

**Iowa State University
Capital Request
Capital Project Summary
Fiscal Year 2021- 2025**

| Institution | Project Title | Category of Request | Priority |
|------------------------------|-------------------------------|----------------------------------------|-------------------------|
| Iowa State University | LeBaron/MacKay Complex | New Construction and Renovation | BOR # ISU #1 |

Estimated Cost by Year and Source of Funds (e.g. Academic Building Revenue Bonds, Building Repair Funds, Utility Enterprise Funds)

| | <u>Appro./Bonds</u> | <u>Private Gifts</u> | <u>University Funds</u> | <u>TOTAL</u> |
|--------------|---------------------|----------------------|-------------------------|---------------------|
| FY2021 | 10,000,000 | 5,000,000 | | \$15,000,000 |
| FY2022 | 10,000,000 | 5,000,000 | 5,000,000 | \$20,000,000 |
| FY2023 | 10,000,000 | 5,000,000 | 5,000,000 | \$20,000,000 |
| FY2024 | | | | |
| FY2025 | | | | |
| TOTAL | <u>30,000,000</u> | <u>15,000,000</u> | <u>10,000,000</u> | <u>\$55,000,000</u> |

Brief Description

As part of a comprehensive, holistic, and long-term facilities space and infrastructure assessment for the College of Human Sciences, a study of LeBaron Hall was undertaken in 2017. Further evaluation of the overall poor condition, infrastructure deficiencies, and structural limitations of LeBaron was a key objective. The study also included MacKay Hall, recognizing the deteriorated condition of sections of that facility. The two buildings jointly house multiple departments, which are distributed throughout both buildings. The location of departmental and college units has evolved over time as space became available, without the opportunity to optimize functional, programmatic adjacencies. LeBaron Hall has had no significant renovation since it was constructed in 1958; MacKay is the original and historical home of the college, built in 1911.

The study identified the need for additional space based on new and expanding programs and increased enrollment, and recognized the importance of optimizing the College's central campus location and limited expansion opportunities. The recommendation is to replace LeBaron Hall and the LeBaron circulation corridor, providing approximately 84,000 gross square feet of new space, replacing 49,000 gross square feet of poor quality, program-constraining space, and eliminating deferred maintenance of more than \$5M. The project will also include the renovation of certain sections of MacKay Hall. The college's programs are highly ranked, but current facilities no longer match programmatic excellence. New and updated facilities will offer a contemporary learning environment that will encourage independent learning and leadership-building, create a sense of community and inclusiveness, and better prepare students by facilitating industry-based and experiential learning.

| | GSF | NASF | Project Cost per Gross Square Foot |
|----------------------------------------|---------------|---------------|------------------------------------|
| New Construction (60% net-to-gross) | 84,000 | 50,400 | \$640 |
| Renovation (60% net-to-gross) | 5,000 | 3,000 | \$300 |

| Project Schedule (Elapsed months following Approval of Permission to Proceed by Board) | # Months | Cumulative | Previous Action (if any) |
|----------------------------------------------------------------------------------------|-----------|------------|--------------------------|
| Planning Phase | <u>24</u> | <u>24</u> | |
| Bidding | <u>2</u> | <u>26</u> | |
| Construction | <u>30</u> | <u>56</u> | |
| Opening | <u>2</u> | <u>58</u> | |

| Budget Estimate: | | Operating Budget Impact: (full year estimate) | |
|--------------------------------------|---------------------|----------------------------------------------------------|------------------|
| Construction Cost | <u>\$43,850,000</u> | Opening Cost (nonrecurring) | <u>0</u> |
| Fixed Equipment* | <u>0</u> | Operations and Maintenance | <u>\$130,000</u> |
| Movable Equipment | <u>2,800,000</u> | Utilities | <u>155,000</u> |
| Utility Extensions | <u>0</u> | Other (Grnds/EHS/DPS/Mail) | <u>28,000</u> |
| Site Development/Land Acquisition | <u>0</u> | Total | <u>\$313,000</u> |
| Design and Supervision | <u>4,500,000</u> | | |
| Art Work | <u>0</u> | Annual Capital Renewal | <u>\$825,000</u> |
| Contingency | <u>1,100,000</u> | | |
| Internal Project Management | <u>2,750,000</u> | | |
| Total Project Budget Estimate | <u>\$55,000,000</u> | Source of Operating Funds: CHS | |
| * Included with Construction Cost | | Source of Annual Capital Renewal: General Fund | |

