FISCAL YEAR 2025
CAPITAL OUTLAY MAJOR
PROJECT REQUEST

Institution Name: Jackson College
Capital Outlay Code:  
Project Title: Whiting Hall Renovation

Project Focus: X Academic
Type of Project: X Renovation

Research
Addition
Administrative/Support
New Construction

Approximate Square Footage: 101,266
Total Estimated Cost: $50.5M
Estimated Duration of Project: 1.8 yrs.

Is the Five-Year Plan posted on the department's public Internet site? YES
Is the requested project included in the Five-Year Capital Outlay Plan? YES

Project Purpose

Justin Whiting Hall, the oldest building on the Jackson College Central campus and was constructed in 1967. The building is filled with archaic infrastructure, inefficient HVAC systems, as well as other antiquated and inferior energy systems. Indeed, the HVAC systems are placed upon a T-Decking system that is 1.5 levels up from the base floor and is only accessible for servicing through a ‘ship’s ladder’ or by forklift. For facilities and maintenance staff who have limited mobility, yet need to monitor and repair the equipment, it is next to impossible to do. Further, the space hosting the HVAC systems and associated plenum is only 4.5 feet in height making servicing and repair extremely difficult and suboptimal. The surrounding space is used by the instructional faculty for storage of bar stock, and other classroom consumables, further creating accessibility challenges to the HVAC equipment.

The building was constructed at a time where there were no concerns about instructional and operational technology that is considered contemporary today, let alone concerns for the accessibility of persons with limited mobility and other disabilities.
Indeed, the doorways and circulation patterns, building approaches, entry systems, an inadequately sized elevator, limited radius bathrooms, as well as the multiple-level design of the building is largely incompatible with disabled persons. As the College serves growing numbers of non-traditional aged students, attention must be rendered to this issue in a new remodel of the building.

The building houses much of the College’s mid- and heavy-vocational, technical, and career programs, whose labs were constructed using older technology, antiquated instructional design, uninsulated spaces, and outmoded operating systems. The building currently incorporates major areas of unnecessarily high ceilings. As an example, the east wing of the building has hallway ceilings at 2.5 levels above the flooring deck, causing an unnecessary waste of energy to fully heat the entire space. Furthermore, the building incorporates massive spans of glazing which, during the summer months, prompts significant and excess heat gain, thereby requiring even more expense to cool the multiple large volume spaces. The building generally is woefully energy inefficient.

Complicating matters further is the roofing deck which is comprised of multiple stages, standpipes, and membrane surface structures and drainage systems, which are significantly aged and in need of complete replacement. Overall, according to expert examination, the building has $17.2MM as of 09.19.23, in deferred maintenance costs, which must be attended to quickly.

Given the rapid change in instructional technology, new instructional programs and instructional typologies that the College needs to deploy to satisfy current and emerging employer needs, the labs and related space are in need of significant renovation. A principal instructional program in the building is in the College’s nursing and allied health program area. To make these programs more effective with student outcomes, the College needs to construct a full continuum-of-care (i.e., birthing through palliative care) simulation center complete with multiple health simulation stations, equipment, student monitoring systems, and instructional storage. Finally, the building houses the College’s medical clinic and mental health clinic, both of which are in desperate need of expansion due to expanding and vital student need

**Scope of the Project**

The Whiting Hall renovation, and its modest 20,000 square foot expansion, is a full and comprehensive removal of old infrastructure to the building columns and external walls, to the substrate, and the reconstruction of the building with new infrastructure, electrical gridwork connection, installation of energy management systems, with new instructional and technological design. Also included in the project is related instructional equipment, and area pedestrian, (circulation flatwork. The minor expansion will provide for additional learning spaces, labs, and cocurricular study spaces. Additionally, the project will allow the College to address multiple deferred maintenance issues, improve building security issues, and enhance operational efficiencies.
Program Focus of Occupants

