

FY 2024-2028 5-Yr Capital Plan

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I. Mission Statement

Together we empower people and communities to thrive through education, innovation, and experiences.

	Goals	
Academic Excellence Students are well-prepared to excel academically and professionally	Student Success Our students explore, define, and reach their goals	Community Impact Our educational and cultural experiences improve socioeconomic mobility, strengthen the economy, and enrich lives
 Quality Programs/Curriculum Student Learning Culture/Environment for/of Learning 	Strategic ThemeAccessInclusionRetentionStudent Support	 Strategic Method Outreach Communication Workforce/Talent Development Regional Community Enrichment
 Measures Meeting employer needs Successful institutional transfer Instructional effectiveness 	 Measures Persistence and retention Goal completion rate and duration Student satisfaction 	 Measures Economic impact Financial savings for students and families Professionals in high demand fields

Our guiding principles:

Accountability: We hold ourselves accountable to our students, communities, professional standards, and each other.

Culture: We ensure our actions support the whole person through compassion and kindness.

Diversity: We promote an inclusive environment by thoughtfully and intentionally engaging diversity in all its forms.

Integrity: We conduct ourselves with integrity in all matters.

Quality: We provide the highest quality education and experiences possible.

Service: We strive to meet the needs of our students, employees, and communities.

Lake Michigan College is a two-year, accredited, nonprofit community college in southwest Michigan. Locations:

A. BENTON HARBOR CAMPUS

Situated on former farmland in Benton Township between US 31 and I 94, the Benton Harbor Campus on Napier Avenue was completed in 1976. The original academic building, now joined by Mendel Center, Hanson Technology Center, Todd Center, Welch Center, and the Beckwith Residence Hall.

B. NILES CAMPUS

The Niles Campus is located just off US 31 in the Bertrand Crossing Industrial Park. This campus serves residents of South Berrien County including Niles, Buchanan and New Buffalo; Cass County and Northern Indiana.

C. SOUTH HAVEN CAMPUS

Lake Michigan College's South Haven Campus provides local higher education opportunity to city residents at in-district tuition rates. The campus on Veterans Boulevard is also conveniently located for other residents of Van Buren County.

D. ALLEGAN TECH CENTER

The Allegan Tech Center hosts several Lake Michigan College degree, certificate and short-term training programs.

Programs for All Learners:

Lake Michigan College offers over <u>80 different academic programs</u>, including career education, transfer programs, part-time and full-time options and online learning.

Even before students graduate from high school, LMC has partnered with local school systems to offer college-level coursework to qualified students. With <u>Early College</u>, students earn both high school and college credit for courses, saving families thousands of dollars in college tuition.

Several programs at LMC are designed to assist local residents who have had a hard time getting to college. The Educational Opportunity Center can help anyone over 19 to get into any college, not just LMC. Upward Bound offers help to students who are struggling at Lake Michigan College. And Start to Finish provides support to students beginning when they're in high school, all the way through their college career at LMC.

II. Instructional Programming

A. Description of existing academic programs and projected programming changes during the next 5 years, in so far as academic programs are affected by specific structural considerations (i.e., laboratories, classrooms, current and future distance learning initiatives, etc.)

The College offers 53 programs of study at the Associate Degree level and 29 certificate programs. Please see the appendix for additional information: **Registrar's Official Program Major Listing.**

Existing Academic Programs

The College's credit academic programs are organized under three instructional divisions (Arts and Sciences Education, Career and Workforce Education, and Health Sciences Education) that serve campuses in Benton Harbor, Niles, and South Haven. The South Haven and Niles campuses are approximately a half hour drive from the Benton Harbor Campus and serve the northern and southern portions of LMC's district, respectively.

The Arts and Sciences Education Division consists of six departments:

- Mathematics
- Natural Sciences, Exercise Science & Wellness
- Rhetoric, Communication, and World Languages
- Social Sciences, Humanities, and Education
- Visual and Performing Arts

The Career and Workforce Education Division is comprised of three departments:

- Advanced Manufacturing and Computer Information Systems
- Business, Culinary, and Hospitality
- Wine and Viticulture Technology

The Health Sciences Education Division is comprised of seven departments:

- Allied Health
 - Certified Nurse Aide (CNA); Medical Assisting; Pharmacy Technician;
 Phlebotomy
- Dental Assisting
- Nursing
- Physical Therapist Assistant (PTA)
- Radiologic Technology
- Sonography

- Surgical Technology
 - Sterile Processing Technician

Projected Programming Needs for Next 5 Years

The need for new programs and academic support services are identified in a variety of ways. In addition to labor market analyses and environmental scanning conducted during the College's regular strategic planning activities, advisory committees routinely assist the College in identifying regional employment needs and trends. Academic Deans and Faculty also play a key role in proposing new programming by staying abreast of developments in their fields of expertise, helping to assure that students are prepared for employment and transfer opportunities.

Emerging and Projected Programming

The following academic and support programs are emerging, proposed, or expected to undergo feasibility studies within the next five years at LMC:

	Requires Structural	Distance Learning Component
Academic Program	Needs	Included
Brewing	X	X
Cannabis Testing	X	X
Cyber Security	X	X
Drone Piloting	X	X
Marine Maintenance Technician	X	X
Music Technology	X	X
Physical Therapy Assistant	X	X
Public Health	X	X
Respiratory Therapy	X	X
Sterile Processor Technician	X	X
Virtual and Augmented Learning	Х	Х

B. Unique characteristics of each institution's academic mission for Community Colleges: 2-yr degree and certificated technical/vocational training, workforce development activities, adult education focus, continuing or lifelong educational programming, partnerships with intermediate school district(s), community activities; geographic service delivery area(s), articulation agreements or

partnerships with four-year institutions, etc.

