

Implementation Plan

The 5-year comprehensive master plan should identify the schedule by which the institution proposes to address major capital deficiencies, and:

- A. *Prioritize major capital projects requested from the State, including a brief project description and estimated cost, in the format provided. (Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate).*

Lake Michigan College has submitted a request to **renovate and upgrade the Napier Avenue Campus Academic facility**. This project is identified as our #1 FY'18 Capital Outlay Request. An investment in a 45+ year existing facility and infrastructure (scoring criteria a), the project includes a sustainable design (scoring criteria d) which will save approximately \$320,000 in energy costs annually (scoring criteria g). Project will address current safety deficiencies caused by regular HVAC system breakdowns, along with ADA compliance concerns (scoring criteria b). The Napier Avenue Campus Academic facility is operating at capacity, making temporary space rental necessary at an offsite storage facility (scoring criteria c). We are also restricted currently from adding additional programs and services, including a planned Student Success Center, Business Education and Resource Center, and a Faculty Service Center. Estimated cost for this project is \$16,954,646 (scoring criteria e), of which the College can assume 50% of the cost (scoring criteria f). Operating costs would decrease with the efficiencies achieved through this renovation, both in energy and rental expenses (scoring criteria g). We do not anticipate any increase in tuition due to this project (scoring criteria h). Besides the immediate positive job impact due to construction, we anticipate energy production and distribution program and regional growth supported by the new HVAC system serving as a learning laboratory and employment support due to the expansion of a Career and Transfer Center. Additionally, the College's Academic Plan focuses on new and updated program development directly tied to area projected job creation (scoring criteria i). Lake Michigan College has not received any State of Michigan capital funding for **13** years (scoring criteria j).

Describe the project purpose: The proposed project is grounded in two fundamental needs. The first priority for Lake Michigan College is to advance its teaching, learning and student success. LMC classroom and support space design currently is traditional in nature and does not support flexible, interactive and collaborative learning. Additionally, the heating and cooling infrastructure is 45+ years old and while well maintained, has reached the end of its operational life. Replacement will address infrastructure issues and achieve nearly \$320,000 in energy savings annually. This project is unique in that it marries infrastructure improvement with the ability to provide detailed energy savings data to the classrooms for instructors' use in curriculum development and delivery.

Describe the scope of the project: Lake Michigan College proposes modernizing its teaching spaces in its 45+ year old classroom facility along with several areas for student success support and learning including revitalizing space for learning resources, instruction, and expansion of student achievement services. This project will complement a recent \$7.3M College funded

renovation of its science laboratories in support of our Science, Technology, Engineering and Math (STEM) initiative. In the classrooms, lecture halls, and student success spaces the College proposes using advanced technologies including, but not limited to, flexible learning spaces, acoustics, ventilation and air quality, and digital technologies to bring multiple forms of media into the learning environment. Energy upgrades of mechanical infrastructure and support systems will include heating, cooling, air distribution and building control systems with new sustainable energy-efficient systems.

Specific project components include:

- Renovate 50 classrooms, 2 lecture halls and learning resource center to improve the classroom environment and incorporate new teaching technologies to enhance student success and better prepare students for the use of “real-world” technologies at work or in advanced studies.
- Create a new service center to assist faculty with redesigning curricula, identifying and learning new technologies, expanding on line learning and incorporating those technologies into the classroom.
- Create new collaborative learning and engagement spaces on the Napier Avenue Campus that will provide students with group study and classroom project preparation areas.
- Replace original heating and cooling plant and air handling units. This equipment is over 45 years old and well past its design lifetime. Annual energy savings is estimated at \$318,045.
- Connect the STEM initiative and the physical plant replacements by bringing the energy data into the classroom, using the building as a real life learning lab.
- Bring building facilities to current ADA standards.
- Provide a Student Success Center to support student retention and successful transition into the workforce.

B. If applicable, provide an estimate relative to the institution’s current deferred maintenance backlog. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impact, immediately versus over the next five years.

Lake Michigan College has identified a five-year backlog of \$61,538,599 deferred maintenance and capital projects. Of this backlog we have identified \$21,628,215 of currently critical deferred maintenance items that have safety, regulatory or collateral damage implications within one year. A significant portion of this exists in our Napier Academic Building and will be addressed by the Capital Outlay Grant for which we have planning authorization. With the completion of the Hanson Technology Center and Beckwith Hall both within the last three years our deferred maintenance as a percentage of capital replacement value (Facility Condition Index) has dropped from 0.20 to 0.13 which is very good. Napier Academic Building aside our facilities are in good condition and have been well maintained.

Projects that have associated annualized cost savings include the following projects:

<u>Project</u>	<u>Estimated Cost</u>	<u>Annual Savings</u>
Mendel Center Energy Renewal and Retrofit	\$2,531,480.	\$108,420.
Miscellaneous Electrical Upgrades	\$187,943.	\$10,720.

In addition, other projects, notably brick tuck-pointing, while not resulting in an annual cost savings, do represent an eventual cost savings in reduced collateral damage to adjacent building infrastructure.

Finally, projects are in some cases designed to mitigate risk to our students and staff by providing a safe educational environment. Projects falling into this category include adding a safety railing to the plaza, providing upgraded site lighting, and providing additional emergency phones in the student/staff parking lots.

- C. *Include the status of on-going projects financed with State Building Authority resources and explain how completion coincides with the overall five-year Capital Outlay Plan.*

<u>Facility</u>	<u>Project Status</u>
South Haven Campus	Complete and operational

- D. *Identify to the extent possible, a rate of return on planned expenditures. This could be expressed as operational “savings” that a planned capital expenditure would yield in future years.*

The facility assessment includes several projects with energy savings including HVAC, electrical and boiler replacements. Preliminary estimates indicate that the College could save up to 50% of its maintenance and utility costs for the next 20 years by replacing the existing HVAC system with an energy efficient, sustainable system. In addition, the facility assessment takes advantage of renovation as opposed to more costly new construction.

See the **Facility Assessment** for further details.

- E. *Where applicable, consider alternatives to new infrastructure, such as distance learning.*

The objectives proposed through the FY '18 Capital Outlay Project Request are core infrastructure, service and program support in nature and cannot be addressed through alternatives.

F. Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2017 through fiscal year 2021.

Project Description	Estimated Cost	Implementation Year
Renovate and upgrade the Napier Avenue Campus Academic Facility.	\$16,954,646.	FY'17*
Construct Wine & Culinary Education Center	\$5,184,642	FY'17
Mendel Center Energy Renewal and Retrofit	\$2,531,480	FY'17/FY'18
Bertrand Crossing Facility Renovation	\$12,590,200	FY'18
Modernize Grand Upton Hall – Mendel Center.	\$1,379,891	FY '19
Replace Napier Avenue Academic Building brick veneer.	\$1,610,580	FY '20
Replace Mendel Center North Parking Lot.	\$1,246,134.	FY '20
Re-roof South Haven facility.	\$1,000,000.	FY '21

*Lake Michigan College currently has planning authorization for this project. Actual implementation year is dependent on completing programming and obtaining construction authorization.

G. Identify the amount of non-routine maintenance the institution has budgeted for in its current fiscal year and relevant sources of financing.

For the current fiscal year, Lake Michigan College has budgeted \$2,600,000 for non-routine maintenance projects, equipment and renovations. \$1,000,000 of this amount is funded by an MEDC grant with the remaining funding from the College General Fund.

See **Facility Assessment**, for additional information on these, and other maintenance projects.