As alluded to earlier, the specific programs included in this facility renovation and expansion include the following:

- Industry 4.0 Manufacturing
- Nursing
- Dental Hygiene
- Mental Health Clinic
- Henry Ford Health Clinic
- Faculty Offices
- Jackson Preparatory & Early College
- Phlebotomy
- Health Occupations
- Electronics Technology
- Utilities Technologies, including Line Working Training
- Workforce Development
- Welding Technologies
- Engineering
- Patient Care Technologies
- Medical Records Technology
- Energy Management Systems
- Cybersecurity
- Medical Coder
- Computer Networking
- Robotics Technology
- Student Computer Lab
- Student Lounge
- Circulation, Restrooms, HVAC, Maintenance and Storage Spaces
- Administrative Offices
- Faculty Offices
- Lobby Space

New/Expanded Programs to be added:

- Mechatronics
- Expanded Robotics
- Emergency Medical Technician
- Massage Therapy
• Physical Therapy
• Surgical Technician
• Medical Simulation Center
• Industry Training Center
• Facility Maintenance Technology

Additional Information:

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

As noted by the Brookings Institute, economic development organizations, [like Jackson College] “…must evolve their value proposition to meet the most pressing concern of existing or potential businesses: workforce quality. Businesses cannot grow without a capable workforce, and right now regional economies are undermined by frictions that limit both the development and deployment of workers. Research has always shown that local economies develop only if their people do first, and today’s tight labor markets have presented the case for inclusive talent development...the inability and to effectively attract talent due to declining interstate mobility, economic development organizations are being forced to rethink homegrown talent development. That includes examining the systemic biases and barriers that have prevented residents— particularly those disadvantaged by structural racism and economic inequities—from acquiring the skills and social supports that propel them into good jobs. In short, the combination of tight labor markets and the continued importance of human capital to business growth has provided economic development leaders with a new mandate to center talent development in their institutions, or risk irrelevance.” ([https://www.brookings.edu/wp-content/uploads/2019/10/2019.10.15_Brookings-Metro_Talent-driven-economic-development_Parilla-Liu.pdf](https://www.brookings.edu/wp-content/uploads/2019/10/2019.10.15_Brookings-Metro_Talent-driven-economic-development_Parilla-Liu.pdf)).

Jackson College has, as an ongoing focus, to only provide instructional degree programs that minimally provide for 150% of the Federal Poverty Level for a family of four. Beyond that, our focus has been to provide programs that lead to, if not outrightly qualify, for good paying, family sustaining, jobs that support the Michigan economy. Our instructional programs, their viability, and attendant instructional equipment and curriculum are well researched and influenced heavily through Design Thinking practice, employed by the College. Additionally, the Voice of the Customer (VoC) continues to provide meaningful input into the instructional process. Indeed, each instructional program includes an advisory committee comprised of members of the community of practice. The contributions of the advisory committee also assist with our efforts around workforce development and helping us to better understand workforce demand.

The instructional programs currently in this facility, and those proposed to be added are fully supported by the vision of the Jackson College board of trustees with respect to workforce focus. Indeed, as a locally-elected board, members are uniquely positioned to prioritize the work of the College around meeting local, as well as regional workforce development. Consequently, the College is an active partner with Michigan Works Southeast, the Jackson Enterprise Group – the local
economic development organization, as well as the economic development groups in Lenawee and Hillsdale Counties. Further the College partners with peer community colleges, such as Detroit Drives Degrees, WIN, and other higher education groups concentrating efforts on workforce development. The existence of Wayne State University, and Siena Heights University, on the College’s Central Campus, also provides opportunities for students and the area workforce to continue to pursue knowledge and skills as the workplace continues to change.

More particularly, the College President & CEO is the incoming board chair of the Henry Ford Hospital – Jackson, and a member of the previously mentioned Enterprise Group, and as such helps to position the College with proper education, training, certifications, customized skills training, and supports for the region, based upon area current and anticipated demand in all area industries. The programs provided in this building are based upon current and projected area employer demands.

