city of Cheney who has jurisdiction over Eastern Washington University. Consequently, the toilet facilities throughout this building complex do not meet the current standard for accessibility.

University is committed to eliminating the barriers to accessibility for our students, faculty and staff. The number of individuals requiring accommodation has increased significantly in the past 25 years mostly due to the fact that public facilities are more user-friendly for those who have disabilities. The most difficult public facilities to make these accommodations to our public restrooms due to the restriction of space in an existing floor plan and the limitations of existing infrastructure. Often times, the cost make such projects unachievable.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

There are eight toilet facilities located on the first and second floors of the Martin Williamson complex, none of which are ADA compliant. This project would design construct the renovations necessary to see that they meet the current code standard for accessibility.

Depending upon the outcome of the design phase, other deficiencies will be corrected in the remodeled facilities. Many of the fixtures have reached the end of their life cycles and are difficult to maintain. Replacement of antiquated and obsolete fixtures and finishes will be investigated to the extent that the budget will allow. This project is seen as being completed in a single phase within the 2017 - 2019 biennium.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The Martin Williamson building makes no public accommodation for individuals with disabilities in their toilet room layouts. This request would modify the existing facilities and/or add new facilities that would meet the current building codes and ADA standards for toilet room design. Currently, individuals with disabilities have only one option which is to use the facilities that will accommodate them located in nearby buildings. The nearest building with such facilities is over 800 feet away which does not meet the intent of the law which states that "reasonable accommodations must be made for individuals with disabilities."

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Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000603

SubProject Title: Minor Works Program - 057 - Martin/Williamson ADA Restrooms

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

EWU has a growing number of individuals with disabilities seeking higher education on our Cheney campus. Such individuals are not just those who are bound to wheelchairs but include those who are ambulatory impaired (i.e. on crutches, using canes and walkers, or otherwise have difficulty walking), visually impaired, or otherwise physically impaired (i.e. unable to pull the door open under normal circumstances).

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Making needed accommodations for faculty, students, staff and visitors with disabilities achieves the goals of the state of Washington for making reasonable accommodation to this segment of our society. Universally, it provides access to students who would otherwise be prevented or discouraged from seeking higher education.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### s there additional information you would like the decision makers to know when evaluating this request?

Depending upon the outcome of the design phase, it may be possible to also satisfy the special needs of families with small children, and for individuals with alternative gender identities. It might also be possible to provide shower facilities for individuals who employ alternate modes of transportation in their commute to and from campus, and accommodation that is in alignment with LEED design practices.

Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Program (Minor Works)



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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000603 SubProject Title: Minor Works Program - 057 - Martin/Williamson ADA Restrooms

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Funding		Expenditures			2017-19 Fiscal Period			
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps		
057-1	State Bldg Constr-State	750,000				750,000		
	Total	750,000	0	0	0	750,000		
		F	Future Fiscal Periods					
		2019-21	2021-23	2023-25	2025-27			
057-1	State Bldg Constr-State							
	Total	0	0	0	0			
<u>Operat</u>	ting Impacts							
No Op	erating Impact							

SubProject Number: 30000604 SubProject Title: Minor Works Program - 057 - Communications Building ADA Improve

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000604 SubProject Title: Minor Works Program - 057 - Communications Building ADA Improve

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Works Program funds to support corrections of Americans with Disability items in our Communications Building. University is committed to eliminating the barriers to accessibility for our students, faculty and staff. The number of individuals requiring accommodation has increased significantly in the past 25 years mostly due to the fact that public facilities are more user-friendly for those who have disabilities. The most difficult public facilities to make these accommodations to our public restrooms due to the restriction of space in an existing floor plan and the limitations of existing infrastructure. Often times, the cost make such projects unachievable.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The Communications Building is part of a complex of buildings constructed in the early 1970s prior to the enactment of the American Disabilities Act and its adoption by the state of Washington into its building codes. At the time of design, no considerations were given addressing the needs of individuals with disabilities. Where accommodations can be easily made in the areas of door hardware, signage and furnishings, there are great challenges in making restroom facilities compliant with current code standards.

University is committed to eliminating the barriers to accessibility for our students, faculty and staff. The number of individuals requiring accommodation has increased significantly in the past 25 years mostly due to the fact that public facilities are more user-friendly for those who have disabilities. The most difficult public facilities to make these accommodations to our public restrooms due to the restriction of space in an existing floor plan and the limitations of existing infrastructure. Often times, the cost make such projects unachievable.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

There are 4 toilet facilities located on the first and second floors of the Communications Building, none of which are ADA compliant. This project would design construct the renovations necessary to see that they meet the current code standard for accessibility.

Depending upon the outcome of the design phase, other deficiencies will be corrected in the remodeled facilities. Many of the fixtures have reached the end of their life cycles and are difficult to maintain. Replacement of antiquated and obsolete fixtures and finishes will be investigated to the extent that the budget will allow. This project is seen as being completed in a single phase within the 2017 - 2019 biennium.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The Communications Building makes no public accommodation for individuals with disabilities in their toilet room layouts. This request would modify the existing facilities and/or add new facilities that would meet the current building codes and ADA standards for toilet room design. Currently, individuals with disabilities have only one option which is to use the facilities that will accommodate them located in nearby buildings. The nearest building with such facilities is over 500 feet away which does not

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

#### SubProject Number: 30000604

SubProject Title: Minor Works Program - 057 - Communications Building ADA Improve

meet the intent of the law which states that "reasonable accommodations must be made for individuals with disabilities."

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

EWU has a growing number of individuals with disabilities seeking higher education on our Cheney campus. Such individuals are not just those who are bound to wheelchairs but include those who are ambulatory impaired (i.e. on crutches, using canes and walkers, or otherwise have difficulty walking), visually impaired, or otherwise physically impaired (i.e. unable to pull the door open under normal circumstances).

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Making needed accommodations for faculty, students, staff and visitors with disabilities achieves the goals of the state of Washington for making reasonable accommodation to this segment of our society. Universally, it provides access to students who would otherwise be prevented or discouraged from seeking higher education.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Depending upon the outcome of the design phase, it may be possible to also satisfy the special needs of families with small children, and for individuals with alternative gender identities. It might also be possible to provide shower facilities for individuals who employ alternate modes of transportation in their commute to and from campus, and accommodation that is in alignment with LEED design practices.