Name and Priority

LeBaron/MacKay Complex
Priority #1 in FY 2021

Category of the Request

New Construction and Renovation

Statement of the Problem

The College of Human Sciences occupies space in several buildings, four of which are physically connected: MacKay, constructed in 1911 and 1926, LeBaron Hall, constructed in 1958, with two subsequent additions, the Human Nutritional Sciences Building, built in 1992, and the Palmer Building, which was completed in 2000. The college occupies over 225,000 net square feet in total; more than half of the college's space is located in this four-building complex on central campus. All space is occupied and in use, regardless of condition and functionality. A college-wide space assessment in 2014 identified the need for additional space, as well as the need to replace and renovate existing, poor quality, obsolete and inadequate space. The study included a variety of recommendations which included renovation and repurposing existing space, addressing critical building infrastructure needs, and implementing improvements to support programmatic priorities. The study also recommended evaluating options to renovate or replace LeBaron Hall, in addition to exploring options for expansion.

Due to the age and condition of LeBaron and MacKay, and the interrelated nature of the programs housed in these two buildings, a study was undertaken in 2017 to evaluate these buildings holistically. The goal of the study was to explore strategic facilities upgrades to support expanding enrollment, a fuller integration of extension and outreach activities, new instructional spaces and technologies, emerging research activities, and the additional demand for community spaces that foster collaboration and team learning.

Overall programmatic space needs were quantified and the opportunity to maximize functional relationships and spatial adjacencies guided study recommendations. Age, condition, functional obsolescence, limitations with older structures, and deficiencies in building infrastructure and systems were identified.

LeBaron Hall has not been significantly renovated since its original construction; mechanical systems are outdated, air distribution is poor, plumbing is inadequate, and electrical and data systems are limited in capacity and distribution. Accessibility in the complex is a concern, as well. Restrooms, elevators, and wayfinding need to be significantly improved. Necessary infrastructure to support high-tech equipment for data collection, computing, and creative laboratory design does not exist and cannot be added due to structural limitations in the building.

Due to its central campus location and link to the history of the college, space in MacKay has been remodeled incrementally, as funding allowed. Student-focused services for the college were consolidated to renovated space in MacKay, in a highly visible and accessible first floor location. Renovation has been program-focused, some wings have been completely renovated, while others have not been remodeled for decades. Renovation is needed to provide accessible, up-to-date, functional, and aesthetically pleasing spaces that reflect the historic elegance of MacKay Hall and the historical prominence of one of the first universities in the nation to teach home economics.

Several departments occupy space in both buildings, which limits flexibility to meet and adapt to changing needs and growth in specific areas and the ability to optimize resources overall. With a fully occupied complex, the ability to collocate faculty and staff to support programmatic synergisms is challenging at best.

Description of the Project

This project proposes to demolish approximately 49,000 gross square feet, replacing LeBaron Hall and the circulation corridor connecting LeBaron Hall, MacKay Hall, and the Human Nutritional Sciences Building with an approximately 84,000 gross square foot new facility. The project also recommends the renovation of approximately 5,000 square feet in MacKay Hall.

The new and renovated facilities will offer a contemporary learning environment that is collaborative, adaptable, experiential and technologically advanced. The facilities will offer active learning spaces, encouraging innovation and collaboration. Spaces will be designed to create a sense of community and inclusiveness and encourage independent learning and leadership-building. The space will allow the college to better prepare students by facilitating industry-based and experiential learning through state of the art technology. In addition, it will provide space for new and expanding areas of study, such as the new nursing degree program.

The additional space will provide cutting-edge instructional opportunities including multi-purpose classrooms of varying sizes. Teaching laboratories will meet industry standards and program enrollment needs. Centralized distance education classrooms will enhance the efficiency and effectiveness of alternative educational delivery methods. In addition, this project provides an *opportunity to optimize functional, programmatic adjacencies*.

Common good space, currently limited across all CHS facilities, will provide a sense of place – a community hub for students, faculty, staff and administration. The proposed atrium and circulation core will serve various purposes, including teaching and research space for the event management program, event space for the college and university, and congregate space for students to study independently and in groups.

The project will enhance the research enterprise of the college and university. Dedicated social science research space will provide resources not currently available to researchers at the undergraduate level, graduate level and within the faculty. The college is uniquely positioned to further expand the interdisciplinary nature of human sciences research across the university. The updated teaching and research space will attract and retain leading human sciences faculty at Iowa State.

