Eastern Illinois University
FY2027 Capital Budget Summary

Regular Capital Projects	**Amount**
1. Rehabilitate Physical Science Building – Remodel & Rehabilitation	69,920,100
2. Rehabilitate Coleman Hall – Remodel & Rehabilitation	40,430,400
3. Rehabilitate Klehm Hall – Remodel & Rehabilitation	31,175,800
4. Renovation of space for Student Services which includes the demolition of two existing buildings (estimate needs further refinement) – Remodel & Rehabilitation	107,104,800
Subtotal	$ 248,631,100

Capital Renewal Projects	
1. Additional Funds for New Science Building Construction (815-010-082) to ensure funding for greenhouse replacement	2,442,100
2. Additional Funds for Utility Tunnel Repair (815-010-084) to replace potable water and compressed air lines – Safety & Utilities	4,477,300
3. Fire Alarm Upgrades Old Main/Klehm Hall/Student Services/ Buzzard/ Coleman – Life Safety	8,473,800
4. Roof Replacement, Booth Library/Physical Science/Buzzard/McAfee/Klehm Hall/FPM North/Lumpkin Hall – Safety & Rehabilitation	7,656,700
5. Rehabilitate Windows, McAfee – Safety & Rehabilitation	5,063,300
6. Chilled Water System Upgrades – Safety & Utilities	11,322,300
7. Rehabilitate Building Envelope, Booth Library/Old Main – Safety & Rehabilitation	9,289,700
8. Upgrade Electrical Building Distribution – Safety & Utilities	8,217,800
9. Utility Transformer – Safety & Utilities	2,255,800
Subtotal	$ 59,198,800
Total Capital Projects	$ 307,829,900

Eastern Illinois University
Scope Statement
Category: Remodel and Rehabilitation

Rehabilitate Physical Science Building – Project Number 2027–1 **$69,920,100**

The Physical Science Building was originally constructed in 1938 as the first science building on the campus of Eastern Illinois University. Two wings and Phipps Lecture Hall were added to the building in 1969, at which time some HVAC and electrical upgrades were done to the original building. The overall building has not experienced any significant upgrades or improvements during its life. The total gross square footage of this facility is 128,683. The deferred maintenance needs of the building are extensive as all of the systems are past their expected life. Further, the teaching methods and classroom/laboratory space expectations are much different than they were 54-85 years ago. It is the current home to the department of Chemistry, Physics, Geology, Geography, Psychology. Upon the construction of the new Science building on the EIU campus, the Chemistry department will be the only department that will be moving out of the Physical Science Building. The students that the remaining departments serve deserve an improved learning environment.

The project would be to completely rehabilitate the facility, including building envelope, roof, mechanical systems, electrical systems and provide updated classrooms, laboratories and office spaces. The roof is approximately 50 years old, beyond its useful life, and leaks despite persistent patching. The windows are single pane; many of them are glazed with asbestos and coated with lead-based paint. The masonry has developed cracks in several areas, requiring stabilization and repair. All electrical components are outdated, some systems going back to the original construction. The electrical system itself is at or beyond capacity, as demand for modern instructional needs and conveniences have outpaced capital renewal. Steam condensate piping, used for heating, has numerous band clamps on the piping to stop leaks, as does the domestic water piping. Most mechanical systems are coated in asbestos thermal insulation, and all ceiling tiles used in the building contain asbestos, making them a safety hazard and causing ongoing maintenance issues. The building also contains a chiller and cooling tower used for the building and the campus, the system is fully depreciated and inefficient. The numerous ventilation hoods do not have demand control and run 24/7/365, wasting a tremendous amount of energy. The energy use intensity for the building is well above averages and guidelines identified by Energy Star. The plumbing fixture counts are too few for the building to current code. After Chemistry vacates, the space will need to be transformed into usable space for infilling occupants.
EIU is in the process of creating a new facilities master plan that focuses on our learning and living environments. As a part of that process, we will study this facility more in-depth and will refine the cost estimates as a part of that process.

