

## **Five-Year Capital Outlay Facility Assessment for FY 2022-2026**

*A professionally developed comprehensive facilities assessment is required. The assessment must identify and evaluate the overall condition of capital facilities under college or university control. The description must include facility age, use patterns, and an assessment of general physical condition. The assessment must specifically identify:*

- A. Summary description of each facility (administrative, classroom, biology, hospital, etc.) according to categories outlined in "net-to-gross ratio guidelines for various building types," DTMB-Office of Design and Construction Major Project Design Manual, appendix 8. If facility is of more than one "type," please identify the percentage of each type within a given facility.*

See table on following page.

**Facility Description**

Building Type	Main Building		Mendel Center <sup>2)</sup>		Niles at Bertrand Crossing		Hanson Tech Center		South Haven		Beckwith Hall		Todd Center		Welch Center	
	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>	Sq. Ft	% <sup>1)</sup>
Administrative	4,038	1.33					835	1.69	1,970	4.58			3,049	7.03		
Auditorium	10,088	3.33	5,235	3.77												
Biology	5,005	1.65			1,321	3.85										
Chemistry	3,903	1.29			1,539	4.49										
Classroom	52,121	17.19	2,286	1.65	12,811	37.37	4,298	8.71	14,273	33.18	1,756	2.78	15,471	35.65	1,259	9.01
Dining Hall	384	0.13														
Dormitory											48,724	77.08				
Garage	6,864	2.26														
Gymnasium	12,528	4.13														
Laboratory	14,595	4.81	478	0.34	3,204	9.35	20,236	41.02	7,323	17.02					4,191	29.98
Library	22,308	7.36	159	0.11												
Office	30,014	9.90	179	0.13	1,973	5.76	1,519	3.08	3,338	7.76			4,647	10.71	615	4.40
Science	3,252	1.07														
Service	33,630	11.09	131	0.09	2,254	6.57	916	1.86	2,112	4.91	1,548	2.45	3,885	8.95	1,500	10.73
Warehouse	6,488	2.14	272	0.20	370	1.08	-		4,519	10.50						

- 1) Percentage is based on gross square footage of each facility.
- 2) Please note the Mendel Center is a Conference and Performing Arts Center.

- B. *Building and/or classroom utilization rates (Percentages of rooms' used and percent capacity). Identify building/classroom usage rates for peak (M-F, 10-3), off-peak (M-F, 8-10 am, 3-5 pm), evening, and weekend periods.*

### **Classroom Utilization Rates**

The College's routine hours of operation for Benton Harbor Campus facilities have historically been, as a minimum, 8:00 a.m. – 10:00 p.m., Monday through Thursday; 8:00 a.m. – 5:00 p.m., Friday; and 8:00 a.m. – 12:00 p.m., Saturday. The Niles and South Haven Campuses are as a minimum 8:00 a.m. – 9:00 p.m., Monday through Thursday; 8:00 a.m. – 5:00 p.m., Friday. These hours have been reduced to core business hours 8:00 a.m. – 5:00 p.m., Monday through Friday due to the COVID-19 pandemic. Depending on in-person instruction needs, operations are extended on a building-by-building basis.

During the Main Building Renovation and Upgrade many programs were displaced to allow for the work to be completed. Now that the project has been completed, a new comprehensive utilization study is warranted for the Benton Harbor, Niles and South Haven Campuses. Due to the COVID-19 pandemic, a new study as well as comprehensive programming planning for Niles and South Haven campuses is currently on hold.

LMC achieved record enrollment of 4,832 unduplicated head count in the Fall 2010 Semester and has remained above 4,000 until Fall 2017. Our enrollments are still down from this peak high. The Fall 2020 unduplicated head count is 2,499, a 12.7% decrease from Fall 2019. Additional offerings and the Futures for Frontliners program both support higher enrollments.

We continue to rent offsite warehouse storage space to ameliorate the storage space on campus for extra materials, stock needs for our resident hall, and surplus furniture.