Location

City: Cheney

County: Spokane

Legislative District: 006

#### **Project Type**

Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:52AM

Project Number: 30000567

Project Title: Minor Works Program - State Resources 057

#### **SubProjects**

SubProject Number: 30000604 SubProject Title: Minor Works Program - 057 - Communications Building ADA Improve

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

Fundir	ng	Expenditures 2017-19			Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	650,000				650,000
	Total	650,000	0	0	0	650,000
		F	Future Fiscal Per	riods		
		2019-21	2021-23	2023-25	2025-27	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

### OFM

### **Capital Project Request**

2017-19 Biennium

<u>Parameter</u>	Entered As	Interpreted As
Biennium	2017-19	2017-19
Agency	370	370
Version	A6-A	A6-A
Project Classification	*	All Project Classifications
Capital Project Number	30000567	30000567
Sort Order	Project Priority	Priority
Include Page Numbers	Υ	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

#### Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **Description**

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

These Program projects will significantly improve the spaces and their functionality. The request are a priority based upon ongoing assessment, review and prioritization of campus programs and the needs to support academic instruction and university operations. Program projects primarily achieve academic and student support goals. These projects include updating and improving space that are in need to improve the program delivery.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Program projects primarily achieve academic and student support goal. This project includes updating and improving spaces needed to help furthermore functionality as well as program delivery.

Projects requesting this category for the 2017-19 request are: Classroom Technology, ADA Improvements, Sustainability Initiatives, Water Conservation Projects, Program Remodels, Emergent Needs, Aquatic Locker Room Upgrade, JFK library flooring replacement, Jim Thorpe Fieldhouse Flooring Replacement and Physical Education Activities Office Remodel

The requests are priority-based upon on going assessment, review, and prioritization of campus programs and the academic support needed for academic instruction and university operations. These projects were identified through evaluation of our current systems by architectural engineering consultants, academic program departments and plant staff. From these requests and assessments, we compiled a list of projects and budgetary estimate costs for review and funding requests. These projects are the highest priority to align facilities improvement with the current and future needs of individual departments and general campus spaces. In many cases, the evaluation of these requests show the deteriorating condition of some of the spaces, systems, and equipment. We captured the costs to maintain and operate these facilities through our computerized maintenance management systems (CMMS) and identifed those that have the highest need for improvements.

Once staff had captured the needs and budgetary costs to respond, we prioritized these projects to improve and extend the lifecycle of our systems and equipment as well as reduce the maintenance and operating cost for the university.

Eastern's facilities are complex and costly resources to maintain and operate. These program enhancing projects enable us to defer major capital expenditures through creative preservation measures that extend the lifecycle of our facilities and systems. We continually work to find innovative ways to maintain our facilities and manage the long term costs of the university and state. We designed these projects based on their ability to be maintained on a cost effective level as well as on their ability to respond to the programs and the needs of the students and staff. These type of projects allow us to meet programmatic need without major project resources.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be started and completed? Identify whether the project can be phased, and if so which phase is included in this request.

Each separate project will produce enhancements and improvements for the university's facilities. Once funding is approved, we will design and construct projects that will replace or improve the systems or equipment indicated in the proposal. Design on these project will start as soon as funding is approved in July of 2017. Construction will follow as soon as the design and bid for the project are completed. These projects will be scheduled for construction throughout the biennium in coordination with other departments to minimize disruptions, to work around seasonal weather conditions that are related to the scope of work, and finally depending upon the current workload of university staff, implement the projects or manage the contractor that installs the projects.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **Description**

Requests contained in Minor Works Preservation are already developed to be phased once funding is approved. The university understands that funding will not always be available at the level of the request therefore, we plan for the project to be dynamic and flexible with the funding that is made available. We will either reduce the scope of specific project or reduce the facilities being addressed in this request.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The requests would address the following problems on current university facilities: Improve the conditions and efficiency of program's instructional classrooms ADA compliance deficiency upgrades Establish Green and Sustainable Initiatives Reduction of Potable Water Usage Unforeseen Emergent Needs Program space remodels and improvements Upgrade of Aquatics Building Locker room Upgrade of Jim Thorpe Fieldhouse Flooring Upgrade of the Physical Education Activities Office

The result of taking no action will decrease the effectiveness of our instruction, general student spaces to meet our strategic needs, and cause the cause some upgrades related to accessibility and inclusion to not be completed. Some spaces that are deteriorating will continue to do so and their operating costs will continue to rise. This includes regular preventative action as well as regular maintenance. Most of the facilities and space upgrades would include more cost effective system and equipment upgrades; which if deferred would not offer the level of utility cost reduction that could be achieved. Deferring will also impact the ability to provide a safe, comfortable, and accessible campus for all that use it.

As is the case with reduction of approved funding for the university, we will prioritize the highest demand project and defer others as required. In many cases, there will be an additional burden on our operation budgets.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

These requests impact the university students, faculty, staff and community members that use our facilities on campus. This is our service area and includes a variety of university and community activities on a daily basis. Some projects specifically address specific buildings but, these improvements are a benefit to the campus as a whole and our entire clientele.

Currently, our estimates for this project are based upon cost per square foot or budgetary estimate provided by paid consultants or internal staff generated estimates. Once funding is approved and the design is underway, more detailed cost estimates will be developed and reviewed to provide information for project implementation and good stewardship of state resources.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

There are no related IT cost in this request. These projects do not fall under the requirements of OCIO review or oversight.

# Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

#### Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### Description

agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

These projects are developed and prioritized based on the needs stated in the university Academic Strategic Plan and our Comprehensive Campus Master Plan (2014).

The projects included here affect many other state programs such as sustainability and cost effective facilities management. These projects extend the lifecycle of our buildings' systems and respond to the normal life cycle deterioration that progress in all facilities.

The requested projects align with our Strategic Plan 2014 by supporting Student Success and providing Innovation and Opportunity and Community Engagement. All projects related to Minor Works Program relate to Eastern's strategic goal to remain an "institution of innovation." Eastern is a university of access for all and the improvement and modification with many of these projects are directly related to that strategy. As a priority to us, we consider the aspects relating to high quality/cost effective improvement and replacements, greenhouse gas emissions and the reduction of our carbon footprint. These projects also address the reduction of deferred backlog maintenance that stand as a priority of the state and university.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter 14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request?

Minor Works Program projects allow for providing rapid response to programmatic changes and the dynamic needs of the university. While major projects are years in development, these smaller projects offer the opportunity to make changes that positively affect students and the college environment in a shorter time frame. These projects also put in place improvement that will bridge department and programs until major project funding is available.

Good planning, system renewal and minor capital improvements allow for long term reduction of operating costs, reduction of emergency or catastrophic failures and extension the lifecycle of mission critical systems for the university.

