



FY 2021 Capital Outlay Request



October 2019

Fiscal Year 2021
Capital Outlay Project Request

Institution Name: Lansing Community College

Project Title: Cybersecurity Education & Veterans Resource Center

Project Focus: Academic

Type of Project: Renovation

Program Focus of Occupants: Cybersecurity/Computer Information Technology Classrooms & Veterans Resource Center

Approximate Square Footage: 19,500

Total Estimated Cost: \$7,000,000

Estimated Start/Completion Dates: July 1, 2021 to June 30, 2023

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

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

Is the requested project focuses on a single, stand-alone facility? YES

Project Purpose

The purpose of the renovation of 505 N. Capitol Avenue "Cybersecurity Education & Veterans Resource Center" is twofold. First, The New Center for Cybersecurity Education (CCE) will educate students, assist business & industry, and expose community members and organizations to Cyber Defense education and best practices helping to shrink Michigan's cybersecurity talent gap. Secondly, to provide a new home for the College's Veterans Resource Center (VRC). The current facility housing the VRC simply does not adequately provide for the academic and support needs of our veterans.

Scope of the Project

The intent is to renovate the currently vacant 505 N. Capitol Avenue facility from commercial offices to a classroom building with a focus on STEM Computer Information Technology programs and new home for the Veteran's Resource Center. Creating an environment in which our veterans can feel comfortable is an essential part of this project. In addition, developing adaptive and technology-rich classrooms will allow academic programs to improve the delivery of instructional content. These new technology rich classrooms are also designed to be flexible to allow the College to respond quickly to changing student and industry needs. The space will also be utilized for community special events such as Grow with Google, industry professional groups to present on topics of IT and cybersecurity, Business & Industry events involving cybersecurity, IT and cybersecurity recruiting events, student competitions in cybersecurity, and graduation events for those completing the program.

Because this building was built in the 1960s, the College will address the building envelope and systems for energy efficiency. The mechanical and electrical systems will require updating and replacement. The glass on the building envelope will need to be replaced, as it is the original 1960's glass/glazing system. Insulation throughout the building will be replaced to remove any asbestos-containing materials and improve energy efficiency. Replacing the building envelope materials will also protect the building infrastructure from any further deterioration. In addition, building accessibility and compliance with ADA regulations will be addressed at all entrances.

Program Focus of Occupants

The program focus for students in the STEM Computer Information Technology area specifically addresses the growing demand for cybersecurity professionals across Michigan. The Center for Cybersecurity Education will become Mid-Michigan's premiere source of cybersecurity education, providing the resources to further the mission of protecting our state's businesses, government, educational institutions, public and private infrastructure, and the community in cyberspace. Efforts focused on student success in these areas will help meet employer needs in Michigan, as well as prepare students for transfer to four-year institutions for advanced degrees in their chosen areas. Not only will the Associates Degrees open doors to stable employment, but the advanced degree pathway will provide greater career opportunities.

The purpose of a Veterans Resource Center (VRC) is to have a designated space on campus that offers veteran Reserve, National Guard and active duty military students a variety of services to assist with overall readjustment and academic experience, as well as a place to study. It serves as a welcome center, resource center, and support center. For many incoming veterans, traditional new student orientations are not enough; the VRC would provide veteran-specific orientations aimed at easing veterans' transition from soldier to student. Student veterans will find resources such as a computer lab, advisors and counselors for academic or personal support, and Veteran's benefit assistance.

Higher education is critical for veterans discharged from the armed forces. In many cases, military certifications and schooling do not correlate with civilian certifications, degrees, and employment. Even though members of the military go through some of the most rigorous job trainings in the country, once they complete their service to their country, many employers are unsure of the qualifications, these soldiers have, and as a result, veterans are sometimes overlooked. The employment market is extremely competitive and without the proper degrees and/or certifications, a veteran will fare poorly against their civilian-educated counterparts.

The VRC will serve as a one-stop shop for information about veteran educational benefits, assistance with deployment or returning from a tour of duty, help with access to health care and counseling services, assistance with employment searches, and additional references or assistance in anything else the veteran requires. It is a place where student veterans from across all military branches and all fields of study can come together to encourage and help one another. The ultimate purpose of a VRC is to reach out to more veterans and better accommodate those who seek assistance.

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

The demand for a highly trained workforce in the field of Computer Information Technology, to include Cybersecurity, continues to grow on a local, regional, and statewide basis. This need is especially relevant to state and municipal operations. The following data provides a quantitative perspective regarding Michigan’s current and future demand for CIT professionals.

DTMB Labor Information

The following information comes from Michigan’s Hot 50 high-demand high-wage careers projected through 2024 in the arena of Computer Information Technology (CIT).

