

**FISCAL YEAR 2026  
CAPITAL OUTLAY PROJECT REQUEST**

*Institution Name:* Central Michigan University

*Capital Outlay Code:* TBD

*Project Title:* Brooks Hall Renovation

*Project Focus:*        ✓ Academic                    ✓ Research                    ✓ Administrative/Support

*Type of Project:*     ✓ Renovation                ✓ Addition                     New Construction

*Approximate Square Footage:* 128,000

*Total Estimated Cost:* \$43,000,000

*Estimated Duration of Project:* Design: 9 months; Construction: 18 months

*Is the Five-Year Plan posted on the department/s public Internet site?* Yes

*Is the request project included in the Five-Year Capital Outlay Plan?* Yes

**1A. Project Purpose**

Brooks Hall was constructed in 1964 as the primary location for Central Michigan University’s science departments and programs. Since the building’s original construction, the pedagogy, laboratory safety standards, and technological developments in science have drastically changed, and will continue to evolve in the future.

The proposed project will convert an existing, well-built 60-year-old facility into a modern, safe, energy-efficient facility that supports effective teaching, learning, and research in high-demand fields of science and engineering.

Brooks Hall is home to several academic programs linked to growing career fields, such as environmental engineering and environmental science, as well as popular STEM fields including astronomy, meteorology, and geology. Brooks also provides classroom and instructional lab space for the introductory biology classes required for students pursuing degrees in science and health professions programs. The Brooks Astronomical Observatory, located on top of the roof of the building, includes a fully automated retractable dome that protects a 16-inch telescope used for courses, research, and community engagement. An adjacent greenhouse to Brooks Hall serves the needs of numerous biology courses while supporting the outdoor Fabiano Botanical Garden. The Fabiano Garden, in addition to being a place of outdoor learning and relaxation, is a focal point for collaboration with the Saginaw Chippewa Indian Tribe through a new ethnobotanical garden. Incorporating the greenhouse in Brooks will allow for direct access and enhance academic programming and opportunities. Brooks Hall provides key infrastructure supporting all STEM and health professions majors and is also a home to academic programs linked to several of the career fields identified for high growth and demand by the State of Michigan’s Bureau of Labor Market Information and Strategic Initiatives.

Brooks serves as the campus base for the Institute for Great Lakes Research (IGLR), which received \$30 million in U.S. Environmental Protection Agency (EPA) funding over the past 15

years for its efforts to study and monitor the health of the Great Lakes' coastal wetlands. Together with other funding, and in collaboration with an extensive network of partners, IGLR has provided countless opportunities for student training in the jobs that will protect and preserve the Great Lakes and other natural resources of Michigan.

While Brooks Hall supports hundreds of students, faculty, and staff each semester, it does not meet today's requirements for teaching, learning, or research in the sciences. It also fails to meet modern standards for energy efficiency. To continue to serve CMU's students and to promote improved research and teaching, we must renovate Brooks Hall.

CMU completed a space utilization study in 2021, which demonstrated that campus laboratory space for science, technology, and engineering is insufficient. The Brooks Hall renovation will address this by upgrading the laboratory, teaching, and advising spaces to meet the modern educational mission in these fields. Currently, CMU leases lab space from the Central Michigan University Research Cooperation (CMURC), which is a separate 501(c)(3) entity, located away from the academic core of campus. The renovation of Brooks Hall will allow CMU to vacate those labs and return to Brooks Hall, which is geographically proximate to other College of Science and Engineering buildings. This will have the added benefit of enhancing collaboration among CMU researchers while opening the space in CMURC for corporate partnerships and tech company startups, thus enhancing economic development in the region.

The project will also include heating, ventilation, and air conditioning improvements, and modernization to enhance air quality and energy efficiency. These changes in air handling and exhaust will improve indoor air quality for students, faculty and staff learning and working in the facility.

The proposed renovation will also provide a home in Brooks Hall for the exciting new InSciTE (Integration of Science, Technology, and Engineering) certificate program. This research-based cohort model of teaching and learning recruits students from underserved communities into the STEM fields and prepares them for high-demand careers in a rapidly evolving global economy. The renovation also will permit the creation of a centralized Science and Engineering Student Success Center that will offer services including academic advising, tutoring, success coaching and career services. These proactive initiatives have a demonstrable positive impact on student retention and graduation rates.