The university continues to capture and prioritize Minor Works so that when funds become available, we can assign them to projects that are most critical to our operation and complete them in a timely manner. Continual deferring of the critical projects could cause premature, catastrophic and costly failures. Minor projects reduce the frequency of emergencies and cost less on a long term basis.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

New Facility: No

#### Funding

Expenditures
**OFM** 

## 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

#### Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

Func	ding					
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
061-1	EWU Capital Projects-State <b>Total</b>	7,000,000				7,000,000
		7,000,000	0	0	0	7,000,000
		Fu	iture Fiscal Perio	ods		
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Total	0	0	0	0	
Oper	rating Impacts					

#### **No Operating Impact**

#### SubProjects

SubProject Number: 30000605

SubProject Title: Minor Works Program - 061 - Classroom Technology

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000605 SubProject Title: Minor Works Program - 061 - Classroom Technology

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University requests Minor Works Program funding to support the improvement and enhancement of our classroom technology. Many classrooms at EWU lack the technology based equipment necessary for modern instruction. Most of our auditorium style classrooms were upgraded in the late 1990s. Although they included many new electronic features, they have all fallen out of date because of the rapid evolution of the technology equipment industry In order to keep pace with the changes of our times, EWU must constantly be changing the amenities offered in our classrooms. A great number of students come from high schools whose classrooms are better equipped than those at our university. The academic success of our students is, in many ways, tied to the facilities they are instructed in. This is never more true than in the area of technology.

#### Project Description

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Many classrooms at EWU lack the technology based equipment necessary for modern instruction. Most of our auditorium style classrooms were upgraded in the late 1990s. Although they included many new electronic features, they have all fallen out of date because of the rapid evolution of the technology equipment industry

In order to keep pace with the changes of our times, EWU must constantly be changing the amenities offered in our classrooms. A great number of students come from high schools whose classrooms are better equipped than those at our university. The academic success of our students is, in many ways, tied to the facilities they are instructed in. This is never truer than in the area of technology.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Following a brief survey of our existing facilities, though spaces having the greatest priority for improvement in the greatest needs and efficiencies to correct will be remodeled and retrofitted to utilize state-of-the-art instructional technology. Classroom equipment, infrastructure upgrades, and furnishings systems will comprise the majority of the project.

The project could be phased based upon type of project (remodel, new construction, direct purchases, state contracts, etc.) or location of spaces. All work must take place outside of our normal periods of instruction, most likely in a single phase in the summer of 2017.

## How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Upgrading the technology in our classroom spaces would be to provide our students with the greatest learning advantages and equip our faculty with the most advanced tools. It would enable the use of visual aids through video projection or large-screen monitors currently not provided, or improve the learning environment by upgrading to systems that are state-of-the-art.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000605

SubProject Title: Minor Works Program - 061 - Classroom Technology

All faculty and staff would benefit from the upgrades that would result from these projects. Not only would it benefit our current students, but it would serve as a tool for recruitment of both future students and prospective faculty.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Eastern Washington University's values, mission, and vision begins with providing a student centered learning environment that fosters excellence in learning. The cornerstone of our strategic plan is student success. This project is about fulfilling our commitment to successfully attracting, retaining, graduating, and transforming the lives of all our students.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

A significant percentage of our classrooms still have antiquated technology such as slide projectors, VCRs, and overhead projectors mounted on carts and utilizing wall-mounted pulldown projector screens. Room lighting, acoustics, and HVAC all factor in to the equation when designing spaces for modern technology. These deficiencies are intended to be addressed as well as purchasing and installing new equipment.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

New Facility: No

**OFM** 

## 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000605

SubProject Title: Minor Works Program - 061 - Classroom Technology

Funding			Expenditures			2017-19 Fiscal Period	
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
061-1	EWU Capital Projects-State	850,000				850,000	
	Total	850,000	0	0	0	850,000	
		F	Future Fiscal Per	riods			
		2019-21	2021-23	2023-25	2025-27		
061-1	EWU Capital Projects-State						
	Total	0	0	0	0		
<u>Opera</u>	ting Impacts						
No Op	erating Impact						

SubProject Number: 30000606

SubProject Title: Minor Works Program - 061 - ADA Program Improvements

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000606 SubProject Title: Minor Works Program - 061 - ADA Program Improvements

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the critical need for upgrades and enhancement for Americans with Disabilities (ADA) compliance and accessibility issue on campus. These are compliance and regulatory issues that are need to provide equal access for all to programs, facilities and activities. These project were identified and developed in response to the needs of the university to offer the best barrier free access to the users of the Cheney campus. Projects included are: Americans with Disability Act (ADA) compliance issues, improvement of barrier free access and expanding our universal access to all areas of the campus. This project also includes the replacement of deficient equipment that is at the end of it lifecycle. These projects were identified through evaluation of our current system by engineering consultants, regulatory agencies, plant staff and capture the costs associated with maintaining and operating the existing systems through our computerized maintenance management systems. In 2008 the university through the use of a professional consultant survey the campus building and surrounding grounds and developed a database of barrier free items that need to be addressed These projects are prioritized to make the most affective impact on improving the systems and equipment, extending the lifecycle of systems and reducing the maintenance and operating cost for the university.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

In areas within our buildings that are outside the main public circulation ways, many deficiencies exist that encumber a student or faculty members with disabilities. In many laboratory-type instructional spaces, separate accommodations are not made that comply with current state and federal ADA regulations. The same can be said for faculty offices and support spaces that at times require access by our students and support staff.

University is committed to eliminating the barriers to accessibility for our students, faculty, and staff. The number of individuals requiring accommodation has increased significantly in the past 25 years mostly due to the fact that public facilities are more user-friendly for those who have disabilities. Correction of most of the known issues requires more than the rearrangement of furniture or the installation of hardware that complies with current code standards.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will result in interior remodeling of a variety of spaces. Following a study that identifies the locations of concern and severity of needs, designs will be prepared for construction. It's anticipated that all work will take place outside of normal times of construction, but it is likely the projects will be phased in order to occur in the short time windows between academic quarters. The first of these projects could start as soon as early December 2017.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

Many of our buildings have had substantial remodels in the recent past, not every space has been addressed that affect the use by students and faculty with disabilities. There are still buildings on campus that make no accommodations for individuals with disabilities. This request would modify existing facilities to meet the current building codes and ADA standards.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000606

#### SubProject Title: Minor Works Program - 061 - ADA Program Improvements

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

EWU has a growing number of individuals with disabilities seeking higher education on our Cheney campus. Such individuals are not just those who are bound to wheelchairs but include those who are ambulatory impaired (i.e. on crutches, using canes and walkers, or otherwise have difficulty walking), visually impaired, or otherwise physically impaired (i.e. unable to pull the door open under normal circumstances).