Rehabilitate Physical Science Building – Project Number 2027–1, continued

SUMMARY OF PROJECT COSTS:

Construction	$ 48,250,800
Escalation (3 years at 2% per year)	2,895,000
Contingency (10%)	5,114,600
Construction Budget including contingency	$ 56,260,400
A&E Fees (10%)	5,626,000
On-Site Observation	2,273,400
Reimbursables	568,300
Asbestos	3,155,500
Project Budget	$ 67,883,600
CDB Fee (3%)	2,036,500
TOTAL Project Budget	$ 69,920,100

Eastern Illinois University
Scope Statement
Category: Remodel and Rehabilitation

Rehabilitate Coleman Hall – Project Number 2027–2 **$40,430,400**

Coleman Hall is a liberal arts academic building on campus that contains mostly classroom and office space. It was constructed in 1965, added onto in 1967, and received a third small addition in 1991. The total gross square footage of this building is 115,538.

The project would rehabilitate the facility, including window replacement and addressing other building envelope deficiencies, mechanical systems, electrical systems and provide updated classrooms, restrooms, and office spaces. The windows are single pane and many of them are glazed with asbestos. All electrical components are outdated and date back to the original construction. Steam and condensate piping, used for heating, has numerous band clamps on the piping to stop leaks. In some locations inaccessible lines are leaking under the concrete slab. There is asbestos present throughout the building, including most floors and mechanical systems, making ongoing maintenance difficult. The plumbing fixture counts are too few for the building to current code, and most restroom cannot meet accessibility codes due to building limitations. The elevator has a control system that is no longer supported and needs retrofitted.

EIU is in the process of creating a new facilities master plan that focuses on our learning and living environments. As a part of that process, we will study this facility more in-depth and will refine the cost estimates as a part of that process.

SUMMARY OF PROJECT COSTS:

Construction	$ 27,540,000
Escalation (2 years at 2% per year)	1,101,600
Contingency (10%)	2,864,200
Construction Budget including contingency	$ 31,505,800
A&E Fees (10%)	3,150,600
On-Site Observation	1,280,900
Reimbursables	320,300
Asbestos	2,995,200
Project Budget	$ 39,252,800
CDB Fee (3%)	1,177,600
TOTAL Project Budget	$ 40,430,400

Eastern Illinois University

Scope Statement
Category: Remodel and Rehabilitation

Rehabilitate Klehm Hall – Project Number 2027–3 **$31,175,800**

Klehm Hall is an applied arts academic building on campus that contains classroom, laboratory, and office space. It was constructed in 1966 and added onto in 1968. The total gross square footage of this facility is 86,994.

The project would be to rehabilitate the exterior of the as needed, including window replacement, roof replacement, parapet repairs, and other building envelope deficiencies. On the interior, mechanical systems, electrical systems would be rehabilitated, and updated classrooms, laboratories, restrooms, and office spaces would be provided. The windows are single pane and many of them are glazed with asbestos. All electrical components are outdated and date back to the original construction. Steam and condensate piping, used for heating, has numerous band clamps on the piping to stop leaks. The labs are hindered with outdated support systems. There is asbestos present throughout the building, including most floors and mechanical systems, making ongoing maintenance difficult. The plumbing fixture counts are too few for the building to current code, and most restroom cannot meet accessibility codes due to building limitations. The elevator is in need of retrofit.

EIU is in the process of creating a new facilities master plan that focuses on our learning and living environments. As a part of that process, we will study this facility more in-depth and will refine the cost estimates as a part of that process.