- C. *Mandated facility standards for specific programs, where applicable (i.e. federal/industry standards for laboratory, animal, or agricultural research facilities, hospitals, use of industrial machinery, etc.).*

- OSHA - Occupational Safety and Health Administration (all programs)
- ACEN – Accreditation Commission for Education in Nursing, Inc.
- ACPHA – Accreditation Commission for Programs in Hospitality Administration – in process
- ACFEF-AC – American Culinary Federation Education Foundation – Accrediting Commission – in process
- ADA – American Dental Association
- ARRT – The American Registry of Radiologic Technologists
- CAAHEP – Commission on Accreditation of Allied Health Education Programs
- CODA – Commission on Dental Accreditation

- JRC-DMS - Joint Review Committee on Education in Diagnostic Medical Sonography
- JRCERT – Joint Review Committee on Education in Radiologic Technology
- MAERB – Medical Assisting Education Review Board

*D. Functionality of existing structures and space allocation to program areas served.*

Areas with space shortages which have already been recently remedied by the Main Building Renovation and Upgrade project include: Health Sciences, Transitional Studies, Student Success, Culinary and Hospitality programs, assembly and collaboration space. With the program and curriculum growth at our branch campuses, we anticipate additional space needs at those campuses in the future. The specific new College programming being considered includes expanded Health Sciences, Automotive Technology, Brewing, Biotechnology/Food Safety, Cyber Security, Drone Piloting, Geographic Information Systems, Truck Driving, Marine Technician, and Virtual and Augmented Learning, none of which are feasible based on the current layout and use of College facilities.

For further details, please see **Space Needs Assessment Update** section.

*E. Replacement value of existing facilities (insured value of structure to the extent available).*

**Data and Discussion**

The building replacement values, and machinery and equipment values noted below are based on a July 2020 summation of replacement value by MASB-SEG Property/Casualty Pool.

<b>Facility</b>	<b>Building</b>	<b>Furnishings &amp; Equipment</b>	<b>Total</b>
Main Building	\$93,037,770	\$44,661,251	\$137,699,021
Mendel Center	\$36,505,555	\$2,697,757	\$39,203,312
Niles	\$7,804,248	\$1,636,549	\$9,440,797
Hanson Tech Ctr.	\$10,716,640	\$1,623,024	\$12,339,664
South Haven	\$10,023,526	\$1,599,095	\$11,622,621
Beckwith Hall	\$9,571,368	\$907,229	\$10,478,597
Todd Center	\$11,610,864	\$873,936	\$12,484,800
Welch Center	\$6,665,321	\$255,000	\$6,920,321
<b>Total</b>	<b>\$185,935,292</b>	<b>\$54,253,841</b>	<b>\$240,189,133</b>

Excluded from the replacement values above are any subsurface structures such as foundations, sanitary system piping, underground wiring, and below ground tanks.

*F. Utility system condition (i.e., heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.).*

The Main Building (formally known as the Napier Academic building) was constructed beginning in 1968. During the recent Renovation and Update project, the main equipment serving the HVAC system was replaced, including new boilers, chiller and cooling tower, air handler units, air terminal units, and cabinet heaters. Much of the existing ductwork and hydronic piping remained as is for the project, except where remodeling in the space also occurred. Electrical infrastructure was upgraded. The building received new LED lighting where areas were remodeled.

The Mendel Center was constructed over a period of years from approximately 1980 through 1990. The centrifugal chiller and cooling tower were replaced in summer 2002. The College completed an Energy Upgrades project to save energy and operating costs in the summer of 2020. The project replaced the heating plant boilers and the cooling plant with a new chiller and ice storage. The largest of four building air handlers serving the Grand Upton Hall event space has been replaced and LED upgrades were made throughout the building. An envelope study was conducted for the Mendel Center in May 2019 which identified masonry repairs, sealant replacement and sloped window replacement.

The Niles at Bertrand Crossing Campus and South Haven Campus facilities were constructed in 1998 and 2003, respectively. In 2011, the Niles boiler was replaced with two gas-fired package units to improve energy efficiency and reliability. A boiler replacement project is planned for one of the two package units in late 2020. An envelope study was conducted at the Niles Campus in June 2020 which identified a myriad of repairs. Due to the lack of weather barrier at the time of original construction, to fully resolve the thermal and moisture issues will require a significant investment in re-cladding the building.

The Beckwith Hall residence life facility was constructed in 2014 and opened for the first time to student residents in July 2014 and continues to operate reliably. However, the self-contained packaged terminal A/C units used for the resident suites are planned for replacement in phases starting within the next five years.

The Hanson Technology Center was opened for classes in September 2016 and continues to operate reliably. Changes in machine laboratories required increased ventilation requirements which were added in May 2019.

Todd Center was purchased by the College in 2018 but was originally built in 2002. The building has aged well, but some systems are reaching the end of useful life. The College

invested in a major cooling plant upgrade in the summer of 2020. The building automation system is original and needs to be fully upgraded.