As our state competes to attract new business, we must ensure we have a workforce with the knowledge, skills, and experience to tackle the jobs of the future. The requested renovations will enable CMU to produce Michigan's workforce of tomorrow – a workforce prepared to design and build electric vehicles, help society adapt to changing weather patterns, provide effective healthcare to all citizens, ensure a clean water supply, and create innovative technologies that enhance the quality of life.

## **1B. Scope of the Project**

The proposed Brooks Hall renovation will be the modernization of the 128,000 square foot facility. The project is to include new mechanical, electrical and plumbing infrastructure to support the re-programmed research laboratories (including Rock Grinding, Chemistry, Biology, and General Science Flexible Labs), and the Chemical Waste Storage Area. Additional infrastructure improvements in the project will also include new exterior windows, new exterior doors at the primary entrances, an elevator modernization, and an electrical generator replacement. Included in the project are building envelope replacements and repairs, including roofing and masonry; energy efficient windows and exterior doors; interior finish replacements including ceilings, doors, and flooring; and renovations that ensure the building meets current ADA standards and best practices vital to the student experience, such as restroom and elevator upgrades.

The plan includes the provision of modern and efficient infrastructure by replacing existing systems including interior lighting, secondary electrical distribution, domestic piping and sanitary systems and hydronic pumps, and controls to support a new four-pipe HVAC system. Proposed additional infrastructure modernization is to include installation of Direct Digital Controls; replacement of select dampers and ducts, Variable Air Ventilation (VAV) boxes, exhaust fans, heat pumps, heat exchange equipment, tanks, pumps, and valves; replacement of select chilled water piping and valves, replacement of select domestic piping, valves, and equipment; replacement of select sanitary and storm sewer piping.

Renovation of Brooks Hall will include improved classroom laboratory spaces for academic programs including environmental engineering, environmental science, meteorology, astronomy, geology, and biology. Enhancements to the instructional classrooms and lab spaces, used by all undergraduate students, will include adjacent prep rooms allowing greater functionality and safe storage of biological and chemical teaching aids. These instructional spaces also will receive technology updates to improve teaching and learning.

Laboratory renovations also will support vital faculty research. This research provides hands-on, immersive experiences for students to work directly with faculty members. Modernizing research laboratories and support spaces will allow for consolidation of research currently occurring across multiple on- and off-campus spaces, providing greater opportunities for collaboration, and sharing. Additionally, included in the renovation plan is space for the Office of Laboratory and Field Safety, including a dedicated area for safe handling of chemical waste, and technology upgrades.

Also included in the renovation plan are enhancements to the Brooks Astronomical Observatory, which houses a 16" telescope protected by a retractable dome and an adjacent open observation deck. A renovation of this space will provide students with access to hands-on training on modern computer-controlled telescope and state-of-the art imaging cameras, allowing students to acquire skills valued in a wide range of industries, from automation to imaging in manufacturing processes. Accessibility to the observation deck will also be improved through a new elevator system. Astronomy is a field that captures the public imagination and attracts a diverse set of students to STEM fields, and a renovated observatory at CMU will aid in recruiting and retention. To further leverage the improvements to the observatory itself, the project will also include the creation of a

50-seat planetarium and renovation of 2,000 square feet of existing space into an associated science outreach center. The outreach center and planetarium will provide a new “front door” to engage the communities in central Michigan and beyond.

An exciting component of the project is improved space for CMU’s Institute for Great Lakes Research, a flagship research and educational institute attracting millions of dollars in federal and state funding each year. The IGLR takes a multidisciplinary approach to protecting and preserving the coastal wetlands and ecological health of the nation’s largest freshwater resource. IGLR programs engage hundreds of students each year in classroom and research activities that prepare them for high-demand careers in environmental sustainability and other growing fields.

Another important feature of the Brooks Hall project is the modernization of a greenhouse to replace the current structure, which is beyond its originally anticipated service life. The new design will continue to meet all current curricular and research needs plus will add flexible meeting and study space for broader campus use. Integrating the greenhouse in Brooks will allow for increased usage and will enhance the courses and research conducted within the facility.