- CIT jobs account for 6 of Michigan’s top 50 careers
- CIT jobs currently generate 2,409 position openings annually
- CIT annual open positions are estimated to grow to 2,838 by 2024
- CIT average wages range from \$28 - \$45 per hour

Labor Market Analysis

LCC uses a comprehensive third-party resource (EMSI) to forecast future job growth, regional demand, and associated wages. The anticipated growth rate in jobs for Information Security Analysts is estimated to be 28.3% in Michigan and 28.4% nationally from 2017-2027. In addition to the high demand for these positions, the median hourly wage for Information Security Analysts in Michigan is \$43.54.

Cyber Seek Data

In a comparison of the currently employed cybersecurity workforce relative to demand, Cyber Seek found that Michigan is tied for 4th in the nation with regard for the greatest need for cybersecurity positions. Cyber Seek is supported by the National Initiative for Cybersecurity Education (NICE), a program of the National Institute of Standards and Technology in the U.S. Department of Commerce. Source: Cybersecurity Supply And Demand Heat Map. (n.d.). Retrieved August 26, 2019 from <http://cyberseek.org/heatmap.html>

1) How does the project enhance the core academic and/or research mission of the institution?

This project will directly support LCC’s Mission and 4 out of 5 of the College’s strategic focus areas of Engaged Learning and Student Success, Competitiveness and Innovation, Community Engagement, and Resource Management and Fiscal Responsibility.

•**Mission:** To provide a high-quality education ensuring that all students successfully complete their educational goals while developing life skills necessary for them to enrich and support themselves, their families, and their community as engaged global citizens.

•**Engaged Learning and Student Success:** Lansing Community College is an exemplary institution where student achievement and success are realized through relevant and rigorous curricula across all areas of

teaching and learning. Lansing Community College provides excellent student support services that facilitate retention, goal completion, engagement, and success.

•**Competitiveness and Innovation:** Lansing Community College demonstrates its status as a college of choice by delivering superior value, by continuously improving and innovating, and by forecasting and responding to growth opportunities and competitive challenges.

•**Community Engagement:** LCC builds and enhances mutually beneficial relationships with community partners.

•**Resource Management and Fiscal Responsibility (see section 4)**

Through this project, LCC is prepared to meet the state's Competitive and Innovation needs by creating highly-skilled, well-educated students capable of participating and providing leadership in an increasingly sophisticated scientific and technological global workplace. A widening achievement gap continues to emerge, marked by a steady decline in the preparedness of high school students for college-level coursework in the STEM course of study.

Lansing Community College has a long and distinguished history of training and supporting its men and women of the armed services. At the heart of the Veterans Resource Center is Student Success. All divisions and departments at Lansing Community College are focused on 100% success for all students, through inclusion and completion of degree, transfer, or certificate programs. LCC focuses on this goal with customized learning and support systems that engage every aspect of our college. This "wrap-around" design brings together all of our student success and/or institutional improvement efforts under one cohesion-building umbrella to provide an environment that reduces non-academic obstructions and facilitates the student learning portion of our mission.

Most of our military service members joined the military before their 21st birthday, and it is often the only job they have ever held. While it's true they've received extensive training during their years of service, it's often fairly narrow in scope and not immediately translatable to civilian employment. As a result, more than 1 million veterans are enrolled in higher education in order to become successfully employed. Lansing Community College enrolled 427 veterans and veteran dependents in 2018.

Our veterans are some of the most highly skilled, motivated, honest, hardworking and experienced people in our country. It would be a disservice to our nation if we did not provide the needed services for our student veterans in order for them to be successful while attending school, and upon completion when they enter the job market. The current unemployment rate for all veterans in the U.S. is 3.5%, which is lower than the national average of 4.7%. The average rate for Post 9/11 veterans stands at 3.8%. However, the unemployment percentage for veterans who are 18-34 stands at 5.8%, which is much higher than the national percentage. This age group could also be deemed as the targeted age group for higher education institutions.

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

Yes.

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

When the building was vacated in October 2012, LCC committed to incorporating the facility into its campus. This means that a renovation and upgrade project is required to bring the building in line with LCC's campus operation. LCC designs and builds using LEED principles and is committed to achieving LEED certification during major renovation and construction projects. The repurposing of the facility will incorporate the use of sustainable building systems to improve the energy efficiency of the building and provide a comfortable learning environment for our students. Innovative and energy conserving systems will be incorporated, bringing this building in line with the campus utility standards and minimizing operating costs.

This project also supports the College's mission regarding the strategic focus area of Resource Management by investing thoughtfully in an existing facility instead of tearing it down and building an entirely new facility, which uses far more fiscal and natural resources.

- **Resource Management and Fiscal Responsibility:** Lansing Community College engages in planning activities that support its ability to make data-informed and transparent decisions within a participatory framework at all levels to ensure the health and sustainability of the institution over the long term.

4) Does the project address or mitigate any current life/safety deficiencies relative to existing facilities? If yes, please explain.

