#### JACKSON COLLEGE



Fiscal Year 2027 Capital Project Request

October 2025

Institution Name: Jackson College

Project Title: STEM Remodel of James McDivitt Hall

Total Estimated Cost: \$45,000000 (\$22,500,000 Institution share, \$22,500,000 State

share)

Estimated Duration of Project: 30 months

**Approximate Square Footage: 117,000** 

Is the Five-Year Plan posted on the institution's public internet site? Yes

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

Is the requested project the top priority in the Five-Year Capital Outlay Plan? Yes

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

**Project Focus:** Academic: ☑ Research: ☐ Administrative/Support: ☐

#### 1) Describe the Project Purpose

The renovation and expansion of the Jackson College STEM Center is a strategic initiative that directly supports the Colleges mission: to inspire and transform lives. This Capital Outlay project represents a significant investment in Michigan's educational infrastructure and workforce development.

The project is expected to generate substantial economic and employment benefits for the State of Michigan, including:

- 5 new full-time faculty positions
- 3 full-time technician roles
- 3 additional staff positions (full- and part-time)

These additions will contribute approximately \$1,000,000 annually to the state's resident workforce revenues. Additionally, the broader economic impact factoring in construction, equipment, and related expenditures is conservatively estimated at \$315 million statewide.

The enhanced STEM Center will provide students with access to high-demand academic programs that lead to career-based credentials with market value. These programs are designed to prepare students for direct entry into the workforce or for transfer to baccalaureate-degree granting institutions to continue their education.

Jackson College seeks to partner with the State of Michigan to prioritize STEM education as a cornerstone of its academic offerings. This initiative will help ensure that graduates are equipped with the skills and knowledge necessary to thrive in a rapidly evolving technological landscape. As the National Science Foundation states:

"STEM Education brings together our advanced understanding of how people learn with modern technology to create more personalized learning experiences, to inspire learning, and to foster creativity from an early age. It will unleash and harness the curiosity of young people and adult learners across the United States, cultivating a culture of innovation and inquiry, and ensuring our nation remains the global leader in science and technology discovery and competitiveness."

Through this project, Jackson College will enhance its recruitment and student support strategies to ensure broad access to STEM education. The College will also expand its faculty to meet instructional needs and support student success across all programming areas.

#### 2) Describe the Scope of the Project

The proposed renovation and expansion of the Jackson College STEM Center will result in a state-of-the-art, approximately 117,000 square foot instructional facility designed to support advanced learning, research, and workforce development. The facility will include the following key components:

- Bimodal and hybrid-ready learning environments to include:
  - Multi-function and adaptable learning studios
  - Upgraded science and cadaver labs
  - Study and breakout rooms to support collaborative learning
- Expanded University Center, with dedicated spaces for partner institutions including Wayne State University, Siena Heights University, and Spring Arbor University
- Faculty and staff offices
- Conference rooms for academic and administrative use
- Math Peer Study Center
- Science and study labs
- Engineering laboratories
- Biology/Botany greenhouse
- Virtual Reality (VR) learning lab

- Computer networking labs
- Cybersecurity labs
- Modernized building maintenance and operating systems
- Storage facilities
- Human circulation spaces to support efficient movement throughout the building
- Building security and reception area
- Restroom facilities
- STEM Commons a central hub for STEM-related activities and student engagement
- Astronomy lab
- Physics manipulation lab
- Makerspace lab for hands-on innovation and prototyping

This comprehensive facility will serve as a cornerstone for STEM education at Jackson College, supporting both instructional excellence and regional economic development.

#### 3) Program Focus of Occupants

The primary objective of the proposed renovation and expansion is to enhance educational delivery in STEM courses and programs that align with strong market demand. In addition to supporting workforce-oriented instruction, the facility will also serve students pursuing pre-baccalaureate coursework with the intent of transferring to four-year institutions.

The design of instructional spaces is informed by faculty input, recommendations from academic advisory groups, and the structural framework of the existing building. The resulting environment will support a wide range of instructional modes, including hands-on laboratory work, practicum experiences, and program-specific learning activities. These enhancements are aimed at promoting student success in completing degrees, earning credentials, transferring to baccalaureate institutions, or entering the workforce directly including opportunities for entrepreneurship.

Graduates of Jackson Colleges STEM programs will be prepared for careers in a variety of high-demand fields, including:

- Geographers
- Computer Systems Specialists
- Environmental Analysts

- Water Quality Technicians
- Forensic Science Technicians
- Web Developers
- Accountants
- Computer Systems Analysts
- Geographic Information Technicians (GeoTechs)
- Computer Network Architects
- Cartographers
- Cost Estimators
- IT Managers
- Augmented and Virtual Reality Technicians
- Science Laboratory Technicians
- Cybersecurity Technicians
- Physics Laboratory Technicians
- Technical Writers

Students who choose to transfer to baccalaureate-granting institutions will be well-positioned to pursue advanced study and expand their career opportunities.