Career readiness, especially for fast-growing STEM careers, is a vital part of CMU’s mission. The Brooks Hall renovation will support one of CMU’s newest interdisciplinary programs, Integration of Science, Technology and Engineering, or InSciTE. This research-based, cohort-driven certificate program empowers a diverse team of learners to build the transferable skills employers seek, such as interdisciplinary communication, collaboration, critical thinking and problem-solving. The student-driven research projects focus on addressing pressing real-world issues, providing opportunities for hands-on learning and skill building. Retention rates in the first two InSciTE cohorts totaling more than 70 students significantly exceeded the average rate for CMU. A dedicated, modern space for InSciTE in Brooks Hall will allow the program to grow the cohort size while also providing the necessary instructional and collaborative workspaces required by the program model.

A key component of career readiness is academic success, which also is a component of the Brooks Hall renovation. Included in the plans is a new, centralized Science and Engineering Student Success Center that will offer services including academic advising, tutoring, success coaching and career services. These proactive initiatives have been demonstrated to enhance students’ academic success, improving both retention and graduation rates. Career readiness also requires the ability to collaborate and work in teams. A renovated Brooks Hall will also include a new collaborative workspace for students.

CMU has historically invested in maintaining the Brooks Hall infrastructure and will continue to ensure the building meets the needs of today’s — and tomorrow’s — students. The Brooks Hall renovation would extend the useful life of the building and reduce annual deferred maintenance needs for this building.

## 1C. Program Focus of Occupants

Upon the completion of the Brooks Hall renovation project, the facility will accommodate:

- Academic programs in astronomy, environmental engineering, environmental science, geology, and meteorology, as well as biology courses taken by students pursuing degrees in science and health professions and those completing general education requirements.
- Modernized instructional classrooms, instructional laboratories, research laboratories and support spaces to advance important activities in the academic programs listed above, with support for interdisciplinary programs, grants, and contract work.
- Instructional, collaborative, and laboratory space for programs such as the InSciTE Certificate Program, the Institute for Great Lakes Research, and other STEM-related initiatives focused on initiatives aligned with the United Nations Sustainable Development Goals.
- A 5,000 square feet greenhouse to replace the current structure, which is beyond its originally anticipated service life. The new design will continue to meet all current curricular and research needs and will provide modern flexible meeting and study space for broader campus use.
- Creation of a 50-seat planetarium and renovation of 2,000 square feet of existing space into an associated science outreach center. The outreach center and planetarium will provide a new “front door” to engage the communities in central Michigan and beyond.
- A centralized Science and Engineering Student Success Center that will offer services including academic advising, tutoring, success coaching and career services — initiatives demonstrated to have a positive impact on student retention and graduation rates.
- Space for the Office of Laboratory and Field Safety, including a dedicated area for safe handling of chemical waste.

## 2. How does the project support Michigan’s talent enhancement, job creation and economic growth initiatives on a local, regional, and/or statewide basis?

Jobs in STEM-related fields continue to grow, and students are increasingly interested in these programs. Science was cited as a primary area of interest by nearly 20 percent of the CMU incoming first-year class, and nearly all undergraduate students will take classes in Brooks Hall. Programs housed in Brooks Hall include astronomy, environmental engineering, environmental science, geology, and meteorology. Biology also has an essential presence in Brooks Hall that enables the teaching of foundational laboratory-based courses. The renovated spaces will keep students excited and engaged, increasing retention and enrollment in science, technology, and engineering programs. These academic programs, all located in Brooks Hall, produce graduates who go directly into high-paying positions in fast-growing fields. The following career and salary data come from the U.S. Bureau of Labor Statistics for the projected job market growth in years 2021-2031:

- Biochemist: \$102,270; 15% growth
- Microbiologist: \$79,260; 9% growth
- Physicists and Astronomers: \$147,450; 8% growth
- Geoscientist: \$83,680; 5% growth
- Environmental Scientist: \$76,530; 5% growth

- Environmental Engineer: \$96,820; 4% growth
- Atmospheric Scientist, including Meteorologist: \$94,570; 4% growth

