

## **Five-Year Capital Outlay – Facility Assessment for FY 2020-2024**

*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 <sup>3)</sup>	
	Sq. Ft	% <sup>1)</sup>	Sq. Ft	%	Sq. Ft	%	Sq. Ft	%	Sq. Ft	%	Sq. Ft	%	Sq. Ft	%	Sq. Ft	%
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.

3) Welch Center for Wine & Viticulture is currently under construction; opening for classes September 2019.

- 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 are 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.

With the addition of the Todd Center, which includes seventeen classrooms, the College on the whole has ample space for credit courses as well as non-credit activity like community education, tutoring, testing, professional development and club meetings. The Todd Center plays a key role to provide necessary classroom and office space during the major renovation of the Main Building as functions must be shifted around to allow construction work to occur. Once the Main Building Renovation and Upgrade is complete in March 2020, a new comprehensive utilization study will be warranted for the Benton Harbor Campus. Academics is currently reviewing the Niles and South Haven campuses in relation to new program opportunities in anticipation of a space review of these sites in Spring 2019.

LMC achieved record enrollment of 4,832 unduplicated head count in Fall 2010 Semester and has remained above 4,000 until Fall 2017. While our enrollments are still down from this peak high, the Fall 2018 unduplicated head count is 3,424, a 4.5% increase from Fall 2017. Additional offerings in viticulture and enology, culinary, health care certifications, welding certificate and associate degree, and community education continue to support expectations that our recent enrollment numbers will hold steady in forthcoming years. Additionally, new programming in Early Childhood/Elementary Education and Medical Assisting at our South Haven Campus support higher enrollments.

In addition to for-credit classes and directly related college activities, our classrooms and other facilities are routinely used by a variety of programs including Workforce Development training classes and countywide K-12 training programs. These room use and occupancy rates tend to be scheduled in the short term and are therefore not reflected in the figures above, and were not evaluated in the space needs assessment.

Areas with space shortages remain: Health Sciences, Transitional Studies, Culinary/Hospitality, Student Success, and assembly and collaboration space. We expect those shortages to be rectified once Main Building Renovation and Upgrade is complete. We continue to rent offsite warehouse storage space to ameliorate the shortage of simple storage space. With the program and curriculum growth at our branch campuses, we anticipate additional space needs at those campuses in the future. The specific programming being considered includes expanded Health Sciences, Advanced Manufacturing and the addition of Computer Information Systems and Geographic Information Systems, none of which are feasible based on the current layout and use of the facility.

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

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.
- 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.*

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 2018 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	\$89,425,000	\$42,927,000	\$132,352,000
Mendel Center	\$35,088,000	\$2,593,000	\$37,681,000
Niles	\$7,501,200	\$1,573,000	\$9,074,200
Hanson Tech Ctr.	\$10,300,500	\$1,560,000	\$11,860,500
South Haven	\$9,666,137	\$1,563,244	\$11,229,381
Beckwith Hall	\$9,199,700	\$872,000	\$10,071,700
Todd Center	\$11,160,000	\$840,000	\$12,000,000
<b>Total</b>	<b>\$161,180,537</b>	<b>\$51,088,244</b>	<b>\$224,268,781</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 current Renovation and Update project the main equipment serving the HVAC system will be replaced, including new boilers, chiller and cooling tower, air handler units, air terminal units, and cabinet heaters. Only the most recent equipment installed in projects over the last ten years will remain in place. Much of the existing ductwork and hydronic piping will remain as it is currently, except where remodeling in the space also occurs. Electrical infrastructure will be upgraded. The building will receive new LED lighting where areas are remodeled.

The Mendel Center was constructed over a period of years from approximately 1980 through 1990. System boilers and all heating system equipment are original. The centrifugal chiller and cooling tower were replaced in summer 2002. The College is currently conducting an Energy Upgrades project which will address immediate equipment replacement needs and identify and implement upgrades which will save the most energy and operating costs for the facility.

The Niles at Bertrand Crossing Campus and South Haven Campus facilities were constructed in 1998 and 2003, respectively. With the exception of the Niles boiler, all equipment is original and in excellent operating condition. In 2011, the Niles boiler was replaced with two gas-fired package units to improve energy efficiency and reliability.