High impact student experiences, a hallmark of the Iowa State brand, will be greatly enhanced through this project. Engaging with others through meaningful relationships is foundational to the human sciences; the atrium and circulation core spaces will provide an opportunity for these relational connections among students. Addressed through this project are the more than 50 registered human sciences student organizations with no dedicated leadership development, meeting or storage space.

Program adjacencies will be greatly enhanced through this project. Over several decades, programs have developed and expanded, enrollment has increased, classroom needs have changed, and research space has evolved, resulting in decentralized programmatic space, difficult wayfinding, inadequate classrooms, and makeshift teaching and research laboratories. This comprehensive capital project provides the opportunity for program adjacencies that will enrich curriculum, expand research, increase sponsored funding, and further integrate engaged scholarship.

Justification of the Project

Iowa State University College of Human Sciences shares the university's mission to create, share and apply knowledge to improve people's lives. This mission includes providing an innovative learning environment, engaging in life-changing research that improves lives, and sharing the college's expertise with the state, nation and world. The College of Human Sciences is a national leader expanding human potential and improving people's lives through teaching, research and outreach across five academic units and fourteen majors with 4,500 students, 180 faculty and 140 staff. Renowned as a pioneer in home economics, today's diverse human sciences programs are built on that strong home economics foundation and include apparel, merchandising and design, events management, hospitality management, food science and human nutrition, human development and family studies, kinesiology and PK-20 education.

The college's programs are highly ranked, yet the facilities no longer match this level of excellence. The interdisciplinary breadth of the college's teaching, research, and outreach positively influences every aspect of the human experience – at the individual, family, school, business, and community levels. Updated Human Sciences facilities will advance the college in all priority areas and help achieve a goal to build on our rich history and become the premier human sciences college at a land-grant university. Iowa State cannot compete with other programs on reputation alone, especially in attracting students and top-notch faculty.

This project addresses:

- The Board of Regents, State of Iowa's priority to promote and support innovation in teaching, research, and economic development.
- Iowa State University strategic goal to ensure access to the ISU Experience- including an exceptional education offering practical, global, and leadership experiences that shape the well-rounded citizens and informed critical thinkers needed in the 21st century.
- Iowa State University's strategic goal to enhance the university's research profile by conducting high impact research that addresses the grand challenges of the 21st century.
- Iowa State University's strategic goal to improve the quality of life for all Iowans through services and programs dedicated to economic development and the promotion of healthy communities, people, and environments.

Additional, functionally appropriate space is required to accommodate and support robust enrollment, student and faculty engagement and collaboration, and scholarship.

The LeBaron/MacKay Complex will facilitate productivity and collaboration and provide up-to-date, flexible and interdisciplinary laboratory space needed for today's research methods. The new and renovated space will offer space for social sciences research and will attract and retain top-level researchers, scientists and graduate students. The new multi-use atrium will serve as a "learning lab" for students in a variety of human sciences areas, where they can put classroom learning into practice and encourage entrepreneurship, a university-wide priority.

Apparel, Merchandising, and Design (AMD) students experience exceedingly poor quality and extremely overcrowded space in every aspect of their academic program. A goal of this project is to significantly expand teaching laboratory space, research space and dedicated studio space. Merchandising students are in critical need of space for group projects, data analysis, and presentation/display space.

Event Management, a B.S. degree since 2011, was one of the first such programs in the nation and is growing at the undergraduate and graduate level. There is limited dedicated experiential space for faculty and students and for research and

scholarship. The Human Sciences Atrium in the new building will provide multi-use space for a diverse array of real and simulated events for undergraduate teaching and graduate student teaching and research.

Hospitality Management (HSP) has experienced an enrollment decline in recent years, due in part to competition from institutions with cutting-edge facilities. The limited and outdated space has not kept pace with industry standards of environmental ambiance, customer experience, technology solutions, or practice with current culinary equipment. Equipment and storage are inefficiently located throughout MacKay Hall. Students and customers in the HSP laboratory classes have an outdated mid-century dining experience, compared with competitive alternative programs at other institutions. The program is unable to purchase equipment needed for students to experience cutting-edge industry practices due to limited space and insufficient infrastructure for installation and storage. Limited program space restricts the opportunity to expand and develop curriculum and engage students in entrepreneurial activities.

Food Science and Human Nutrition (FSHN) administers the largest accredited dietetics internship program in the nation. Required courses in the dietetics program include courses delivered in outdated teaching laboratories. FSHN also administers the recently approved RN-BSN program.