Although the students with disabilities would obviously benefit from these improvements, it expands the universities ability to serve a broader and more diverse student population. Almost every academic program has some type of issue that this budget request would solve, from furniture replacement to pedestrian circulation and access.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Making needed accommodations for faculty, students, staff, and visitors with disabilities achieves the goals of the state of Washington for making reasonable accommodation to this segment of our society. Universally, it provides access to students who would otherwise be prevented or discouraged from seeking higher education.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Where other minor Works requests deal specifically with toilet facilities, this category deals with individual programs that have experienced difficulties in accommodating students and faculty with disabilities in the past. Where many times it is as simple as modifying a door or rearranging the furniture, this request is intended to do what normal maintenance budgets are unable to correct.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000606 SubProject Title: Minor Works Program - 061 - ADA Program Improvements

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period				
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps			
061-1	EWU Capital Projects-State	450,000				450,000			
	Total	450,000	0	0	0	450,000			
		Future Fiscal Periods							
		2019-21	2021-23	2023-25	2025-27				
061-1	EWU Capital Projects-State								
	Total	0	0	0	0				
<u>Opera</u>	ting Impacts								
No Op	erating Impact								

SubProject Number: 30000607 SubProject Title: Minor Works Program - 061 - Green Sustainability Initiatives

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000607 SubProject Title: Minor Works Program - 061 - Green Sustainability Initiatives

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Works Program funding to support the implementation of green and sustainable initiatives on the Cheney campus. In the University's pursuit to meet state goals and objectives regarding sustainability in public facilities, many of our practices have been modified. In areas where sustainability can only be achieved through substantial purchases and/or renovations, this request would enable the University to succeed at a broader level. Items of been identified as non-sustainable conditions or practices include waste collection, potable water system purification, landscape maintenance, recycling, and exterior lighting. Some items not only have ecological implications but economic ones as well such as reducing the use of fossil fuels in waste and recycling collection. Some have health and safety implications such as cold food refrigeration and pathway lighting.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

In the University's pursuit to meet state goals and objectives regarding sustainability in public facilities, many of our practices have been modified. In areas where sustainability can only be achieved through substantial purchases and/or renovations, this request would enable the University to succeed at a broader level.

Items that have been identified as having non-sustainable conditions or practices include waste collection, potable water system purification, landscape maintenance, recycling, and exterior lighting. Some items not only have ecological implications but economic ones as well such as reducing the use of fossil fuels in waste and recycling collection. Some have health and safety implications such as cold food refrigeration and pathway lighting.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Projects that will result from the approval of this request include the purchase of more fuel-efficient vehicles (possibly electricpowered), the installation of filtered water bottle filling stations, the replacement of spray irrigation systems with drip systems, the purchase of modern cleaning equipment that operates without the aid of chemicals, and the retrofitting of select electronic devices to become solar powered.

Design and construction documents of all projects will occur in the early part of the biennium with the majority of projects being executed in the latter part, beginning in the spring of 2017. Projects may be split into phases depending upon their type, location, and whether dependency. Some may be affected by the academic calendar where construction would conflict with normal University operations.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

For the examples listed in the question above, all would result in conditions that cost the university less to run and maintain, provide essential services to the greater population of campus, reduce the University's consumption of energy (particularly fossil fuels), and would leave a smaller carbon footprint.

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000607

#### SubProject Title: Minor Works Program - 061 - Green Sustainability Initiatives

Most of the projects that would be attempted under this request are aimed at improving current conditions for the future. As energy costs continue to rise and our population as an institution grows, so does our impact on the environment. Without addressing the needs now, the problems identified above are compounded making it more difficult and expensive to rectify in the future.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Because this request addresses needs in all sectors of our campus, everyone is affected by the outcome. It would enable the University to stretch their maintenance resources while providing better service to our campus constituents. It would consume less energy and thereby reduce energy costs, preserving dollars for greater needs.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

EWU's sustainability goal is to promote environmental sustainability and reduce the impact of university operations on the environment. The University established a sustainability committee charged with being an instrument for the discussion of sustainability and energy conservation between the various campus and stakeholders the goals that they established and the timelines that were set were intended to meet the intent of the AASHE (Association for the Advancement of Sustainability in Higher Education) and with the ACUPCC (American Colleges and University Presidents Climate Commitment). Such goals include the reduction of the institutions carbon footprint, which can be most feasibly achieved through reduction of emissions.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Reduction of campus emissions is likely to also achieve a savings in future costs for energy usage. The long-term benefits not only include a healthier air quality for the area immediately surrounding our campus, but also lower energy consumption at a time when energy costs are expected to rise. It would not only be environmentally sustainable but economically sustainable as well.

Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000607 SubProject Title: Minor Works Program - 061 - Green Sustainability Initiatives

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
061-1	EWU Capital Projects-State	500,000				500,000
	Total	500,000	0	0	0	500,000
		F				
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number:30000608SubProject Title:Minor Works Program - 061 - Water Conservation Project

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000608 SubProject Title: Minor Works Program - 061 - Water Conservation Project

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Work Program funding to address the reduction of domestic use on the Cheney campus. The university commitment to conservation and sustainability is a critical part of our strategic initiative of a "University of Innovation" With limited water resources due to the static supply versus growing demand, the University has found itself in situations where irrigation systems needed to be shut down in order to maintain adequate levels for domestic water usage and fire protection. Attacking the problem with water conservation is not only the most fiscally responsible approach, but also the most logical. In wanting to be the best stewards of state resources, Eastern Washington University desires to waste less rather than use more.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

As the campus expands their enrollment and develops new properties for facilities, the burden on our water system becomes greater and greater. Expanding infrastructure systems is the most expensive means of fulfilling our expanding needs but conservation is the least expensive.

With limited water resources due to the static supply versus growing demand, the University has found itself in situations where irrigation systems needed to be shut down in order to maintain adequate levels for domestic water usage and fire protection. Attacking the problem with water conservation is not only the most fiscally responsible approach, but also the most logical. In wanting to be the best stewards of state resources, Eastern Washington University desires to waste less rather than use more.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Depending upon the result of design study and analysis, we anticipate making modifications to our irrigation systems, potable water systems, and fire protection systems wherever possible to make an appreciable impact on our consumption.

The design studies would take place in the summer and fall of 2017 and construction during the following spring and summer. Some of these initiatives may be affected by the academic calendar and some by the effects of winter on construction, some may be affected by both. It is anticipated that some projects could extend into the latter part of the biennium and carry over into the early part of the next. Phasing the construction may be necessary to mitigate calendar conflicts with instruction, university operations, and the weather.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The goal of this request is to achieve greater efficiencies to what our standard practices are in areas of water usage. If possible, we would replace spray irrigation systems with drip irrigation systems. Many plumbing fixtures could be retrofitted with low flow devices, accommodating the same need with less water.

The University has started the ball rolling on utilizing groundwater captured in the basements of our buildings for irrigation.