Furthermore, the academic programs in Brooks Hall provide the foundational science and technology courses for the following professions found on the list of Michigan’s high-demand, high-wage jobs from the Bureau of Labor Market Information and Strategic Initiatives:

- Physician Assistants: \$48-\$62/per hour; 31.9% growth
- Medical Scientist: \$29-\$50/per hour; 20.2% growth
- Physical Therapists: \$36-\$48/per hour; 18.5% growth

The recent addition of an environmental engineering — ranked #3 in Best Engineering Jobs and #25 in Best STEM Jobs in U.S. News and World Report — program will benefit from this project. The program is already producing graduates with in-demand skills, especially in water quality, waste management, and sustainability. On a national level, employment of environmental engineers is projected to grow four percent from 2021 to 2031. The growth rate in Michigan is currently outpacing the national average by about 50 percent.

In addition, this program is expected to significantly increase the participation of women in engineering, a point of emphasis for the College of Science and Engineering. Moreover, even though environmental engineering is a very new program, all its faculty members were able to secure federal funding to undertake research to help protect the environment and quality of life in Michigan and beyond.

As part of the university-wide, interdisciplinary focus, all undergraduate students will utilize Brooks Hall, especially those in other STEM-related fields. Therefore, the renovation of Brooks Hall will also impact students seeking careers in the following fields, which are found on the list of Michigan’s high-demand, high-wage jobs from the Bureau of Labor Market Information and Strategic Initiatives:

- Data Scientists & Mathematical Science Occupations: \$30-\$49/per hour; 29.4% growth
- Software Developers & Quality Assurance Analysts: \$37-\$58; 22.8% growth
- Industrial Engineers: \$36-\$48/per hour; 20.4% growth
- Civil Engineers: \$30-\$47/per hour; 12.3% growth
- Industrial Production Managers: \$39-\$63/per hour; 10.1% growth
- Mechanical Engineers: \$37-\$49/per hour; 10.1% growth
- Electrical Engineers: \$37-\$58/per hour; 8.2% growth
- Computer & Information Systems Managers: \$49-\$78/per hour; 7.6% growth

A renovated Brooks Hall also will be home to the College of Science and Engineering’s Student Success Center. This center will be a high-profile space dedicated to undergraduate student success and achievement. Services provided include academic advising, career services, internship placements and tutoring. Time spent with advisors is proven to increase retention and persistence and gives students a focused plan for timely degree completion.

Additionally, a new collaborative workspace for students will be included in the project. Research clearly shows that engaged students are more likely to succeed in their studies. This has also been our experience at CMU with the Biosciences Building, whose modern design has been linked to higher academic success rates for students. This modernized and upgraded space in Brooks Hall will maximize student engagement with faculty and peers, expand active teaching and learning, and promote collaborative work. This activity is essential to preparing students for success in the professional world, while increasing performance outcomes such as retention and graduation.

CMU has a robust Career Development Center that has built extensive relationships with employers across the state and supports the employment efforts of recent graduates and alumni. Employers post more than 130,000 jobs and internships a year through the university's Career Development Center. Based on CMU's most recent Career Outcomes Rate, nearly 95 percent of CMU graduates were gainfully employed, volunteering, or continuing their education within six months of graduation, and employers say they seek out CMU graduates for their knowledge, skill, and work ethic.

### **3. How does the project support core academic, development of critical skill degrees, and/or research mission of CMU?**

This project request focuses on enhancing the core academic and research missions of CMU, and the success of students in critical skills programs.

*Academic Programs:* The Brooks Hall renovation will provide a modern facility for students in many fields of science. Nearly 20 percent of CMU new, first-year students cite science as a primary area of interest, and nearly all undergraduate students will utilize Brooks Hall throughout their educational journey. The enhanced and modernized classrooms and laboratories will foster innovative teaching and learning in environmental engineering, environmental science, meteorology, astronomy, and geology, in addition to biology.