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 construction in 2016 and opened for classes in September 2016 and continues to operate reliably. Changes in machine laboratories is requiring increased ventilation requirements and is currently under review.

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 couple of years.

The College's Main Building, Mendel Center, Hanson Technology Center and Beckwith Hall share common infrastructure. The Mendel South lot was replaced in 2002. The Mendel North lot was resurfaced in Summer 2004, and a significant number of large surface cracks were repaired in Summer 2012; however, the base is seriously degraded and the lot is earmarked for replacement in 2021. The Mendel South lot was resurfaced during Summer 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 amount 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. All parking lots and parking access drives received maintenance crack filling and sealant in Summer 2018. 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.

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 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 vehicular and pedestrian bridges located at the Benton Harbor Campus are original construction. They are in fair condition.

Due to an inordinate amount of stormwater site and roadway flooding experienced within the last year, a new study is proposed to assess and evaluate the existing stormwater infrastructure on the Benton Harbor Campus. While there has been no flooding of any building facilities, the main entry drive was flooded in February 2018, which caused the Benton Harbor Campus to close briefly.

The College has set aside up to one million dollars to provide Benton Harbor Campus exterior infrastructure improvements including, but not limited to, water management, roadways and sidewalks, and signage to connect old and new facilities. The work is to be completed by Summer 2020, in line with completion of 3 major campus renovation and construction projects.

As noted in section F. above, the Niles Campus and South Haven Campus facilities have been constructed within the past fifteen years and the infrastructure is in good condition. The South Haven Campus and surrounding area has experienced more than normal stormwater runoff in the last year. As a result, asphalt pavement deterioration is becoming an issue in some places on the campus. A new pavement study for the both campuses is planned for late 2018 and will identify an overall pavement maintenance and repair masterplan for the next ten years.

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

Our current Main Building (Napier Academic Building) Renovation and Upgrade project under construction will address the existing utilities and infrastructure system which has been our highest priority. This work is planned to be complete by March 2020.

Within the Main Building we have captured existing space and renovated it into a new 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. Some improvements on the plaza were made in Summer 2014, but in the long term more extensive renovation will be required to maintain the plaza.

On the NE corner of the Benton Harbor Campus, the College is constructing the Welch Center for Wine & Viticulture. The College has already invested in the extension of utilities and infrastructure to support this new facility. Currently a temporary Wine & Viticulture Center is housed in the Mendel Center.

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. A proposed site improvements project is planned to address new sidewalk infrastructure, visitor parking, improved parking lot accessibility and building access, lighting, public address systems, and vehicular drives.

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.

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

*I. 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 \$38M in physical plant upgrades, enhancements and expansions. Each of these projects included energy efficiency and sustainability elements including energy efficient roofing, package-boilers and window systems, and low-volume flush units in any restroom upgrades completed to date. Heat recovery systems and acuity monitors have been installed in our new science lab spaces. College-wide we are replacing CFL's with new LED lighting units when lighting upgrades or replacements are needed. We are continuing to expand our building control system to cover more and more of our facilities. Finally, hybrid vehicles were purchased for our College pool.

While significant progress has been made, our most critical energy improvement, the replacement of our 50+ year old primary heating and cooling plant and distributions system in our Main Building (Napier Academic Building) is currently under construction.

The College is currently beginning an Energy Upgrade project for the Mendel Center to address immediate equipment replacement needs and identify and implement upgrades which will save the most energy and operating costs for the facility.

- 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.

<u>Address</u>	<u>City</u>	<u>State</u>	<u>Facility</u>	<u>Acreage</u>
2755 E. Napier Avenue	Benton Harbor	Michigan	Benton Harbor Campus	263.00 acres
1905 Foundation Drive	Niles	Michigan	Niles at Bertrand Crossing	19.49 acres
125 Veterans Blvd.	South Haven	Michigan	South Haven Campus	22.37 acres

In addition, our Niles and South Haven Campus sites each allow for expansion by at least two additional facilities.

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

<u>Address</u>	<u>City</u>	<u>State</u>	<u>Facility</u>	<u>Acreage</u>
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 Napier Avenue Campus/Mendel Center, 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, we sold 0.51 acres to the City of Niles for the erection of a water tower on the southeast corner of our property.

Our South Haven Campus includes land for at least two additional facilities.

In summary we have adequately 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 are 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 2019