These facilities must be upgraded now to preserve the college’s history of excellence and ensure future generations carry this legacy forward. Every program in the college focuses on improving people’s lives, with many addressing key concerns related to quality of life across the entire life span. Today’s learning and research environment calls for synergy across disciplines and space that encourages innovation – especially in addressing the world’s grand challenges.

This project will reflect our culture of building community and civic innovation, as well as the entrepreneurial mindset among undergraduate and graduate students.

Summary of the Alternatives Considered

Options were evaluated to significantly renovate LeBaron Hall. However, renovation does not provide any additional space; programmatic space would actually be reduced to meet current code requirements (accessibility and restrooms), further exacerbating the lack of adequate space. Renovation cannot address the issues with the existing footprint and building configuration such as low floor-to-floor heights, and the ability to distribute and deliver heating, ventilating, air conditioning, and modern technology. These issues severely constrain how effectively and efficiently the space can be used. Replacement of LeBaron and the circulation corridor provides the opportunity to develop functional, contemporary space for emerging and expanding programs in the College of Human Sciences. Wayfinding for the complex will be enhanced and clarified, and obsolete, antiquated space in MacKay Hall renovated to meet the academic needs of a 21st century learning and research facility.

Estimated Costs and Source of Funds

State Appropriations \$30,000,000
 Private Funds \$15,000,000
 University Funds \$10,000,000

| | Appropriations | Private Gifts | University Funds | Total by year |
|--------------|-----------------------|----------------------|-------------------------|----------------------|
| FY 2021 | \$10,000,000 | \$5,000,000 | | \$15,000,000 |
| FY 2022 | \$10,000,000 | \$5,000,000 | \$5,000,000 | \$20,000,000 |
| FY 2023 | \$10,000,000 | \$5,000,000 | \$5,000,000 | \$20,000,000 |
| FY 2024 | | | | |
| FY 2025 | | | | |
| Total | \$30,000,000 | \$15,000,000 | \$10,000,000 | \$55,000,000 |

Operating Expenses

Operating Budget Impact:
 Operations and Maintenance \$130,000
 Utilities \$155,000
 Other (Grounds/Mail/EHS/DPS) \$28,000
 Annual Capital Renewal \$825,000

Methods used to determine the costs:

Estimates of the Operating Budget Impact are based on actual costs and metered utilities for existing space and correlation with similar building types.

Proposed source of funds: College of Human Sciences

Project Schedule and History of Previous Action

The anticipated schedule following funding of the project is:

- Planning and Design Phase- 24 months
- Bidding and Contract Award- 2 months
- Construction Phase- 30 months
- Occupancy- 2 months
- Total number of months: 58 months

Previous action by the Board:

None.

Previous request and any changes in dollar amounts or priorities:

NA

| | | | |
|-----------------------|-------------------------------|------------------------------------------|------------------|
| Institution | Project Title | Category of Request | Priority |
| Iowa State University | Fire and Environmental Safety | Fire and Environmental Safety Resolution | BOR#____ ISU# |

Estimated Cost by Year and Source of Funds (e.g. Academic Building Revenue Bonds, Building Repair Funds, Utility Enterprise Funds)

| | Appropriations | TOTAL |
|--------------|---------------------|---------------------|
| FY2021 | \$ 2,000,000 | \$ 2,000,000 |
| FY2022 | \$ 1,500,000 | \$ 1,500,000 |
| FY2023 | \$ 1,500,000 | \$ 1,500,000 |
| FY2024 | \$ 1,500,000 | \$ 1,500,000 |
| FY2025 | \$ 1,500,000 | \$ 1,500,000 |
| TOTAL | \$ 8,000,000 | \$ 8,000,000 |

Brief Description

The ISU Department of Environmental Health and Safety, in cooperation with the State Fire Marshal, has identified, documented, and prioritized all known deficiency corrections. A priority-based program has been developed to correct these high-risk deficiencies. The most current estimate to correct remaining fire safety deficiencies identified by the State Fire Marshal in General Fund facilities is \$4,015,000. This includes the cost of adding sprinkler systems to seven buildings to address fire corridor deficiencies.