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000608

#### SubProject Title: Minor Works Program - 061 - Water Conservation Project

Three of our LEED certified projects were designed with underground water collection tanks fed by water collected in the basements of those buildings. According to this State Department of Ecology, such waters are considered nuisances that the owner/agency must deal with. In the past, these waters were sent to the sanitary sewer system for which we pay the City a usage fee based upon volume. Capturing this water for reuse reduces the amount of fee paid to the city, the impact to the environment, and preserves are well water resources for the greater needs of campus.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The benefits of this request would be twofold: it would stretch our resources to cover and expanding need for domestic potable water, and it would reduce our utility costs. It would enable us to maintain irrigated areas of campus that are sometimes shut down during peak water usage times. These areas often time turn brown which affects the appearance of campus, usually immediately preceding the start of the fall quarter when we hope to have our campus looking at its best.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

EWU's sustainability goal is to promote environmental sustainability and reduce the impact of university operations on the environment. The University established a sustainability committee charged with being an instrument for the discussion of sustainability and energy conservation between the various campus and stakeholders the goals that they established and the timelines that were set were intended to meet the intent of the AASHE (Association for the Advancement of Sustainability in Higher Education) and with the ACUPCC (American Colleges and University Presidents Climate Commitment). Such goals include the conservation of our water resources.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

Is there additional information you would like the decision makers to know when evaluating this request?

No.

Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type Program (Minor Works)



2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000608 SubProject Title: Minor Works Program - 061 - Water Conservation Project

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
061-1	EWU Capital Projects-State	500,000				500,000
	Total	500,000	0	0	0	500,000
		F				
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Total	0	0	0	0	
<u>Operat</u>	ing Impacts					
No Op	erating Impact					

SubProject Number:30000609SubProject Title:Minor Works Program - 061 - Program Remodels

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000609 SubProject Title: Minor Works Program - 061 - Program Remodels

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Works Program funds to be used to renew and enhance our academic and non-academic program spaces. Eastern Washington University runs over 50 academic related programs each year. Because of new pedagogical means, methods and technologies, changes are necessary in several programs. In cases where the requirements for accreditation change due to new methods of instruction or new findings based on recent research, remodeling of program space is necessary to maintain our accreditations and certifications.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

Eastern Washington University runs over 50 academic related programs each year. Because of new pedagogical means, methods and technologies, changes are necessary in several programs. In the cases where the requirements for accreditation change due to new methods of instruction or new findings based on recent research, remodeling of program space is necessary to maintain our accreditations and certifications.

Keeping pace with peer institutions by offering programs that are on par with the higher education norm makes this request a high priority. In most cases, the students served are upperclassman close to achieving undergraduate degrees. In the programs involving engineering and technology, specialized equipment and the infrastructure necessary to support it is ever-changing. These programs affect a large percentage of our student population pursuing degrees in those areas.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request supports the design and construction of the existing spaces to support new equipment intended to enhance specific academic programs. Where the individual projects have yet to be identified, each biennium usually produces more projects than the funding levels can support. The amount of our request is the approximate average of several past biennium's requests.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

As needs arise, this request would enable the University to respond to those needs on a case-by-case basis, upholding our commitment to quality education through our course offerings and special programs. In some cases it would result in remodeling space, in other cases providing the infrastructure necessary to support new equipment sometimes obtained through outside funding sources (i.e. grants, donations, etc.).

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

This budget request would most likely provide a positive impact to our upper level courses that utilize special spaces and equipment. Programs such as engineering, technology, physical therapy, dental hygiene, fine arts, modern languages, and

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000609

SubProject Title: Minor Works Program - 061 - Program Remodels physical education are heavily dependent upon uniquely equipped facilities.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Three of the five pillars in EW's strategic plan are (1) provide a student centered learning environment, (2) achieve quality in everything we do, and (3) expand access and opportunity for the success of our students. This project would directly address those three points. By upgrading our instructional spaces for specialized programs, the quality of our education programs increases greatly, which has a direct effect on our students' pre-and post-graduation success.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Examining past levels of enrollment point towards the future trend of students seeking instruction and degrees in engineering, computer science and technology, programs that are uniquely dependent upon the facilities they are accommodated by. Where some programs' facility needs do not change due to the nature of their instruction (i.e. English, math, etc.) These particular programs see changes on a yearly basis. In the areas of computer and audiovisual equipment alone, five-year-old equipment can be considered obsolete.

Where the equipment itself represents one cost, it is typical that the infrastructure required to support it becomes the greater cost in its installation. In extreme cases (usually science) it can require the complete remodeling of existing space or the creation of new space (i.e. research laboratories requiring finely tuned and sensitive HVAC systems).

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)



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Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000609 SubProject Title: Minor Works Program - 061 - Program Remodels

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
061-1	EWU Capital Projects-State	1,000,000				1,000,000
	Total	1,000,000	0	0	0	1,000,000
			Future Fiscal Pe			
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Total	0	0	0	0	
<u>Operat</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000610 SubProject Title: Minor Works Program - 061 - Emergent Need

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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000610 SubProject Title: Minor Works Program - 061 - Emergent Need

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Works Program funds to address Emergent Facilities needs on the Cheney campus. Looking back at each of the past five biennia, Eastern Washington University has found itself in situations where needs arise that were not foreseen. Often times it comes when an opportunity to capture grant funding results in a remodel project or an infrastructure upgrade. Other times it can be a result of receiving a donation or gift-in-kind such as in the case of robotics equipment that has been life-cycled out of a manufacturing facility and given to the University as a tax write off. When this happens, Eastern is the beneficiary only if there are funds to support its installation.

#### **Project Description**

Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

This request addresses the situations where university needs arise that are unanticipated and unforeseen. Every biennium, careful planning and consideration goes into each request for funding but the dynamics of managing the entire campuses facilities cannot account for those needs that arise sometimes years past the time of the request.

Looking back at each of the past five biennia, Eastern Washington University has found itself in situations where needs arise that were not foreseen. Often times it comes when an opportunity to capture grant funding results in a remodel project or an infrastructure upgrade. Other times it can be a result of receiving a donation or gift-in-kind such as in the case of robotics equipment that has been life-cycled out of a manufacturing facility and given to the University as a tax write off. When this happens, Eastern is the beneficiary only if there are funds to support its installation.

In other instances there have been shifts in instructional programs that require minor remodeling. In modern languages, for example, there was a recent change from audio cassette learning stations to computer-driven systems. Where the change was obviously beneficial to the programs initiating it, it placed an undue burden on our facilities infrastructure that required significant additions and alterations to accommodate.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

Where these changes are unforeseen, specific details of what will be produced cannot be given. What can be anticipated is that these needs will arise and there will need to be funds in place in order to meet them. The projects that we would address sometimes surface in between the time of our request and the start of the biennium giving the University time structure a plan for execution.