SUMMARY OF PROJECT COSTS:

Construction	$ 20,400,000
Escalation (2 years at 2% per year)	816,000
Contingency (10%)	2,121,600
Construction Budget including contingency	$ 23,337,600
A&E Fees (10%)	2,333,800
On-Site Observation	1,280,900
Reimbursables	320,300
Asbestos	2,995,200
Project Budget	$ 30,267,800
CDB Fee (3%)	908,000
TOTAL Project Budget	$ 31,175,800

Eastern Illinois University

Scope Statement
Category: Remodel and Rehabilitation

Renovation of space for Student Services which includes the demolition of two existing buildings – Project Number 2027–4 **$ 107,104,800**

With the operation of the Renewable Energy Center and after completion of the campus steam system upgrades currently being planned for, steam production capability will no longer be available from the current steam plant location. Additionally, the Student Services Building on EIU's campus is dated and in need up updates. This will be an opportunity for EIU to reduce campus square footage by demolishing two buildings, one unused and one outdated, and relocate services into existing under-utilized square footage. The project would additionally rehabilitate existing space to meet the needs of departments that provide service to students.

SUMMARY OF PROJECT COSTS:

Construction	$ 71,400,000
Escalation (2 years at 2% per year)	2,856,000
Contingency (10%)	7,425,600
Construction Budget including contingency	$ 81,681,600
A&E Fees (10%)	8,168,200
On-Site Observation	3,321,100
Reimbursables	830,300
Asbestos	9,984,000
Project Budget	$ 103,985,200
CDB Fee (3%)	3,119,600
TOTAL Project Budget	$ 107,104,800

Eastern Illinois University

Scope Statement
Category: Demolish & New Construction

Additional Funds for New Science Building Construction (815-010-082)

– Project Number 2027-5 **$ 2,442,100**

Eastern Illinois University is in the process of designing a new science building for the campus (CDB Project #815-010-082). Due to cost escalation, it has been requested of EIU to reduce the scope of the project below the program level to align with available funds. One of the items currently being cut from the program is a new greenhouse. EIU's current greenhouse is in extremely poor condition but is a critical part of our biological sciences program. This request is for the replacement of the greenhouse.

SUMMARY OF PROJECT COSTS:

Construction	$ 1,836,000
Escalation (1 year at 2%)	36,700
Contingency (10%)	187,300
Construction Budget including contingency	$ 2,060,000
A&E Fees (10%)	206,000
On-Site Observation	84,000
Reimbursables	21,000
Project Budget	$ 2,371,000
CDB Fee (3%)	71,100
TOTAL Project Budget	$ 2,442,100

Eastern Illinois University
Scope Statement
Category: Safety & Utilities

Additional Funds for Utility Tunnel Repair (815-010-084)– Project Number 2027-6 **$ 4,477,300**

Eastern Illinois University is in the process of designing utility tunnel repairs for the campus (CDB Project #815-010-084). While the project is in process, EIU desires to add to the scope to replace domestic water supply lines and compressed air piping. Many of the domestic water supply lines in the tunnels are galvanized and are in poor condition, with many band clamps to stop leaks, and reduced water flow and quality associated with internal corrosion. The compressed air is used for control of all space temperature regulating systems and critical functions in various academic labs and preparation areas. A study performed by the Department of Commerce and Economic Opportunity indicated that Eastern's distribution lines are undersized, causing loss of temperature control during periods of high air demand. In addition. The new piping system will be appropriately sized for the load it is serving.

SUMMARY OF PROJECT COSTS:

Construction	$ 3,366,000
Escalation (1 year at 2%)	67,300
Contingency (10%)	343,300
Construction Budget including contingency	$ 3,776,600
A&E Fees (10%)	377,700
On-Site Observation	154,000
Reimbursables	38,600
Project Budget	$ 4,346,900
CDB Fee (3%)	130,400
TOTAL Project Budget	$ 4,477,300

Eastern Illinois University
Scope Statement
Category: Life Safety

Fire Alarm System Upgrades – Project Number 2027-7 **$ 8,473,800**

This capital project updates the fire alarm detection, pull stations and notification devices to improve fire protection notification and increase occupant safety in the Old Main, Klehm Hall, Student Services, Buzzard Hall, and Coleman Hall buildings. New fire alarm systems will be compatible with the Simplex systems in campus security and will include an Emergency Notification System (ENS) to align with our 2013 Campus Security Plan as well as conform to the State Fire Marshal code standards and NFPA 101 – Life Safety Code. The ENS will provide student and staff notification of emergency actions such as shelter during severe weather or an active shooter on campus.