The Top 25 list includes university priorities for some of the other buildings that need sprinkler systems, increasing the overall funding required to almost \$8,000,000. Funding for correcting fire safety deficiencies has been allocated from the general building repair fund.

| | | | |
|---------------------------|-----|------|------------------------------------|
| | GSF | NASF | Project Cost per Gross Square Foot |
| New Construction Building | N/A | N/A | N/A |
| Renovation | N/A | N/A | N/A |

| | | |
|----------------------------------------------------------------------------------------|-----------------------------------------|-------------------|
| Project Schedule (Elapsed months following Approval of Permission to Proceed by Board) | Previous Action (if any) None | |
| | <u># Months</u> | <u>Cumulative</u> |
| Planning Phase | <u>1-3</u> | <u>1-3</u> |
| Bidding | <u>1</u> | <u>2-4</u> |
| Construction | <u>3-6</u> | <u>5-10</u> |
| Opening | <u>1</u> | <u>6-11</u> |

| | | | |
|--------------------------------------|---------------------------|---------------------------------------------------------|--------------------|
| Budget Estimate: | | Operating Budget Impact: (full year estimate) | |
| Construction Cost | <u>\$6,200,000</u> | Opening Cost (nonrecurring) | \$ <u>0</u> |
| Fixed Equipment | <u>0</u> | Operations and Maintenance | <u>0</u> |
| Movable Equipment/Furnishings | <u>0</u> | Utilities | <u>0</u> |
| Utility Extensions | <u>0</u> | Annual Capital Renewal | <u>0</u> |
| Site Development/Land Acquisition | <u>0</u> | Other (specify) | <u>0</u> |
| Design and Supervision | <u>950,000</u> | Total | \$ <u>0</u> |
| Art Work | <u>0</u> | | |
| Contingency | <u>430,000</u> | Annual Capital Renewal | \$ <u>0</u> |
| Internal Project Management | <u>420,000</u> | Source of Operating Funds: General Fund | |
| Total Project Budget Estimate | <u>\$8,000,000</u> | | |

Fire and Environmental Safety

The university has a responsibility to provide a safe environment for the university community.

The State Fire Marshal's Office and the Iowa State University Environmental Health and Safety Office have identified a number of fire and environmental safety deficiencies in Iowa State University facilities. Fire and environmental safety issues fall into many different categories, which include the following: asbestos and lead abatement, building fire safety, electrical repairs, emergency lighting and exit identification, hazardous material handling facility improvements, fire alarms, general safety, second exits, sprinkler systems, and ventilation improvements. The Building Safety Priority List includes both small and large projects in each of these categories. ISU includes sprinklers as a requirement for all new construction and major renovation projects in General Fund and residence facilities. There are sprinkler systems in all existing residence halls.

In many cases, the university is required to follow established codes, laws, or regulations. Many of these projects are required by outside agencies, including the State Fire Marshal, the Iowa Division of Labor (IOSHA), and the Environmental Protection Agency. The university prioritizes risks and undertakes the most serious deficiencies as soon as funding is available and the work can be practically accomplished. The Board of Regents and the Legislature have been supportive of the university's efforts and have provided periodic appropriations for deficiency corrections in many buildings. The changing codes, laws, and regulations combined with the change in use of buildings, continue to add to the list of conditions that must be addressed.

Facilities Governance Report- Table E2
Health and Life Safety Projects to be completed in FY 2020 in General Fund Facilities
(All sources of funds)

| BUILDING | PROJECT/ITEM | SOURCE OF FUNDS | COST |
|------------------|----------------------------------|-----------------|--------------------|
| BESSEY HALL | REPLACEMENT OF SPRINKLERS | USOUF | \$400,000 |
| NATIONAL SWINE | REPLACEMENT OF SPRINKLERS | USOUF | \$455,000 |
| TOWN ENGINEERING | FIRE ALARM SYSTEM EXTENSION | USOUF | \$150,000 |
| VARIOUS | REPLACEMENT OF FIRE ALARM PANELS | CR | \$100,000 |
| VARIOUS | RESTROOM FIRE ALARM STROBES | USOUF | \$100,000 |
| | | TOTAL | \$1,205,000 |