*Critical Skills and Student Success:* CMU is a major contributor to meeting the State of Michigan's goals for critical skills education. During FY24, CMU conferred 1,490 degrees to students graduating with majors in critical skills programs. Furthermore, CMU's fall term 2023 headcount enrollment included 4,025 students with authorized majors in critical skills areas and another 834 students who plan to major in critical skills fields such as biological and biomedical sciences, computer information systems, engineering, engineering technology, health professions, mathematics and statistics, natural resources and conservation, physical sciences, and science technologies.

Critical skills programs tend to be some of the most intellectually challenging majors on campus. As such, significant academic advising and support are needed to ensure we recruit and retain students in these fields. The planned renovation of Brooks Hall includes the creation of a College of Science and Engineering Student Success Center that will house academic advisors, as well as space for tutoring and career services. In addition, spaces for students to study and collaborate will be incorporated throughout the building to enhance its academic character and appeal to students.

These features will help CMU recruit students into STEM disciplines and promote their academic success.

The new InSciTE undergraduate certificate program focuses on providing STEM majors with critical skills in teamwork, communication, and the development of a professional identity, preparing CMU STEM graduates to be proficient in working across boundaries and in their chosen field. The first two cohorts (spring 2023, spring 2024) total over 70 students, and we expect the number to exceed 100 when the spring 2025 cohort is added. Retention in the first two cohorts is 100 percent at CMU and 93 percent in the program itself, which are remarkable numbers for any academic program. Initial data indicate significant gains in transferable skills and sense of STEM identity. We are also seeing interest in InSciTE during recruitment events for high school and transfer students. We expect InSciTE to be a flagship program that attracts hundreds of STEM students from across the Midwest to CMU.

*Research:* The renovation will enhance research laboratories in environmental science and engineering. These enhancements will increase opportunities for student research as well. Unlike many research universities, CMU is committed to providing opportunities for undergraduate students to engage in original research with faculty mentors. In the last three years, more than 600 science and engineering undergraduate students participated in faculty-led research projects, and nearly 100 of those students were co-authors on published scientific papers.

The proposed facility will foster greater collaboration among faculty, staff, students, and community partners. Early interdisciplinary research in the classroom often burgeons into student opportunities serving around the state. This includes partnering in field work with the Great Lakes Restoration Initiative (GLRI) to advance important research on the health of plants, animals, and water quality in approximately 1,000 Great Lakes coastal wetlands. Hundreds of governmental and environmental groups in the United States and Canada have requested data from the GLRI wetlands monitoring program. Through a strong academic foundation built with faculty and peers in the courses and labs in Brooks Hall, students build advanced experiences and go on to be the next generation of scientists, engineers, and health professionals. Offering students these types of experiences fulfills CMU's mission of fostering personal and intellectual growth to prepare students for productive careers, meaningful lives, and responsible citizenship in a global society.

**4. Describe how the project will address, incorporate, or enhance any equity efforts, policies, or goals for the academic programs within the scope of the project or as a component of your institution and campus at large?**

The InSciTE (Integration of Science, Technology, and Engineering) Certificate program, which will be housed in the renovated Brooks Hall, is built on five pillars: Equity, Relevance to Real-World Problems, Learner-Centered, Collaboration, and Creative Problem-Solving. In the two short years since program inception, enrollment has grown from 0 to more than 70 students and will likely be in the range of 110-140 after the fall 2024 recruiting cycle. Due to the intentional focus on equity, 28% of current InSciTE students identify as a member of an underrepresented, racially minoritized (URM) group, and 83% identify as belonging to at least one marginalized population.



InSciTE is changing the way that inclusive STEM education is done, as evidenced by a 2024 Inspiring Programs in STEM Award from INSIGHT into Diversity Magazine and amazing retention numbers in the first two cohorts (93 percent in the program itself, 100 percent at CMU). We believe that InSciTE will serve as a model program to others across the state, and indeed across the country. The new space in Brooks Hall will allow InSciTE to grow to our estimated capacity of 300, which is roughly 25 percent of the current number of declared majors in the College of Science and Engineering.

**5. Is the requested project focused on a single, stand-alone facility? If no, please explain.**

Yes, the Brooks Hall renovation project is focused on a stand-alone facility.