The College also makes use of LightCast, formerly EMSI data, to engage in planning regarding workforce demand at the local, area, state, and regional area. These data continue to support instructional programs in this facility and those anticipated to be added over the next 3-5 years. These data also reveal the economic impact that the College as on the region it serves. More specifically: During the analysis year, Jackson College spent $30.3 million on payroll and benefits for 597 full-time and part-time employees, and spent another $8.2 million on goods and services to carry out its day-to-day operations. This analysis shows that, for the most recent report, operations and student spending of Jackson College, together with the enhanced productivity of its alumni, generated $276.4 million in added income for the Jackson College Service Area economy. The additional income of $276.4 million created by Jackson College is equal to approximately 2.4% of the total gross regional product (GRP) of the Jackson College Service Area. For perspective, this impact from the college is nearly as large as the entire Real Estate & Rental & Leasing industry in the region. The impact of $276.4 million is equivalent to supporting 3,517 jobs. For further perspective, this means that one out of every 38 jobs in the JC Service Area is supported by the activities of Jackson College and its students. The improved education and workforce training efforts, made possible by this Capital Outlay projects, are anticipated to further grow these data in support of economic growth and workforce development, consistent with the goals of the State of Michigan.

The following table outlines the LightCast data outline verifiable data as to the nature of the essential instructional and customized training areas needed to be provided by the College, according to income. Of particular note are manufacturing, electrical and utility education, nursing, and allied health, which are the very program areas included this this Capital Outlay request for Whiting Hall. These current, expanded, and new instructional programs are essential to serving the Jackson community and throughout the region, as noted by the data. Additionally, the subsequent table provides information regarding job demand by industry in the Jackson College’s service area.
<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Labor income (millions)</th>
<th>Non-labor income (millions)</th>
<th>Total income (millions)**</th>
<th>% of total income</th>
<th>Sales (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$1,547</td>
<td>$1,096</td>
<td>$2,643</td>
<td>23%</td>
<td>$8,479</td>
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<tr>
<td>Utilities</td>
<td>$400</td>
<td>$1,090</td>
<td>$1,490</td>
<td>13%</td>
<td>$2,357</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>$193</td>
<td>$1,116</td>
<td>$1,309</td>
<td>11%</td>
<td>$1,835</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>$832</td>
<td>$115</td>
<td>$947</td>
<td>8%</td>
<td>$1,588</td>
</tr>
<tr>
<td>Government, Non-Education</td>
<td>$587</td>
<td>$121</td>
<td>$708</td>
<td>6%</td>
<td>$3,752</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$430</td>
<td>$258</td>
<td>$688</td>
<td>6%</td>
<td>$1,118</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>$297</td>
<td>$196</td>
<td>$492</td>
<td>4%</td>
<td>$910</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>$226</td>
<td>$246</td>
<td>$473</td>
<td>4%</td>
<td>$767</td>
</tr>
<tr>
<td>Government, Education</td>
<td>$398</td>
<td>$0</td>
<td>$398</td>
<td>3%</td>
<td>$447</td>
</tr>
<tr>
<td>Construction</td>
<td>$281</td>
<td>$76</td>
<td>$356</td>
<td>3%</td>
<td>$693</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>$143</td>
<td>$151</td>
<td>$295</td>
<td>3%</td>
<td>$678</td>
</tr>
<tr>
<td>Administrative &amp; Waste Services</td>
<td>$230</td>
<td>$59</td>
<td>$289</td>
<td>3%</td>
<td>$459</td>
</tr>
<tr>
<td>Professional &amp; Technical Services</td>
<td>$223</td>
<td>$56</td>
<td>$279</td>
<td>2%</td>
<td>$435</td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>$154</td>
<td>$69</td>
<td>$223</td>
<td>2%</td>
<td>$426</td>
</tr>
<tr>
<td>Educational Services</td>
<td>$169</td>
<td>$45</td>
<td>$214</td>
<td>2%</td>
<td>$307</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>$152</td>
<td>$62</td>
<td>$214</td>
<td>2%</td>
<td>$421</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing &amp; Hunting</td>
<td>$127</td>
<td>$73</td>
<td>$200</td>
<td>2%</td>
<td>$548</td>
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<tr>
<td>Information</td>
<td>$52</td>
<td>$75</td>
<td>$128</td>
<td>1%</td>
<td>$221</td>
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<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>$64</td>
<td>$5</td>
<td>$68</td>
<td>&lt;1%</td>
<td>$102</td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>$35</td>
<td>$13</td>
<td>$48</td>
<td>&lt;1%</td>
<td>$81</td>
</tr>
<tr>
<td>Mining, Quarrying, &amp; Oil and Gas Extraction</td>
<td>$9</td>
<td>$9</td>
<td>$18</td>
<td>&lt;1%</td>
<td>$32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,553</strong></td>
<td><strong>$4,929</strong></td>
<td><strong>$11,481</strong></td>
<td><strong>100%</strong></td>
<td><strong>$25,656</strong></td>
</tr>
</tbody>
</table>