Fire & Life Safety Deficiencies Top 25

| Building | Description | Estimated Costs |
|---------------------------------------------------|--------------------------------------------------------------------|--------------------|
| Gilman Hall | Sprinkler addition | \$1,600,000 |
| Black Engineering | Sprinkler coverage addition where needed | \$200,000 |
| Coover Hall | Sprinkler addition | \$400,000 |
| Carver Hall | Sprinkler and standpipe addition | \$600,000 |
| Physics Hall | Sprinkler addition | \$320,000 |
| Music Hall | Sprinkler addition | \$350,000 |
| Zaffarano Physics Addition | Modifications required to develop a one hour corridor rating | \$15,000 |
| Multiple | Install fire alarm strobes in general use restrooms in 7 buildings | \$20,000 |
| Forestry & Plant Pathology Greenhouses | Install electrical disconnects on exterior HVAC units | \$30,000 |
| Veterinary Medicine | Seal rail system through the BMS commons with fire rated material | \$20,000 |
| Multiple | Install stairway identification signs in 8 buildings | \$20,000 |
| Firemanship Training & Central Receiving | Install protection for the gas meters | \$5,000 |
| Multiple | Provide paved exit discharge from 11 buildings | \$35,000 |
| Multiple | Install emergency gas shut-off buttons in 10 buildings | \$100,000 |
| Ross Hall | Sprinkler addition | \$450,000 |
| Science Hall II | Sprinkler addition | \$600,000 |
| Science Hall | Sprinkler addition | \$380,000 |
| Town Engineering | Sprinkler addition | \$440,000 |
| Horticulture Hall | Sprinkler addition | \$220,000 |
| Kildee Hall (Partially sprinklered) | Sprinkler addition | \$360,000 |
| General Services Building (Partially sprinklered) | Sprinkler addition | \$375,000 |
| Meats Laboratory | Sprinkler addition | \$220,000 |
| Heady & East Hall | Sprinkler addition | \$360,000 |
| LeBaron Hall | Sprinkler addition | \$250,000 |
| Office and Laboratory Building | Modifications required to develop a one hour corridor rating | \$15,000 |
| | Total Costs | \$7,385,000 |

Fiscal Year 2021
 Fiscal Year 2021

Board of Regents
 Board of Regents

| | | | |
|-----------------------|-----------------------------------------------------|----------------------|--------------|
| Institution | Project Title | Category of Request | Priority |
| Iowa State University | Deferred Maintenance and Campus Safety Improvements | Deferred Maintenance | BOR# ISU# |

Estimated Cost by Year and Source of Funds (e.g. Academic Building Revenue Bonds, Building Repair Funds, Utility Enterprise Funds)

| | Appropriations | TOTAL |
|--------------|----------------------|----------------------|
| FY2021 | \$ 4,700,000 | \$ 4,700,000 |
| FY2022 | \$ 8,300,000 | \$ 8,300,000 |
| FY2023 | \$ 11,900,000 | \$ 11,900,000 |
| FY2024 | \$ 12,400,000 | \$ 12,400,000 |
| FY2025 | \$ 12,800,000 | \$ 12,800,000 |
| TOTAL | \$ 50,100,000 | \$ 50,100,000 |

Brief Description

The university currently maintains a backlog of deferred maintenance issues. This request is part of a multi-year program to address a growing backlog of needs. The FY 2019 level of deferred maintenance was approximately \$476 million for General Fund facilities.

Funds to address accumulated deferred maintenance allow the university to address the highest priority requirements, including repair and replacement of roofs, mechanical systems, plumbing and elevators in academic and research facilities. Aging infrastructure, especially in science buildings, is a huge concern. Interruption of research and instructional activities due to building system failures could have a serious impact on course delivery and scholarly research.

| | | | |
|------------------|------------|-------------|-------------------------------------------|
| New Construction | GSF N/A | NASF N/A | Project Cost per Gross Square Foot N/A |
| Renovation | N/A | N/A | N/A |

| | | |
|----------------------------------------------------------------------------------------|-----------------|--------------------------|
| Project Schedule (Elapsed months following Approval of Permission to Proceed by Board) | | Previous Action (if any) |
| | <u># Months</u> | <u>Cumulative</u> |
| Planning Phase | <u>1-3</u> | <u>1-3</u> |
| Bidding | <u>1</u> | <u>2-4</u> |
| Construction | <u>3-12</u> | <u>5-16</u> |
| Opening | <u>1</u> | <u>6-17</u> |

| | | | |
|--------------------------------------|---------------------|----------------------------------------------------------|-------------|
| Budget Estimate: | | Operating Budget Impact: (full year estimate) | |
| Construction Cost | <u>\$37,500,000</u> | Opening Cost (nonrecurring) | <u>\$ 0</u> |
| Demolition | <u>0</u> | Operations and Maintenance | <u>0</u> |
| Fixed Equipment | <u>0</u> | Utilities | <u>0</u> |
| Movable Equipment/Furnishings | <u>0</u> | Other (Grnds/EHS/DPS/Mail) | <u>0</u> |
| Utility Extensions | <u>0</u> | Total | \$ 0 |
| Site Development/Land Acquisition | <u>0</u> | | |
| Design and Supervision | <u>5,550,000</u> | | |
| Art Work | <u>0</u> | | |
| Contingency | <u>4,450,000</u> | | |
| Internal Project Management | <u>2,600,000</u> | | |
| Total Project Budget Estimate | \$50,100,000 | Annual Capital Renewal | <u>\$ 0</u> |