**6. How does the project support investment in or adaptive re-purposing of existing facilities and infrastructure?**

This renovation will make Brooks Hall a showcase facility for all CMU students while keeping fiscal responsibility of finite state and university resources at the forefront of decision making. This project will revitalize a structurally sound 60-year-old building, completing the modernization of its infrastructure and support systems, and reducing annual deferred maintenance costs. This renovation will improve the environmental quality of the building and increase the energy efficiency of systems. The renovation will enhance laboratory safety, including chemical waste handling.

The overall goal is to enhance the space to meet the needs of students and researchers today and in the future. The skills students attain in Brooks Hall are foundational to their academic knowledge in many fields of science. Time spent in Brooks Hall plays a critical role in helping students grow personally and intellectually as they choose a career path, often in science, medicine, and other health professions.

The renovation will far better utilize the existing space. Master planning efforts identified efficiencies to be gained in this building, while also allowing for better laboratory space with innovative technology critical for scientific research and support space for students, researchers, and academic programs.

**7. Does the project address or mitigate any current health/safety deficiencies relative to existing facilities?**

Yes. A key component of the Brooks Hall renovation will be the enhancement of safety in the existing facilities. The current building was built in 1964, and laboratory spaces were built to meet that era's standards. Modern design processes will eliminate inefficiencies in the building's mechanical systems and implement optimal improvements. The facility will meet increasingly stringent regulations, including those for expanded ADA compliance. Infrastructure upgrades will include all necessary environmental work.

The Brooks Hall renovation will also enhance the ability to process chemical and hazardous waste more safely for disposal. Currently, this activity is carried out in the chemistry stockroom, which

has a very small hood and limited bench space. A suitable dedicated room for waste processing will include space for a larger hood and more bench space and isolate activity away from current preparation and chemical storage areas, which have high daily foot traffic.

**8. How does CMU measure utilization of its existing facilities, and how does it compare relative to established benchmarks for educational facilities? How does the project help to improve the utilization of existing space and infrastructure, or conversely how does current utilization support the need for additional space and infrastructure?**

CMU completed a space utilization study in 2021, which demonstrated that current laboratory space for the sciences is insufficient. Brooks Hall contains 18 labs and four classroom spaces and is heavily utilized in courses required for science majors. Among the four buildings with lab spaces used by the College of Science and Engineering, Brooks Hall accounts for the largest proportion of semester credit hours (39 percent) and course enrollments (37 percent) in lab courses. Renovating Brooks Hall will address the need to increase and improve laboratory spaces, as well as classroom space needs for undergraduate students completing required biology classes for general education requirements and those pursuing degrees in the basic and health sciences. An updated Brooks Hall will be better equipped to engage and foster the science majors and health professionals of tomorrow.

**9. How does CMU intend to integrate sustainable design principles to enhance the efficiency and operations of the facility?**

The project will be built using design standards that incorporate sustainable technology and practices, ensuring proven energy and environmental improvements will be implemented across all aspects of this project's design and construction.

Primary components of sustainable design for the Brooks Hall renovation project include:

- Implementation of energy recovery, which will yield significant energy savings, as existing hoods currently operate on individual fans with 100 percent outside air.
- Upgrading controls to improve operations and occupant comfort; these enhancements will allow the ability to schedule spaces and to improve energy control.
- Upgraded lighting controls throughout the facility, including in areas such as classrooms and offices. The plan also includes new lighting controls for common spaces, such as hallways, and the addition of LED lighting in key locations throughout the building.
- Installation of high-performance glass on external windows, replacing the current single-pane windows.

It is important to note that enhanced commissioning, as described by the U.S. Green Building Council, is a standard practice for CMU. Sustainable design principles will be used in the design and construction of the project. The project will be designed and measured using the LEED Green Building Rating System, in accordance with the DTMB Capital Outlay Design Manual.

In 2020, CMU received a Gold Rating from the Sustainability Tracking, Assessment and Rating System (STARS) program, an initiative of the Association for the Advancement of Sustainability in

Higher Education. CMU has a history of striving for LEED certifications. For example, CMU's Education and Human Services building is LEED Gold Certified; both Graduate Housing facilities are LEED Platinum Certified; and CMU's Biosciences, Ronan Hall (renovation), and the College of Medicine facilities are all LEED Silver Certified. Two facilities on campus have both rainwater capture systems and solar panels. CMU will design to LEED Certification standards with the Brooks Hall renovation.