Characteristics of the installation will include:

1. Provide new Addressable Fire Alarm System with Voice Evacuation/Emergency Notification.
2. Where practical wiring shall be installed in existing fire alarm system conduits otherwise, new conduit or metal raceway with new wiring will be provided per EIU and CDB standards.
3. Where wiring cannot be concealed such as in mechanical or electrical spaces all wiring shall be installed in surface mounted conduit.
4. Wiring and conduits will be concealed in walls and ceilings in public spaces in Old Main.
5. In Klehm and Student Services, wiring and conduits will be concealed where possible or will incorporate surface raceways.
6. Wiring and conduits in mechanical or electrical spaces will be installed in surface mounted conduit.
7. In Old Main, consultant will work with Eastern Illinois University to determine historically significant areas and features within the building to ensure wiring and conduits will be installed concealed.
8. Due to ACM in corridor floor tile in Coleman some floor tile will be removed, abated and replaced.
9. Due to ACM in corridor floor tiles in Klehm, some floor tile will be removed abated and replaced.
10. Where existing appliance and device locations meet NFPA 72, new notification appliances will be installed; where existing appliance and device locations do not meet NFPA 72 or are inadequate, new devices will be installed to comply. Buzzard Hall currently is partly protected by sprinklers which cover some mechanical spaces in the basement and the open staircases/atriums, however no fire protection exists in all the egress corridors and individual spaces. The project would upgrade the fire protection system to 100% coverage providing fire protection in egress corridors and other spaces. Coleman Hall is a multi-story structure with no fire protection system. The project will install a fire protection service and fire sprinklers according to NFPA 13. In order to facilitate the fire protection and fire alarm in Coleman, it will be necessary to replace ceilings and the aged lighting to allow access for new piping, conduits, etc.

Fire Alarm System Upgrades – Project Number 2027–7, continued

SUMMARY OF PROJECT COSTS:

Construction	$ 6,340,000
Escalation (1 year at 2%)	126,800
Contingency (10%)	646,700
Construction Budget including contingency	$ 7,113,500
A&E Fees (10%)	711,400
On-Site Observation	56,700
Reimbursables	31,500
Asbestos	313,900
Project Budget	$ 8,227,000
CDB Fee (3%)	246,800
TOTAL Project Budget	$ 8,473,800

Eastern Illinois University
Scope Statement
Category: Safety & Rehabilitation

Roof Replacement, Booth Library/Physical Science/Buzzard/McAfee/Life Science Annex/Klehm Hall/FPM North/Lumpkin Hall, – Project Number 2027-8 **$ 7,656,700**

This capital project will address roof deficiencies on multiple buildings around campus, specifically Booth Library, Physical Science, Buzzard Education Building, McAfee Gymnasium, Life Science Annex, Klehm Hall, Facilities Planning and Management North, and Lumpkin Hall. All roofs have deteriorated to the point where we frequently see roof leaks that require interim repair efforts. The roofs would receive a complete tear-off and replacement, at which time the insulation would be increased to current energy code.

Note this project may require asbestos abatement of some extent.