Yes, the building was built in the mid-60s. LCC will be requesting a change of zoning for this property to match the rest of the campus. The re-zoning will put the building in an educational status so that any architectural/construction changes will include code updates such as fire systems (monitoring, alarms and suppression). In addition, all ADA accessible elements would be included in the scope of work.

Typical of 1960s construction, the building has insulation made of asbestos-containing materials. These materials will be properly removed and disposed. They will be replaced with modern insulation that will improve the energy efficiency and provide a safe and comfortable environment for our students. In addition, maintenance staff will not be required to work with dangerous insulation materials in the building systems.

5) How does the institution measure utilization of existing facilities, and how does it compare relative to established benchmarks? How does the project help to improve the utilization of existing space and infrastructure, or support the need for additional space and infrastructure?

During academic program development, the utilization of existing facilities is a major consideration. The importance of this assessment is demonstrated by the Campus Master Plan and is discussed in the Facilities, Uses, Needs and Challenges section for each Academic Division. The Enrollment and Staffing Section, Student Enrollment Trends by Discipline Area, demonstrates the academic use of facilities. Also, LCC uses the Michigan Postsecondary Data Inventory (MPDI) and Michigan Community College Data Inventory (MCCDI) to compare relevant measures to other similar sized institutions within the state of Michigan.

Room utilization for all classrooms and labs is tracked on a semester basis. Data is reported to academic areas to assist in program offerings and filling wait-listed classes. Student credit hours per semester, full vs part time seats, and student count on a semester basis are used as a benchmark by the academic disciplines to determine additional facility needs. Expansion of our technology rich classroom spaces

will allow us to add additional classes in demand areas and offer additional course offerings that meet the needs of our existing and future students.

LCC is committed to the occupational training of our returning military veterans and is recognized as a Military and Veteran Friendly Institution (2018). The VRC was created and located in the Huron Building to comply with the national trend for non-academic space to meet the many needs of veterans, such as VA benefit guidance and processing, general liaison services throughout an academic career and dedicated, confidential counseling. The VRC initiated programs and activities for our veteran students, but the current space is materially inadequate for their needs. The completion of this renovation project will provide the proper spaces needed for student success.

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

The College is striving to achieve a LEED (Leadership in Energy and Environmental Design) Silver Green Building certification for this project by applying sustainable principles throughout the design, construction, and operation of the facility. Specifically, the design of the building will incorporate low flow water fixtures, high efficiency heating and cooling systems, LED lighting fixtures inside and out, and optimize the use of natural light. Operationally, the facility's energy efficiency will be enhanced using occupancy sensors throughout the building reducing utility demand whenever rooms are not in use. In addition, this facility will be incorporated into the College's green cleaning and recycling programs.

7) 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 LCC Board of Trustees in June 2013 designated \$1,800,000 of the General Fund balance for the renovation of the College property located at 505 N. Capitol Avenue in Lansing. LCC is committed to provide the additional \$1,450,000 from non-operating funding sources when the project is approved. This will bring the total available match to \$3,250,000.

8) 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?

Yes. LCC is committed to funding additional project costs, such as landscaping, site enhancements, and parking lot improvements, estimated at \$500,000.

This brings the College's total commitment to \$3,750,000 of the total \$7,000,000 project cost. Since LCC is only requesting \$3,250,000 from the State of Michigan, the College will pay 54% of the total \$7,000,000 project cost.

9) 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.

No. As a part of the relocation of the Veteran's Resource Center, the Huron Building will be closed until it can be renovated at some point in the future. The College will then transfer the operating budget for the Huron building to the newly renovated building at 505 N. Capitol Avenue.

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

None. The operation of the building would have no direct impact on tuition costs. Tuition at LCC is in the lowest quartile of Michigan's 28 community colleges.

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

Students will always have an opportunity for academic instruction at LCC. However, the challenge, if this project is not supported, is that such opportunities would be limited due to infrastructure inadequacies. Capacity issues would be our primary stumbling block. Additional sections of high-demand STEM CIT courses may not be offered because the room requirements, equipment, and applied learning design might not be available in rooms currently equipped for traditional Liberal Arts Instruction. Insufficient education and training may limit the opportunities for students practice "real world" applications, thus handicapping direct placement in Michigan jobs. In turn, this will diminish LCC's ability to meet employer and labor market demand for these important skills throughout the state's and the nation's economy.

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

The alternative to the renovation of the 505 N. Capitol Avenue Building would be to renovate the existing home of the VRC in the Huron building. Unfortunately, the College does not currently have a temporary location for the VRC to operate from while the Huron building itself could be renovated. The Center for Cybersecurity Education could be built within West Campus, but the decentralization from the local community and main campus would create barriers in reaching its purpose. Moreover, space at the west campus is scarce resulting in a potentially significantly smaller area to scale the critical elements of the plan. The combination of these limitations would severely hinder the outcome of the center's capabilities rendering it a limited scale impact while not sufficiently addressing the current and future gap.