Source of Operating Funds: General Fund

Deferred Maintenance and Campus Safety Improvements

Deferred Maintenance and Campus Safety Improvements

As enrollment has grown over 30% over the past 10 years, general university facility space has grown by about 10%, resulting in more intense use of current facilities. The demand for custodial services and maintenance and repairs of campus buildings and grounds have grown due to increased wear and tear. Although the budget for facilities services has had modest increases, funding remains constrained and only affordable levels of service continue to be provided in the areas of building maintenance, custodial services, and grounds maintenance.

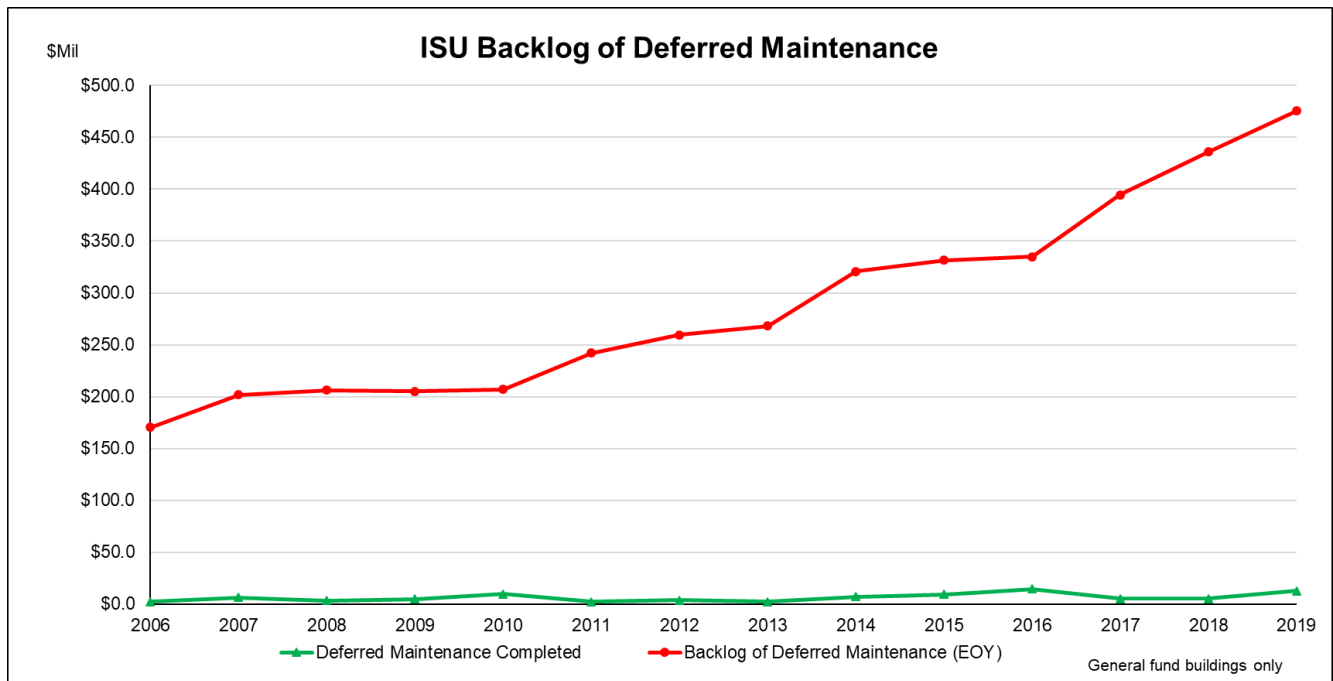
The backlog of deferred maintenance continues to compound given the lack of funding and the increasing age of the facilities. This backlog is based upon a comprehensive, systematic process for identifying the maintenance and repair requirements for general university buildings. The methodology involves assessing general fund buildings in nine different system categories (Envelope, HVAC, Roof, Window, Site, Electric, Plumbing, Interior, and Elevators). The assessment takes into account the replacement value of the building, age of the building, value of the systems within the building, age of the systems, and condition of those systems.