In addition, CMU has implemented additional sustainable policies and procedures on campus. The U.S Environmental Protection Agency awarded CMU the 2019 WasteWise College/University Partner of the Year Award — an award received again in 2020. The following year, CMU received the 2021 WasteWise National Narrative Sustainability Public Education Award. And, in 2022, CMU received high honors in the 2022 Campus Race to Zero Waste, taking first place for large-sized campuses in the Food Organics category, sponsored by the National Wildlife Federation. The university is active in recycling, composting, and green cleaning initiatives, led by the student-run Central Sustainability team, which is housed in the College of Science and Engineering.

**10. Are matching resources currently available for the project? If yes, what is the source of the matching resources? If no, identify the intended source and the estimated timeline for securing said resources.**

Yes, CMU plans to use available university strategic reserves for this project. CMU is also working to secure additional private/foundation gifts and industry partners to offset the construction costs of the renovation, which is one of the university's master plan priorities. CMU is fully committed to this project. We look forward to working with the state to provide our students with modernized facilities to enhance their opportunities for success in high-demand fields of science and engineering, while also fulfilling employer needs across the state.

**11. If authorized for construction, the State typically provides a maximum of 75% of the total cost for university projects. Does the institution intend to commit additional resources that would reduce the State share from the amounts indicated?**

CMU is requesting \$30 million in state funding. The remaining project costs would be funded by the institution. CMU will fund the additional \$13 million as well as all non-allowable costs associated with the project.

**12. Will the completed project increase operating costs to CMU?**

The proposed Brooks Hall renovation project will not increase operating costs for Central Michigan University. In fact, the project goal is to lower operating costs for the building through sustainable design, LEED practices, and sound engineering principles such as energy recovery and control improvements. CMU will strive to meet the LEED silver certification standards. These operating cost savings received will help offset the impact of rising inflation.

**13. What impact, if any, will the project have on tuition costs?**

There will be no impact on tuition costs at CMU related to the renovation of Brooks Hall. The university currently intends to leverage strategic reserves for the institutional cost share of this project.

**14. If this project is not authorized, what are the impacts to the institution and its students?**

This project is essential to the continued success of CMU students, faculty and staff who utilize Brooks Hall. The current, outdated spaces of this facility are heavily utilized, but faculty and student research are limited by the capabilities of the current facility and by the high demand for similar facilities on campus.

This space enhancement project is critically important to meet the needs of students today and in the future. Without this renovation, research and laboratory space will continue to be limited, minimizing student and faculty research. In addition, the ability to expand program offerings in the fields of environmental engineering and health related fields will be limited, as the university is strained for the space needed to provide instructional and research opportunities.

To continue to be competitive in the higher education marketplace, CMU must continue to evolve its facilities to attract students and provide them with high-level educational opportunities. These students are looking for state-of-the-art facilities and technology and research opportunities they cannot find elsewhere.

**15. What alternatives to this project were considered? Why is the project preferable to those alternatives?**

In December 2021, the CMU Board of Trustees approved a 10-year campus master plan and capital projects list following an extensive, campus-wide review of options and alternatives. The 10-year list was developed by a cross-campus team of faculty and staff based on input from many on-campus and community stakeholders.

The Brooks Hall renovation is a top priority on that list, based on safety needs, student demand, laboratory usage, scholarly research opportunities and state needs. Twenty percent of CMU's new, first-year students cite science as a primary area of interest. This project was chosen based on high student demand and the extensive need to update the facility to meet the learning space requirements of students today and in the future.

Several other projects were considered, including the renovation of Pearce Hall, which opened in 1967. Pearce Hall serves many students in their first two years of coursework and is the home of programs such as mathematics, computer science, and world languages and cultures. While both facilities need substantial renovations, Brooks Hall was chosen due to high demand in the sciences, significant research opportunities currently limited by the availability and quality of laboratory space, and the job demand from employers. As such, this proposed capital outlay project will further Central's and Michigan's leadership in the sciences.