* Data reflect the most recent year for which data are available. Emsi data are updated quarterly.
** Numbers may not add due to rounding.
Source: Emsi industry data.
* Data reflect the most recent year for which data are available. Emsi data are updated quarterly.
Source: Emsi complete employment data.
How does the project enhance the core academic, development of critical skill degrees, and/or research mission of the institution?

The extensive renovation of Jackson College’s Whiting Hall is essential in order enhance the critical instructional and workforce training demand for the region. Jackson College is the preeminent leader in education and workforce development that is looked upon by area employers as the educator of first choice. The College is looked upon to provide for a strong cadre of interns, contract training, economic development, and employee certificate and degree graduates. And while not a research-based institution of higher education, Jackson College’s Office of Institutional Research and Effectiveness (IRE), does provide extensive outcomes and performance data on the instructional and workforce efforts of the College. Through this Capital Outlay project, Jackson College remains relevant and essential to the employer community by providing the competencies, skills, and abilities for their current employees, as well as with a steady stream of qualified students to meet their workforce needs.

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

The projected contemplated by this proposal, is a single, stand-alone-facility, with exterior classroom spaces. However, there is a physical “connector-walkway” to anther nearby building, known as the Health Laboratory Center HLC. That said, no funds proposed in this Capital Outlay request will be associated with the HLC building.

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

As outlined previously, this building is a complete repurposing of the existing facility, with a minor square foot expansion of 20,000 square feet to better accommodate an increased number of simulation centers, training, and prototype lab spaces. Please note that the existing infrastructure (water, sewer, power distribution, boilers, air handlers, etc.) is all in critical need of replacement, and is failing in some areas, and as such, cannot be repurposed. However, much of the classroom furniture will be repurposed into the renovated facility.
Does the project address or mitigate any current health/safety deficiencies relative to existing facilities? If yes, please explain.

The new renovation will indeed correct several current design flaws in the existing building, particularly related to access for people with limited mobility. Further, the new HVAC system contemplated for the facility will include elements that provide for the extreme reduction of airborne disease transmission, by incorporating a variety of filtration and intensive light technologies. Beyond this, the new elevators planned for the existing two-story building, will replace the two smaller ones wherein the cars are insufficient in size so to allow EMT patient transport stretchers/gurneys to enter.

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?

College has engaged the CampusWorks organization (see: https://www.campusworksinc.com/) to ensure the creation of a fully-integrated, relational ERP system, that will permit the College to provide real-time data regarding facility utilization, utilization rates, as well as improving utilization efficacy. At present, the process is a manual scheduling system and is a lagging indicator. The remodeled facility will include proximity polling systems that allow the college staff to monitor room utilization, energy consumption, occupancy times, etc. As this building is equipped with room and space monitoring systems, other campus facilities will be likewise equipped with an aftermarket product that will be added into the College’s ERP data and campus facilities management systems.