SUMMARY OF PROJECT COSTS:

Construction	$ 5,610,000
Escalation (2 years at 2% per year)	224,400
Contingency (10%)	583,400
Construction Budget including contingency	$ 6,417,800
A&E Fees (10%)	641,800
On-Site Observation	261,000
Reimbursables	63,200
Asbestos	49,900
Project Budget	$ 7,433,700
CDB Fee (3%)	223,000
TOTAL Project Budget	$ 7,656,700

Eastern Illinois University
Scope Statement
Category: Safety & Rehabilitation

Rehabilitate Windows, McAfee – Project Number 2027-9 **$ 5,063,300**

McAfee Gymnasium is a beautiful art deco structure constructed by the WPA in 1937; it is listed on the national register of historic places. This project will repair/replace the classroom and other windows in McAfee Gym and tuckpoint brick and masonry as necessary. The University will work with the Illinois Historic Preservation Agency (IHPA) to assure that public spaces will not be adversely affected by the project.

Note this project will require asbestos abatement.

SUMMARY OF PROJECT COSTS:

Construction	$ 3,899,400
Escalation (1 year at 2%)	78,000
Contingency (10%)	397,700
Construction Budget including contingency	$ 4,375,100
A&E Fees (10%)	437,500
On-Site Observation	8,500
Reimbursables	2,900
Asbestos	91,800
Project Budget	$ 4,915,800
CDB Fee (3%)	147,500
TOTAL Project Budget	$ 5,063,300

Eastern Illinois University
Scope Statement
Category: Safety & Utilities

Chilled Water System Upgrades – Project Number 2027-10 **$ 11,322,300**

EIU's chilled water system consists of eight centrifugal chillers, six are water-cooled and two are air - cooled. The chillers are connected together in a decentralized loop, and supply comfort and process cooling to most major buildings on campus. Five of the water-cooled chillers are nearing 25+ years in age and are fully depreciated, less energy efficient than new, and a liability to the reliable operation of our chilled water system. This project we request would replace chillers and cooling towers, pumps, and repair cooling tower support steel which is deteriorating due to corrosion and causing a safety issue.

Note this project may require asbestos abatement of some extent.

SUMMARY OF PROJECT COSTS:

Construction	$ 8,160,000
Escalation (2 years at 2% per year)	326,400
Contingency (10%)	848,600
Construction Budget including contingency	$ 9,335,000
A&E Fees (10%)	933,500
On-Site Observation	379,600
Reimbursables	94,800
Asbestos	249,600
Project Budget	$ 10,992,500
CDB Fee (3%)	329,800
TOTAL Project Budget	$ 11,322,300

Eastern Illinois University
Scope Statement
Category: Safety & Rehabilitation

Rehabilitate Building Envelope, Booth Library/Old Main – Project Number 2027-11 **$ 9,289,700**

Old Main was constructed in 1899 and was the first building on campus and is on the national historic register. Booth Library was constructed in 1950; it is eligible for the national register of historic places. This project will repair/replace the windows, masonry, and entry doors as necessary. The University will work with the Illinois Historic Preservation Agency (IHPA) to assure that public spaces will not be adversely affected by the project.

Note this project will require asbestos abatement.

SUMMARY OF PROJECT COSTS:

Construction	$ 6,364,800
Escalation (1 year at 2%)	127,300
Contingency (10%)	649,200
Construction Budget including contingency	$ 7,141,300
A&E Fees (10%)	714,100
On-Site Observation	291,200
Reimbursables	72,800
Asbestos	71,500
Historical Preservation	728,200
Project Budget	$ 9,019,100
CDB Fee (3%)	270,600
TOTAL Project Budget	$ 9,289,700

Eastern Illinois University
Scope Statement
Safety & Utilities

Upgrade Electrical Building Distribution – Project Number 2027-12 **$ 8,217,800**

The existing distribution systems in Coleman and Klehm are original to the buildings. Both have substations and distribution which are more than 40 years of age and obsolete with no readily available replacement parts. This is especially an issue for the integral 5kV incoming switches for the unit substations (USS). Equipment was manufactured by Federal Pacific Electric (FPE) which ceased operations over 20 years ago. With the exception of some later additions, all distribution and branch panels and feeders are 40-50+ years of age and have surpassed normal life expectancies. Old Main has similar issues with the distribution and branch panels which exceed 50 years in age and are also manufactured by FPE.