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

This project will provide students with the education and hands-on experience necessary to enter a high-demand job market across a range of specialized STEM fields. The initiative aligns with the priorities of the Governor and the Michigan Department of Education to position Michigan as a global leader in STEM education and careers (see: Michigan Can Become the World Leader in STEM Education and Careers), as well as the strategic objectives of the MI-STEM Council.

Jackson Colleges commitment to advancing STEM education also supports the States broader economic development goals (see: A Conversation on the Importance of STEM Talent and Internship Opportunities in Michigan | Michigan Business). By equipping students with industry-relevant skills, the College contributes to strengthening Michigan's talent pipeline and innovation capacity.

In addition, Jackson College intends to collaborate with K12 institutions and other colleges and universities to establish STEM academies for dual-enrolled students.

These partnerships will expand access to STEM pathways and support increased graduation rates among STEM learners.

The demand for STEM professionals remains robust, with over 5.7 million job postings nationally, according to Burning Glass. STEM degree holders also benefit from strong earning potential, with associate degree graduates earning an average of \$66,000 annually.

## 5) How does the project enhance the core academic, development of critical skill degrees, and/or research mission of the institution?

The comprehensive renovation of Jackson Colleges Whiting Hall is a critical initiative aimed at strengthening instructional delivery and workforce training capacity to meet regional demand. As a recognized leader in education and workforce development, Jackson College is regarded by area employers as the institution of choice for preparing skilled talent.

The College plays a vital role in supporting regional economic growth through the provision of qualified interns, customized contract training, and graduates with industry-relevant certificates and degrees. While Jackson College is not a research-focused institution, its Office of Institutional Research and Effectiveness (IRE) delivers robust performance and outcomes data that inform and validate the Colleges instructional and workforce development efforts.

This Capital Outlay project ensures that Jackson College remains a relevant and essential partner to the employer community by equipping current employees with updated competencies and providing a consistent pipeline of well-prepared graduates to meet evolving workforce needs.

6) Describe how the project will address, incorporate, or enhance the efforts, policies, or goals to grow and expand opportunities for enrollment for the academic programs within the scope of the project or as a component of your institution and campus at large?

The proposed renovation and expansion of the Jackson College STEM Center is strategically designed to support the growth and diversification of academic programs, thereby enhancing enrollment opportunities across the institution. By modernizing instructional spaces and integrating advanced technologies, the facility will enable the

College to offer new and expanded programs in high-demand STEM fields such as engineering, cybersecurity, computer networking, and biotechnology.

The inclusion of flexible learning studios, simulation labs, and dedicated spaces for partner universities will allow for increased dual-enrollment opportunities, transfer pathways, and collaborative programming. These enhancements will attract a broader range of students, including traditional, non-traditional, and career-focused learners seeking credentials aligned with workforce needs.

Additionally, the facility's design supports hybrid and bimodal instruction, making programs more accessible to students with varying schedules and learning preferences. This flexibility is expected to improve retention and completion rates, while also expanding the Colleges reach within the region.

By aligning academic offerings with industry demand and creating a modern, student-centered learning environment, this project directly supports Jackson Colleges institutional goals for enrollment growth and programmatic expansion.

## 7) Is the requested project focused on a single, stand-alone facility? If no, please explain.

The project outlined in this proposal involves the construction of a single, stand-alone facility that includes exterior instructional spaces. While the new building will feature a physical connector walkway to the adjacent Health Laboratory Center (HLC), it is important to note that no funds requested through this Capital Outlay proposal will be allocated to the HLC building.

#### 8) How does the project support investment in or adaptive re-purposing of existing facilities and infrastructure?

As previously outlined, this project involves complete repurposing of the existing facility, along with a modest expansion of approximately 20,000 square feet to accommodate additional simulation centers, training areas, and prototype laboratories.

It is important to note that the existing infrastructure, including water, sewer, power distribution, boilers, and air handling systems is in critical condition, with several components currently failing. Due to the extent of deterioration, these systems cannot be repurposed and will require full replacement as part of the renovation.

However, where feasible, existing classroom furniture will be reused within the renovated facility to optimize resources and reduce costs.

## 9) <u>Does the project address or mitigate any current health/safety deficiencies</u> relative to existing facilities? If yes, please explain.

The planned renovation will address several existing design deficiencies within the current facility, particularly those affecting accessibility for individuals with limited mobility. The updated layout and infrastructure will ensure full compliance with modern accessibility standards.

A new HVAC system will be installed, incorporating advanced filtration and ultraviolet light technologies designed to significantly reduce airborne disease transmission and improve overall air quality.

Additionally, the renovation includes the replacement of the building's two undersized elevators. The new elevator systems will be appropriately sized to accommodate emergency medical transport equipment, such as stretchers and gurneys, ensuring safe and efficient access throughout the two-story facility.