Total deferred maintenance is approximately \$476M at Iowa State University at the end of FY19. Aging facilities, especially in science buildings, pose a serious concern. Infrastructure failures in science buildings may be detrimental to on-going research projects, highly sensitive research equipment, and archived sample storage.

Annual funds available for deferred maintenance projects in General Fund facilities are now around \$5.5M. There is also some reduction of the deferred maintenance backlog through capital projects because some items are addressed when buildings are renovated or removed.

The University's Maintenance and Improvement Committee meets regularly to review and prioritize maintenance and improvement requests and allocate building repair resources, with representatives from teaching, research, student affairs, business services, financial affairs, and facilities. Requests are prioritized by the negative impact on teaching and research, safety, or the risk to university services. This process allows the university to strategically prioritize and address its most critical needs within the available resources. When feasible, facilities planners and project managers develop partnerships with colleges and departments in order to complete deferred maintenance items while completing major renovation projects.

The consequences of not meeting recommended funding levels are the continuing growth of the deferred maintenance backlog, with the associated risk of facility system failures and impacts on instruction and research. Sustaining and renewing university facilities requires significant funding, above that available for annual capital renewal projects. The Five Year Capital Plan includes an annual request to reduce the backlog, but even at these rates of expenditure, the backlog is growing faster than the funds available to remedy the need. Increases are needed in both capital funds to catch up and operating funds for maintenance and repairs.



Iowa State University- Facilities Governance Report 2019
 Top 25 Deferred Maintenance Items

> \$100,000

Deferred Maintenance Activities Top 25

| | BUILDING | DEFICIENCY | ANTICIPATED COST |
|----|----------------------------------------------|------------------------------------------------------------|----------------------|
| 1 | Enrollment Services | Roof Replacement | \$ 1,000,000 |
| 2 | Marston Water Tower | Repair, Phase I | \$ 460,000 |
| 3 | Kildee Hall | Refurbish/Repair AHU # 2, Phase I | \$ 500,000 |
| 4 | National Swine Research & Information Center | Sprinkler System Modifications | \$ 455,000 |
| 5 | Various | Common Area Improvements (Student & Enroll. Services-FY20) | \$ 250,000 |
| 6 | Town Engineering | Replace Roof | \$ 1,106,000 |
| 7 | Zaffarano Hall | Fan Coil Replacements, Phase IV | \$ 300,000 |
| 8 | East Hall | Roof Repair, Painting, Tuck-pointing & Stone Repair | \$ 781,500 |
| 9 | Parks Library | South Window Wall Repair | \$ 635,700 |
| 10 | Veterinary Medicine | Domestic Water Pipe Replacement - Phase IV | \$ 250,000 |
| 11 | Bessey Hall | Sprinkler Head Replacements | \$ 400,000 |
| 12 | Ross Hall | Restroom Accessibility Improvements | \$ 200,000 |
| 13 | Science II | Restroom Accessibility Improvements | \$ 200,000 |
| 14 | Lloyd Veterinary Medical Center | Replace Roof Sections # 3 & # 4 | \$ 1,196,100 |
| 15 | Curtiss Hall | Tuck Pointing, Stone Repair & Caulking | \$ 475,000 |
| 16 | Agronomy Hall | Tuck Pointing, Step Repair & Caulking | \$ 500,000 |
| 17 | College of Design | Window Replacement/Repairs, Phase I | \$ 400,000 |
| 18 | Headly Hall | Electrical Safety Improvements, Phase II | \$ 800,000 |
| 19 | Parks Library | Sprinkler System Pressure Solution | \$ 325,000 |
| 20 | Veterinary Medicine | Roof Replacements Sections 2, C & D | \$ 825,000 |
| 21 | MacKay Hall | Vertical Circulation Study/Planning | \$ 150,000 |
| 22 | Lagomarcino Hall | Restroom Accessibility Improvements | \$ 300,000 |
| 23 | Site Improvements | Farm House Lane Resurfacing, Phase I | \$ 250,000 |
| 24 | Various | Common Area Improvements (Carver, Design & LeBaron-FY21) | \$ 375,000 |
| 25 | Kildee Hall | Refurbish/Repair AHU # 3, Phase II | \$ 500,000 |
| | | TOTAL | \$ 12,634,300 |