Phasing will be a matter of the number and types of projects the University will undergo. It is not likely that the entire requested amount will go towards a single project (although there is always that potential). It is most likely that several projects will be addressed in this category and will be constructed across the entire time span of the 2017-2019 biennium.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

By funding these types of programs contingencies, the University is positioned to meet the changing needs of our educational

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Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000610

#### SubProject Title: Minor Works Program - 061 - Emergent Need

and support departments. It enables us to keep pace with emerging technologies, pedagogical shifts, increasing enrollments, and successes in marketing. It would avoid the situation where opportunities to support the University's mission and to enhance the education experience would be missed or delayed due to lack of funding.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

This request would be a reserve fund that would be for any and all needs that would arise that were unaccounted for in the biennium funding request. It has the potential to benefit any program or department on campus, the University would prioritize it towards those projects which it deems as critical in supporting the university's mission to enhance the quality of education to our students.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Eastern Washington University's values, mission, and vision begins with providing a student centered learning environment that fosters excellence in learning. The cornerstone of our strategic plan is student success. This project is about fulfilling our commitment to successfully attracting and retaining graduating and transforming the lives of all our students.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

Is there additional information you would like the decision makers to know when evaluating this request?

No.

Location City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)



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Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000610 SubProject Title: Minor Works Program - 061 - Emergent Need

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period				
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps			
061-1	EWU Capital Projects-State	550,000				550,000			
	Total	550,000	0	0	0	550,000			
		Future Fiscal Periods							
		2019-21	2021-23	2023-25	2025-27				
061-1	EWU Capital Projects-State								
	Total	0	0	0	0				
<u>Operat</u>	ting Impacts								
No Op	erating Impact								

SubProject Number:30000611SubProject Title:Minor Works Program - 061 - Aquatics Locker Room Upgrade

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000611 SubProject Title: Minor Works Program - 061 - Aquatics Locker Room Upgrade

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University request Minor Work Program funds to address the critical need of upgrading and renewing the Aquatic Building locker room. Age and deterioration of this space has reduced access and the quality of the programs that continually use the space. Maintenance upgrades have been performed over the years for the pool area itself including ceiling replacement, HVAC improvements, and pool plastering. The locker room area has been maintained regularly, but many components have reached the end of their life cycle and are in need of replacement such as benches, lockers, plumbing fixtures and accessories, and ventilation.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The aquatic center was one of five phased projects designed and constructed in the late 1960s and early 1970s. One of the last phases is completed, it is also one of the last to receive major upgrades. Time and use have resulted in the degradation of materials and finishes, particularly in high humidity and wet environments.

Maintenance upgrades have been performed over the years for the pool area itself including ceiling replacement, HVAC improvements, and pool plastering. The locker room area has been maintained regularly, but many components have reached the end of their life cycle and are in need of replacement such as benches, lockers, plumbing fixtures and accessories, and ventilation.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will address the needs that normal maintenance cannot overcome. After a survey that establishes needs and priorities, design and bid documents will be produced prior to the implementation of construction in the spring of 2018. It is not expected that this project will be phased as it will require an interruption of service and use of the pool facility while construction is taking place.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This request will result in a construction project that updates a 45-year-old facility to be serviceable and maintainable for the next 45 years. It protects the investment of the state and maintains the services it offers to the University and community at large. Many of the corrections that will be made, if left unaddressed, could present a health and safety hazard to its users in the foreseeable future (i.e. rust, mold, mildew).

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The aquatic center is used in both physical education and for general student and community recreation. Thousands of people each year use the facility, but the primary beneficiary of these improvements would be the students, faculty, and staff at

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000611

SubProject Title: Minor Works Program - 061 - Aquatics Locker Room Upgrade Eastern.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Three of the five pillars in EW's strategic plan are (1) provide a student centered learning environment, (2) achieve quality in everything we do, and (3) expand access and opportunity for the success of our students. This project would directly address those three points. By upgrading our educational and recreational spaces, the quality of our student's university experience increases greatly, which has a direct effect on our students' pre-and post-graduation success.

The most prudent use of our financial resources is to maintain the facilities that the state has already invested in. Where maintenance dollars cannot be stretched to make capital improvements for complete replacement of building components that have reached the end of their life cycles, these projects enable us to continue our use of these facilities for many decades in the future.

For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda

#### Is there additional information you would like the decision makers to know when evaluating this request

No.

Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

New Facility: No

**OFM** 

## 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000611

SubProject Title: Minor Works Program - 061 - Aquatics Locker Room Upgrade

Fundi	na		Expenditures		2017-19	Fiscal Period
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	<u>Reapprops</u>	New Approps
061-1	EWU Capital Projects-State	950,000				950,000
	Total	950,000	0	0	0	950,000
		F				
		2019-21	2021-23	2023-25	2025-27	
061-1	EWU Capital Projects-State					
	Total	0	0	0	0	
<u>Opera</u>	ting Impacts					
No Op	erating Impact					

SubProject Number: 30000612

SubProject Title: Minor Works Program - 061 - JFK Flooring Replacement

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000612 SubProject Title: Minor Works Program - 061 - JFK Flooring Replacement

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the needs to replace the flooring in the John F. Kennedy Library. Carpet flooring usually requires replacement within 10 to 15 years after its installation. Hard surface floors such as resilient tile can require replacement from 10 to 20 years. All of the floor finishes in this facility are reaching or have reached the end of their life cycle. Because of the large floor area and the logistics involved in changing carpet around book collections and the constant use of the facility, piecemeal replacement as a maintenance project is unfeasible. Replacement of these finishes as a minor Works project would be the most financially and logistically feasible.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The JFK library was originally constructed in 1967, replacing the University's original 1940 library building. The entire facility underwent a complete remodel in the late 1990s. Since that time, only minor upgrades and remodeling have been done to support emerging program needs. Regular maintenance has been performed to maintain the state's investment, but many of the interior finishes have reached the end of their normal useful life.

Carpet flooring usually requires replacement within 10 to 15 years after its installation. Hard surface floors such as resilient tile can require replacement from 10 to 20 years. All of the floor finishes in this facility are reaching or have reached the end of their life cycle. Because of the large floor area and the logistics involved in changing carpet around book collections and the constant use of the facility, piecemeal replacement as a maintenance project is unfeasible. Replacement of these finishes as a minor Works project would be the most financially and logistically feasible.