This building, even in its current configuration is an essential tool in the College’s ability to address critical instructional program needs in multiple applied and technical areas.

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

Jackson College is committed to becoming carbon neutral by 2028. To that end, the College will utilize Leadership in Energy and Environmental Design (LEED) guidance principles in both design and construction of the facility. The LEED certified building will be designed to save the college operational money, improve operating efficiency, lower the College’s carbon emissions, and create healthier spaces for our students, guests, and employees. This work is critical to our ability to address climate change and meeting the Board of Trustee’s ESG goals, enhancing organizational resilience, and supporting a more equitable region of the State of Michigan. Additionally, the construction methodologies utilized on this project will likewise be LEED compliant insofar as scrap materials will be sorted and recycled, as will the refuse from the demolition of the building.
Finally, as part of the design process, the project planning cycle will consider more sustainable options for building operations including the use of carbon credits, photovoltaic and ground thermal options. Minimally, the building development process will prioritize the use of highly efficient energy utilization systems, ensure a full building and equipment commissioning process, and closely monitor energy utilization through advance building censoring systems technologies.

**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.**

Yes, the intended source for the Jackson College 50% match is general operations and bond indebtedness.

**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?**

Given the limited local property tax support for Jackson College operations (i.e., 12% of the College’s total revenue stream), and even though multiple requests for additional tax support and/or Headlee Override requests have been declined by Jackson County voters – who have continually denied such requests since 1964, the College is unable to provide additional project match funding for this Capital Outlay project.

It should be noted that such matching is not a requirement of the Capital Outlay legislation, and it is believed that our smaller institution should not be held to the same level of match expectation as other community colleges in the State which have local tax support in excess of 50-60% of their total revenue streams, not to mention the significant tax base of those larger metropolitan areas, as well as their substantial foundation capacities. Such practice is not statutorily required, nor is it equitable in awarding additional application review points for this. We respectfully request the elimination of this practice, or minimally providing some other weighting measure to allow for such huge variation in the resources available to large and smaller institutions.

**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, discrete building, the total operating costs will be reduced due to incredibly improved HVAC systems, including the introduction of energy management systems, and a reduction of energy costs. The addition of modest supplementary square footage will not create additional operation costs in excess of the savings obtained from energy efficiencies. The additional cleaning team service required for the minor additional spaces will be covered by another half-time support person.
What impact, if any, will the project have on tuition costs?

Students will not feel the effects of any tuition increase beyond those of normal inflationary adjustments permitted by the Governor and the state legislature – which are currently based upon tuition increase caps.

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

Should Jackson College’s request for Capital Outlay be denied, the College will continue to make application for future consideration. Beyond this, the College will be unable to add other instructional programs at a cadence that would allow for timely response to industries’ changing needs, let alone attending to rising deferred maintenance costs. As noted previously, part of this project and its renovation is designed to address long-standing and extensive deferred maintenance issues of $17.2MM that are beyond the immediate financial capabilities of the College. Consequently, the College will be strapped with addressing an unnecessary level of expenses related to energy costs and repairs – in some cases throwing good money after bad.

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

The College has contemplated other options I opposition to pursuing the capital outlay request, which has included seeking private/donor funding, additional millage support, and partnering with private organizations. None of these options were successful. As an example, the College has only 12% of its total revenue coming from the local taxpayer base. On 14 different occasions since its original millage of 1.33 mills in 1964, however all 14 requests for additional support were denied by voters. The millage, due to the Headlee effect, is now 1.13 mills. Though the College is seeking a Headlee Override request of Jackson County voters in November 2023, it is highly doubtful that it will be successful. This, in part, describes why the College is now working through the option of Capital Outlay to achieve its mission and objectives.