None of the three buildings have adequate branch and distribution panel capacity to support new program needs. Motor controls are of similar age as the power distribution. Power distribution circuit capacity for necessary replacement of aging mechanical systems is needed.

Klehm is the only building of the three which has a generator and transfer switch for life safety system power such as exit signs, egress lighting and fire alarm system but is not large enough for any other use (19kW/24kVA). The single phase 120/240V generator is well beyond normal life expectancy (Onan - estimated 40-50 years old) and serviceability is questionable.

Old Main and Coleman lack Emergency Power System (EPS) to support central Life Safety systems.

Characteristics of the upgrades will include:

1. Provide new indoor MV Metal Enclosed switches for a 12.47kV loop and for feeds to new Unit Substations for Coleman and Klehm.
2. Replace existing Unit Substations (USS) in Coleman and Klehm. Provide both USS with new PowerLogic meter reconnected to the existing campus metering network. New USS will be sized for mechanical or other load needs.
3. Replace feeders for all existing distribution and branch panels in Coleman, Klehm and Old Main.
4. Replace existing distribution and branch panels in Coleman, Klehm and Old Main.
5. Add new 120/208V, 3Ø, 4W branch panels for future load needs in Coleman, Klehm and Old Main.
6. Replace generator, ATS and panels in Klehm for the EPS.
7. Add new EPS in Coleman and Old Main including new outside, weather enclosed diesel generators, automatic transfer switches and distribution for Life Safety systems.
8. Replace motor controls in Old Main.

Upgrade Electrical Building Distribution – Project Number 2027-12, continued

SUMMARY OF PROJECT COSTS:

Construction	$ 5,992,600
Escalation (1 year at 2%)	119,900
Contingency (10%)	611,300
Construction Budget including contingency	$ 6,723,800
A&E Fees (10%)	672,400
On-Site Observation	235,200
Reimbursables	12,000
Asbestos	335,000
Project Budget	$ 7,978,400
CDB Fee (3%)	239,400
TOTAL Project Budget	$ 8,217,800

Eastern Illinois University
Scope Statement
Category: Safety & Utilities

Utility Transformer – Project Number 2027-13 **$ 2,255,800**

Eastern Illinois University's main campus is powered through one utility transformer owned and operated by the campus. The transformer steps voltage down from Ameren's 69KV distribution voltage to 12.5 KV for campus distribution. The transformer has integral voltage regulators within the transformer, making it unique.

The current transformer is regularly checked and maintained; it is in good condition. However, if something were to happen to the transformer through act of God, equipment failure, sabotage, etcetera, the campus would be critically impaired. The lead time on a new transformer is estimated to be around three years. Our backup plan relies on renting strategically placed generators at distribution voltages at a rough cost of $50,000 per week. The generators would consume roughly 10,000 gallons of diesel fuel per day. The total cost to run these generators for three years could be around $50 million at $3.90 per gallon of diesel. Also, the generators would only handle roughly 80% of our peak load, meaning basic operations would need to be curtailed during times of high electric demand.

This project would add a redundant transformer and regulation station next to the current transformer in the event of failure of the current transformer. Either transformer could be turned on or off through manual switching and handle the full load of the campus, making it a truly redundant component. The redundancy would significantly reduce the likelihood of a physically and financially crippling event of a system failure, at a relatively low cost of avoidance.

SUMMARY OF PROJECT COSTS:

Construction	$ 1,591,200
Escalation (2 years at 2% per year)	63,600
Contingency (15%)	248,200
Construction Budget including contingency	$ 1,903,000
A&E Fees (10%)	190,300
On-Site Observation	77,400
Reimbursables	19,400
Project Budget	$ 2,190,100
CDB Fee (3%)	65,700
TOTAL Project Budget	$ 2,255,800