The original construction called for the carpet to be furnished in roles, laid on an open floor before bookshelves and fixed casework was installed. The backing material of such carpets could not withstand modern methods of cleaning that involve steam and injected hot water, limiting the University's ability to maintain these products. Time and use has caused this carpet to have reached the end of its useful life in most areas, and in high traffic areas it has reached that point many years ago.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request would accomplish the complete replacement of worn out flooring materials in one of our most heavily used facilities on campus. The library is usually the first building to open and the last billing the close, and operates seven days a week during the academic school year. The likely window of opportunity to accomplish this work would be between the summer and fall academic quarters, from early August until late September 2018.

It is not expected to be done in separate phases in order to minimize the downtime and disruption to the universities use of this critical need space. Because of the logistical conflicts with existing bookcases and other casework, it would require an additional level of selective demolition and removal and replacement of existing construction in order to do the job properly. Because of the critical function that our library service for our students, the project cannot be accomplished over an extended period of time.

How would the request address the problem or opportunity identified in question #1? What would be the result of not

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Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000612

# SubProject Title: Minor Works Program - 061 - JFK Flooring Replacement taking action?

Replacement of the flooring would enhance the facility not only from an aesthetic standpoint but also from an acoustic standpoint. The construction of carpet has changed over the past 20 years and new products that are available to us now would be expected to perform better and last longer than those that were available for selection at the time of the building's original construction. New carpets are now available in square tiles that enable us to replace areas of damage and high traffic wear selectively under normal maintenance, extending the life of the entire installation.

The construction of carpets has also changed such that they easily withstand the modern ecologically friendly means of cleaning using specialized hot water extraction equipment. The University currently maintains all their carpets this way except for those whose construction cannot withstand it. By leaving the existing carpet, greater failures would be expected in the near future such as delamination, unraveling, tears, and discoloration.

## Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

Because the library is the most utilized building on our campus by our entire student, faculty, and staff population, the greatest number of people would benefit by this project. It would extend the life of the facility and thereby protect the investment made by the state. It would also benefit our maintenance and operation staff by providing a flooring material that is more durable and easily maintained.

# Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

## Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Maintenance of our facilities preserves and protects the investment made by the state for higher education. It is a goal of the University to provide the best university experience for our students, particularly for those who opt to live on or near campus. The library services afforded to our students can only be as good as the facilities that support them. Considering the tremendous investment the state has made in our current library facilities, replacement of worn and damaged finishes would be considered a most prudent course of action.

## For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

No.

OFN	OFM 370 - Eastern Washington University Capital Project Request 2017-19 Biennium							
Versio	n: A6 Eastern Washington Un	iversity	•	Rep Date	ort Number: CBS Run: 9/15/2016	6002 9:53AM		
Projec Projec	t Number: 30000568 t Title: Minor Works Prog	gram - Local Resources 0	61					
SubF	Projects							
SubPro SubPro	oject Number:  30000612 oject Title:        Minor Works F	Program - 061 - JFK Floor	ing Replacement					
Locatio City	Location City: Cheney County: Spokane		Legislative District: 006					
<b>Projec</b> Prog	<b>t Type</b> gram (Minor Works)							
Growt The	h Management impacts re are no Growth Management	Impacts associated with thi	s project.					
New F	acility: No							
<u>Fundir</u> Acct <u>Code</u>	ng Account Title	Estimated <u>Total</u>	Expenditures Prior <u>Biennium</u>	Current Biennium	2017-19 <u>Reapprops</u>	Fiscal Period New <u>Approps</u>		
061-1	EWU Capital Projects-State <b>Total</b>	850,000 <b>850,000</b>	0	0	0	850,000 <b>850,000</b>		

		Future Fiscal Periods				
061-1 FWU	Capital Projects-State	2019-21	2021-23	2023-25	2025-27	
	Total	0	0	0	0	
Operating Im	pacts					
No Operating	J Impact					

SubProject Number: 30000613

SubProject Title: Minor Works Program - 061 - Jim Thorpe Fieldhouse Floor Replace

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000613 SubProject Title: Minor Works Program - 061 - Jim Thorpe Fieldhouse Floor Replace

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the requirement of replacing the activity flooring at the Jim Thorpe Fieldhouse. The base layer of material installed at the time of original construction has reached the end of its lifecycle. Additional resurfacing and topcoats cannot mitigate the structural issues that would lie beneath them. Changing needs and priorities in student recreation require a need for adjustments and rearrangements to the floor layout. Replacement of the floor would facilitate those changes

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The Jim Thorpe Fieldhouse is one of a five building complex constructed in the late 1960s and early 1970s that serves the physical education, sports, and recreational needs of the University. The Fieldhouse contains an indoor track, tennis courts, recreational basketball courts, and facilities for training in a variety of support programs. The existing track surface was resurfaced in its entirety in 2002 with additional paint top coatings inside the track area added in 2006.

The base layer of material installed at the time of original construction has reached the end of its lifecycle. Additional resurfacing and topcoats cannot mitigate the structural issues that would lie beneath them. Changing needs and priorities in student recreation require a need for adjustments and rearrangements to the floor layout. Replacement of the floor would facilitate those changes

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request would be for the removal and replacement of the entire floor surface within the existing building. Once the flooring has been removed, the subbase would be reworked and re-compacted to accept the new finish materials. The Fieldhouse is most heavily utilized during the late fall and winter months when most outdoor recreation is not possible. Scheduling construction around those times would be the most feasible, design and construction documents would be prepared during the fall of 2017 in the winter of 2018 for construction to begin in the late spring of 2018

Because of the narrow window under which this project needs to be constructed in, it is not envisioned that this would be a phase project. In order to accomplish this work there will be accommodations made by the programs offered during the summer months that utilize the space.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

The original flooring in the Fieldhouse was expected to last approximately 30 years. Considering that it has lasted 45 years, continuing to use it as is puts the University at a high risk for failures that would render the space unusable. Problems that it would mitigate include uneven levels, blistering, delamination, and surface peeling. Without replacement, it's possible that the University would be forced to eliminate many of the recreational programs that depend on the use of the space.

#### Which clientele would be impacted by the budget request? Where and how many units would be added, people or

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Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000613

# SubProject Title: Minor Works Program - 061 - Jim Thorpe Fieldhouse Floor Replace communities served etc. Be prepared to provide detail cost backup.