System-wide routine preventive maintenance is performed and service agreements for major mechanical systems are in place.

*G. Facility infrastructure condition (i.e. roads, bridges, parking structures, lots, etc.).*

The infrastructure at all sites consists of access roads, parking lots, and pedestrian walkways. The sole exceptions are two small vehicular bridges and a large pedestrian bridge, all located at the Benton Harbor Campus.

The emergence of Men's and Women's Soccer in Fall 2013, along with the opening of our first residence facility, Beckwith Hall in Fall 2014 led to significant revitalization of our west campus area. Improvements in roadways, utility infrastructure, lighting, wayfinding signage, technology and emergency/safety equipment upgrades have all been made within the past ten years.

The College's Main Building, Mendel Center, Hanson Technology Center and Beckwith Hall share common infrastructure. The Mendel Center South lot was replaced in 2002. The Mendel Center North lot was resurfaced in the summer of 2004, and a significant number of large surface cracks were repaired in the summer of 2012; however, the base is seriously degraded, and the lot is earmarked for replacement in 2022. The Mendel Center South lot was resurfaced during the summer of 2010. The Staff/Student lot was resurfaced in 2012 and a majority of the College's primary access roads were resurfaced that same summer. A significant number of paving repairs were made during Summer 2015 in the Staff portion of the Staff/Student lot. The lot itself was fully replaced including subsurface and drainage in Summer 2017. A new pavement study for the Benton Harbor Campus in late 2017 identified an overall pavement maintenance and repair masterplan for the next ten years. All parking lots and parking access drives received maintenance crack filling and sealant in Summer 2018 (except in areas used by construction activity) and additional maintenance on the main entry drive was implemented in Summer 2019. Additional maintenance crack filling and sealant as well as minor milling and patching was performed in Summer 2020.

A new pedestrian plaza was constructed in 2012 and was extended to the east side of the campus in 2016. This reduces the amount of vehicular and pedestrian interface on the Benton Harbor Campus. In general, the pedestrian walkways are original infrastructure and there has been some degradation of the surface. Where necessary, portions of the walkways continue to be replaced on an annual basis. The Main Building entry was completely reconstructed, including new storm drainage, in Summer 2019 as part of a larger campus exterior infrastructure improvement project. All the existing brick pavers

were removed, and a new concrete plaza was built. The Main building also has a large green roof plaza. Some improvements on the plaza were made in Summer 2014. During the recent major renovation and upgrade project, masonry improvements at the perimeter of the plaza were made; however, drainage system replacement will be required to maintain the plaza. Existing concrete benches along the east and west sides which were deteriorated were removed. Plans for new guardrail installation have been identified.

Work at the Beckwith Hall parking entries improved drainage and provided safer pedestrian access to the adjacent parking area in Summer 2019. Sidewalk pavement replacement addressed safety concerns at the north Mendel Center entry in Summer 2019. In Summer 2020 the entire northwest parking area at the Main building was reconstructed adding much needed accessible parking and safe sidewalks to access building entries. The northeast parking area was also upgraded at the same time.

The vehicular and pedestrian bridges located at the Benton Harbor Campus are original construction. They are in fair to poor condition. A bridge study was conducted Spring 2020 to evaluate approaches for repair and/or reconstruction, and safer passage for pedestrians. Improvements have been designated for future routine maintenance work.

After the main entry drive was flooded in February 2018, which caused the Benton Harbor Campus to close briefly, a study was proposed to assess and evaluate the existing stormwater infrastructure on the Benton Harbor Campus. Since that time, the Campus has not experienced any new site flooding, so the study has been postponed.

As noted in section F. above, the Niles Campus and South Haven Campus facilities have been constructed within the past twenty-one years and the utility infrastructure is in good condition. Both campuses are experiencing asphalt pavement deterioration, which is becoming a more significant issue. A 2018 pavement study for both campuses was conducted and identifies an overall pavement maintenance and repair masterplan for the next ten years. Major pavement maintenance is planned for Summer 2021.

#### *H. Adequacy of existing utilities and infrastructures system to current and 5-year project programmatic needs.*

Our recent Main Building (Napier Academic Building) Renovation and Upgrade project addressed the existing utilities and infrastructure system which had been our highest priority. Work was substantially completed in August 2020.

Within the Main Building, we have captured existing space and renovated it into a student center, the Hawk's Nest. The Center overlooks a green roof plaza that is over 50+ years old and now requires renovation to refresh the look of this student space while

maintaining the integrity of the green roof.