10) How does the institution 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?

Jackson College has partnered with <u>CampusWorks</u> to implement a fully integrated, relational Enterprise Resource Planning (ERP) system. This system will enable the College to access real-time data on facility usage, utilization rates, and overall operational efficiency. Currently, scheduling and utilization tracking are managed manually, resulting in delayed and less actionable insights.

The renovated facility will incorporate proximity-based polling systems that allow staff to monitor room usage, energy consumption, occupancy patterns, and other key metrics. These advanced monitoring capabilities will be integrated into the Colleges ERP and campus facilities management systems. Additionally, similar aftermarket monitoring solutions will be deployed across other campus buildings to ensure consistent data collection and facility optimization.

## 11) How does the institution intend to integrate sustainable design principles to enhance the efficiency and operations of the facility?

Jackson College is committed to achieving carbon neutrality by 2028. In support of this goal, the design and construction of the new facility will follow Leadership in Energy and Environmental Design (LEED) principles to ensure environmental responsibility and operational efficiency.

The LEED-certified building will be designed to reduce operational costs, improve energy performance, lower carbon emissions, and create healthier environments for students, employees, and visitors. This initiative is a key component of the Colleges strategy to address climate change, meet the Board of Trustees environmental, social, and governance (ESG) objectives, and enhance institutional resilience.

Construction practices will also adhere to LEED standards, including the sorting and recycling of scrap materials and demolition debris to minimize environmental impact.

As part of the planning process, the project will evaluate sustainable operational options such as the use of carbon credits, photovoltaic solar energy, and ground-source thermal systems. At a minimum, the facility will incorporate:

- High-efficiency energy systems
- Comprehensive building and equipment commissioning
- Advanced energy monitoring through smart sensor technologies

These measures will ensure that the facility supports long-term sustainability goals while delivering a modern, efficient, and environmentally responsible learning environment.

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

Jackson College's 50% match for this Capital Outlay project will be funded through a combination of general operating funds and bond financing.

13) If authorized for construction, the state typically provides a maximum of 75% of the total cost for university projects and 50% of the total cost for community

## college projects. Does the institution intend to commit additional resources that would reduce the state share from the amounts indicated? If so, by what amount?

Jackson College receives limited local property tax support, accounting for only 12% of its total revenue. Despite multiple attempts to secure additional funding through tax increases or Headlee Override proposals, Jackson County voters have consistently declined such measures since 1964. As a result, the College is unable to provide additional matching funds for this Capital Outlay project beyond the committed institutional share.

# 14) Will the completed project increase operating costs to the institution? If yes, please provide an estimated cost (annually, and over a five-year period) and indicate whether the institution has identified available funds to support the additional cost.

As a single, standalone facility, the building will benefit from significantly improved HVAC systems and the integration of advanced energy management technologies, resulting in reduced overall operating costs. The modest expansion of approximately 20,000 square feet will not generate additional operational expenses beyond the savings achieved through enhanced energy efficiency.

Any increase in custodial service needs due to the added space will be addressed through the addition of a half-time support staff member, ensuring continued operational effectiveness without substantial cost impact.

#### 15) What impact, if any, will the project have on tuition costs?

Students will not experience any tuition increases beyond standard inflationary adjustments permitted by the Governor and the State Legislature, which are currently governed by established tuition cap policies.

## 16) If this project is not authorized, what are the impacts to the institution and its students?

If Jackson Colleges Capital Outlay request is not approved, the College will continue to pursue future funding opportunities. However, without this support, the institution will face significant limitations in its ability to expand instructional programming at a pace

that aligns with the evolving needs of industry. Additionally, the College will be unable to adequately address its growing deferred maintenance backlog.

As previously noted, a key component of this project is the resolution of long-standing infrastructure issues totaling \$17.2 million costs that exceed the Colleges current financial capacity. Without the proposed renovation, Jackson College will be burdened with escalating expenses related to energy inefficiencies and ongoing repairs, often resulting in unsustainable spending on outdated systems.

## 17) What alternatives to this project were considered? Why is the requested project preferable to those alternatives?

Jackson College has actively explored alternative funding options in lieu of pursuing Capital Outlay support. These efforts have included seeking private and donor contributions, proposing additional local millage support, and exploring partnerships with private organizations. Unfortunately, none of these avenues have yielded successful outcomes.

Currently, only 12% of the Colleges total revenue is derived from local property taxes. Since the original millage of 1.33 mills was approved in 1964, the College has submitted 17 requests for increased support, all of which have been denied by Jackson County voters. Due to the Headlee Amendment, the millage rate has since been reduced to 1.13 mills.

Given these constraints, Jackson College is turning to the Capital Outlay process as a necessary and strategic pathway to fulfill its mission and meet the evolving educational and workforce needs of the region.