Eastern Washington University's recreation programs, particularly basketball, are very popular with the entire student population. The participation levels are greater than ever and with our anticipated enrollment growth, will only increase the demand for this facility. Our use of this building extends past student use in the summer quarter where many recreation camps are scheduled. Youngsters from across the state participate in these programs, with the numbers approaching 10,000 per year.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

# Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Maintenance of our facilities preserves and protects the investment made by the state for higher education. It is a goal of the University to provide the best university experience for our students, particularly for those who opt to live on or near campus. The recreational opportunities afforded to our students can only be as good as the facilities that support them. Considering the tremendous investment the state has made in our physical education, sports, and recreation facilities, replacement of worn and damaged finishes would a most prudent course of action.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

Considering that this floor is approximately 45 years old, and that it has been maintained on an annual basis, it is surprising that it has lasted this long. It is not expected that it will last much longer. Replacement would not only extend its life, but improve its performance as the technology in the design of materials of this type has advanced since the original installations.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

**Project Type** 

Program (Minor Works)



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Version: A6 Eastern Washington University

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Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number:30000613SubProject Title:Minor Works Program - 061 - Jim Thorpe Fieldhouse Floor Replace

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

#### New Facility: No

<u>Funding</u>		Expenditures			2017-19 Fiscal Period				
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps			
061-1	EWU Capital Projects-State	900,000				900,000			
	Total	900,000	0	0	0	900,000			
		Future Fiscal Periods							
		2019-21	2021-23	2023-25	2025-27				
061-1	EWU Capital Projects-State								
	Total	0	0	0	0				
<u>Operat</u>	ting Impacts								
No Op	erating Impact								

SubProject Number:30000614SubProject Title:Minor Works Program - 061 - PE Actitivies Office Remodel

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

SubProject Number: 30000614 SubProject Title: Minor Works Program - 061 - PE Actitivies Office Remodel

Starting Fiscal Year:2018Project Class:ProgramAgency Priority:8

#### Project Summary

Eastern Washington University is requesting Minor Works Program funding to address the need to remodel and upgrade the office in the Physical Education Activities building built in the late 1960's. Maintenance upgrades and minor capital improvements have been performed over the years including roof replacement, gymnasium floor refinishing, locker room rearrangement, and laundry equipment upgrades. The overall facility has been maintained regularly, but many components have reached the end of their life cycle particularly in the areas of the building's office space.

#### **Project Description**

# Identify the problem or opportunity addressed. Why is the request a priority? (Numbers not served, students without classrooms, budget savings, safety improvements, history, and other backup necessary to understand the need for the request.)

The PE Activities Building is one of five phased projects designed and constructed in the late 1960s and early 1970s. The second phase to be completed, it is one of the oldest buildings and the most dated in terms of finishes and equipment. Time and use have resulted in the degradation of materials and finishes, particularly in high humidity and wet environments.

Maintenance upgrades and minor capital improvements have been performed over the years including roof replacement, gymnasium floor refinishing, locker room rearrangement, and laundry equipment upgrades. The overall facility has been maintained regularly, but many components have reached the end of their life cycle particularly in the areas of the building's office space.

# What will the request produce or construct (i.e. design of a building, construction of additional space; etc.)? When will the project be start and complete? Identify whether the project can be phased, and if so which phase is included in this request.

This request will address the needs that normal maintenance cannot overcome. After a survey that establishes needs and priorities, design and bid documents will be produced prior to the implementation of construction in the spring of 2018. It is possible that this project will be phased depending upon the outcome of the initial survey and analysis. Construction will be structured such to maximize the amount of construction while minimizing the amount of disruption to normal building operations.

# How would the request address the problem or opportunity identified in question #1? What would be the result of not taking action?

This request will result in a construction project that updates a 45-year-old facility to be serviceable and maintainable for the next 45 years. It protects the investment of the state and maintains the services it offers to the University and community at large. Many of the corrections that will be made, if left unaddressed, could present a health and safety hazard to its users in the foreseeable future (i.e. rust, mold, mildew). The greatest areas that need to be addressed are lighting, ventilation, data and communications, and finishes.

# Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served etc. Be prepared to provide detail cost backup.

The offices in the PE Activities Building are occupied by University staff and students serving to support the recreational use by

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Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000614

#### SubProject Title: Minor Works Program - 061 - PE Actitivies Office Remodel

the general University population as well as community use. It is also utilized by select faculty in physical education and recreation programs. These programs utilize many student employees to operate, most of which do not currently have adequate office space to work from.

Does the request include IT related costs? (See the IT appendix for guidance, and follow directions to meet the OCIO review requirement.) What alternatives were explored? Why was this the recommended alternative chosen?

This project does not meet the OCIO review requirements.

Will non-state funds be used to complete the project? How much, what fund source? And could the request result in matching federal, state, local, or private funds?

No non-state funds are associated with this project.

Describe how the project supports the agency's strategic/master plans, contributes to statewide goal, or enabled the agency to perform better. Reference feasibility studies, master plans, space programming, and other analyses as appropriate.

Three of the five pillars in EW's strategic plan are (1) provide a student centered learning environment, (2) achieve quality in everything we do, and (3) expand access and opportunity for the success of our students. This project would directly address those three points. By upgrading our offices that support our recreational programs, the quality of our student's university experience increases greatly.

The most prudent use of our financial resources is to maintain the facilities that the state has already invested in. Where maintenance dollars cannot be stretched to make capital improvements for the complete replacement of building components that have reached the end of their life cycles, these projects enable us to continue our use of these facilities for many decades in the future.

# For projects linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda. See Chapter14.4 in the 2017-19 Operating Budget Instructions.

This project request has no link to the Puget Sound Action Agenda.

#### Is there additional information you would like the decision makers to know when evaluating this request?

No.

#### Location

City: Cheney

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

#### **Growth Management impacts**

There are no Growth Management Impacts associated with this project.

New Facility: No

**OFM** 

## 370 - Eastern Washington University Capital Project Request

2017-19 Biennium

Version: A6 Eastern Washington University

Report Number: CBS002 Date Run: 9/15/2016 9:53AM

Project Number: 30000568

Project Title: Minor Works Program - Local Resources 061

#### **SubProjects**

#### SubProject Number: 30000614

SubProject Title: Minor Works Program - 061 - PE Actitivies Office Remodel

Funding			Expenditures			2017-19 Fiscal Period	
Acct <u>Code</u>	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps	
061-1	EWU Capital Projects-State	450,000				450,000	
	Total	450,000	0	0	0	450,000	
		2019-21	2021-23	2023-25	2025-27		
061-1	EWU Capital Projects-State						
	Total	0	0	0	0		
<u>Operat</u>	ting Impacts						
No Op	erating Impact						

### **OFM**

### **Capital Project Request**

2017-19 Biennium

Interpreted As **Parameter** Entered As 2017-19 2017-19 Biennium 370 370 Agency Version A6-A A6-A \* **Project Classification** All Project Classifications Capital Project Number 30000568 30000568 Sort Order **Project Priority** Priority Include Page Numbers Y Yes For Word or Excel Ν Ν User Group Agency Budget Agency Budget \* All User Ids User Id