On the northeast corner of the Benton Harbor Campus in 2019, the College opened the Welch Center for Wine & Viticulture. The College invested in the extension of utilities and infrastructure to support this new facility.

In June 2018, the College purchased the Western Michigan University Southwest building, now named the Todd Center for Business, Education and Computer Information Systems. This building is now fully occupied to serve these expanded and relocated programs, allowing growth in our Main Building.

The changes on the Benton Harbor Campus have required the College to address the new pedestrian and vehicular patterns associated with the larger campus environment. In conjunction with the improvements made at our Benton Harbor Campus over the past year and the construction of our new technology facility, we expect the emergence of residence life and increased campus activity to drive facility and infrastructure expansion improvements in this area of our College. The College has developed a wayfinding master plan to improve movement between facilities for students, guests, and employees. New exterior signage will be implemented in phases. The interior signage standard is still in development but will inform the final installation of signage as a part of the Main Building (Napier Academic Building) Renovation and Upgrade project.

Please see the following sections of this submittal for additional information: **Space Needs Assessment Update, Master Plan, and Information Technology Strategic Plan.**

- 1. Does the institution have an enterprise-wide energy plan? What are its goals? Have energy audits been completed on all facilities? If not, what is the plan/timetable for completing such audits?*

All of our energy planning is grounded in Lake Michigan College's over four-decade history of sustainability embodied in our original green roof on our plaza and the historic use of the lake surrounding our Main Building (Napier Academic Building) as the cooling source for our original HVAC plant.

We have completed several energy audits over the last ten years with a variety of firms and consultants including Honeywell Energy Services, Progressive Architecture & Engineering Services and VFA as part of our facilities condition assessment. The results of these planning efforts have been built into our facilities condition assessment.

Over the past five years, Lake Michigan College has invested over \$40 million in physical plant upgrades, enhancements and expansions. Each of these projects included energy



efficiency and sustainability elements including energy efficient heating and cooling plant and distributions systems, roofing, LED lighting, and window systems, and low-volume flush units in restroom upgrades. Heat recovery systems and acuity monitors have been installed in our new science lab spaces. We are continuing to expand our building automation system controls to cover more of our facilities. Finally, hybrid vehicles were purchased for our College pool.

- J. *Land owned by the institution and include a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose.*

**Property Listing**

The College owns the following land, which houses academic facilities.

Address	City	State	Facility	Acreage
2755 E. Napier Avenue	Benton Harbor	Michigan	Benton Harbor Campus	263.00 acres
1905 Foundation Drive	Niles	Michigan	Niles at Bertrand Crossing	12.99 acres
125 Veterans Blvd.	South Haven	Michigan	South Haven Campus	22.37 acres

Lake Michigan College has also acquired additional properties and associated acreage to protect its perimeter in anticipation of future development. These include:

Address	City	State	Facility	Acreage
1442 Yore Avenue	Benton Harbor	Michigan	<i>none</i>	2.06 acres
1486 Yore Avenue	Benton Harbor	Michigan	<i>none</i>	2.06 acres
1508 Yore Avenue	Benton Harbor	Michigan	<i>none</i>	1.98 acres
2840 Territorial	Benton Harbor	Michigan	<i>none</i>	23.80 acres

Note: The Yore Avenue properties listed above are adjacent to the Napier Avenue property.

At the Benton Harbor Campus, Mendel Center parcel, approximately 114 acres are being maintained, leaving 149 acres open, some of which is available for development. Portions of the remaining acreage are maintained in natural forest, wetlands, and prairie grass ecosystems, and are used for instructional programming (see enclosed Master Plan).

At the Niles Campus, approximately 5 acres are maintained, and as noted above, sufficient property exists to support future development. In 2003, the College sold 0.51 acres to the City of Niles for the erection of a water tower on the southeast corner of its property. In 2019, LMC sold a 6.5 acre parcel to N&M Transfer Co. to build a trucking distribution center. Part of the sales agreement included regular access for the College to begin a truck driving program.

Our South Haven Campus includes land for at least two additional facilities. In summary, we have planned for and acquired land for our future development needs.

- K. *What portions of existing building, if any, are currently obligated to the State Building Authority and when are these State Building Authority leases set to expire?*

**Data**

<u>Facility</u>	<u>Obligated in:</u>	<u>Expires in:</u>
South Haven Campus	2003	2043
Todd Center Building*	2002	2037

\*LMC acquired the building in June 2018