- The College district consists of Berrien County and contiguous Covert Township and South Haven in neighboring Van Buren County. Located in the southwest corner of the State, Berrien County has a population of 152,375 and a workforce of 72,413. The three largest cities include Benton Harbor, Niles, and St. Joseph.
- Lake Michigan College's primary educational sites include the Benton Harbor Campus and branch campuses in Niles and South Haven. Plans are being implemented to offer unique programming in Niles and South Haven to better meet the needs of those regions. Niles and South Haven are staffed with an Associate Dean of Regional Campuses, as well as student services personnel. Each of these sites provides convenient access to higher education with a wide variety of programming options. Total Fall 2022 unduplicated headcount, including Early College students is 2,560.
- In addition, the College has extended its programming to serve Allegan County, at their request. Through the Allegan County Area Technical & Education Center, LMC delivers high quality, career-focused programming through its Early Middle College program. Allegan County signed a formal agreement with LMC in 2013 that acknowledges this on-going relationship and the benefits it provides for its rural communities. The Allegan agreement also provides for adult credit classes supported by advising and other student services provided by the South Haven Campus.
- LMC operates a robust and well-established Early College program, which accounts for approximately 28% of its total enrollment. For qualified high school students, college credit can be earned by enrolling in direct credit courses (taught by credentialed high school teachers at high school sites) or by enrolling in dual enrollment courses (taught by LMC faculty at a LMC location). LMC also has 5th year middle college programs in Berrien, Van Buren, and Allegan counties, which provide opportunities for high school students to defer their high school graduation for one year so they can earn both a high school diploma and an associate's degree or certificate at the conclusion of their 5th year of high school. On average, LMC serves over 1,000 early college students annually in partnership with over 40 K-12 districts and regional ISDs.
- Located on-site at the Benton Harbor Campus, Siena Heights University (SHU) has partnered with Lake Michigan College for over thirty years to offer degree completion programs on the Benton Harbor Campus. The LMC/SHU partnership was the first of its kind in Michigan when it started in 1982. Currently six bachelor's

degree programs and four online master's degree programs are available to LMC students and area residents. A unique 3 + 1 academic model allows students to transfer up to 90 credit hours from LMC into their baccalaureate degree with SHU, saving students significant tuition expense. With a focus on meeting the needs of the adult learner, Siena Heights University is an important and valuable partner in raising college education attainment rates in southwest Michigan.

- The College has also expanded our university partnerships through an on-campus
 University Center that has increased baccalaureate completion program options
 for students. We have new partnership agreements with Ferris State University
 and Davenport University and are actively seeking additional partnerships that
 meet the needs of our students and the communities we serve.
- LMC is an active participant in the MiTransfer Pathways project. Led by the Michigan Center for Student Success, this statewide initiative aims to build multi-institutional associate to bachelor's degree transfer pathways in 12 program areas, including in some of the largest majors in Michigan.
- A large part of LMC's service area is comprised of a rural and economically disadvantaged population. The Educational Opportunity Center (EOC) at Lake Michigan College serves a minimum of 1,097 participants each year. The EOC receives funding from the U.S. Department of Education, and serves individuals in the Michigan counties of Berrien, Cass, Van Buren, and Allegan, and the Indiana counties of La Porte and St. Joseph. The EOC provides information and assistance to adults (19 years and above) who are interested in furthering their education. Services to eligible participants include academic tutoring (in preparation for GED or college assessment testing), career assessment, assistance completing applications toward college entrance, referrals to appropriate adult education centers, and/or community assistance agencies. The goal of the EOC program is to increase the number of adult participants who enroll in postsecondary education institutions.
- The Hanson Technology Center, located on the Benton Harbor campus, opened in August 2016 and houses our Advanced Manufacturing programs. The building is designed with new, sustainable energy-efficient systems and is used as a learning tool for students, demonstrating the use of natural building materials and sustainable methods. The building has five classrooms attached to four labs (a Fab Lab, welding lab, and two advanced manufacturing labs), collaboration spaces, and a simulation classroom. The simulation classroom is a state-of-the-art classroom complete with 6'9" x 16' touchscreen and seating for up to 46.

- The Fab Lab—which is available to students, employees, and the community—is
 equipped with laser cutters, vinyl cutters, 3D printers, sewing machines, a
 woodshop with a CNC router, and various pieces of portable equipment to handle
 a variety of projects. A design center is available to encourage creativity,
 entrepreneurialism, and collaboration.
- The Start-to-Finish program, which launched in 2012, provides intensive support services for Benton Harbor High School students, including advising, mentoring, supplemental instruction, life barrier problem-solving, and study skill development.
- The Student Support Services program, made possible through a five-year U.S.
 Department of Education grant, was designed to help 200 students overcome
 class, social, academic, and cultural barriers to higher education. The program
 serves first generation, low income students and students with a disability and
 helps ensure that they earn a certificate or associate degree; or earn a certificate
 or associate degree and transfer to a four-year institution to complete a
 baccalaureate degree or higher.
- The College partners with Benton Harbor Area Schools to serve 78 high school students in the Upward Bound Program. The Upward Bound Program focuses on preparing high school students to graduate from high school, enroll in, and complete a postsecondary credential.
- In 2015, Lake Michigan College joined the Guided Pathways Institute offered by the Michigan Center for Student Success. The Guided Pathways initiative helps community colleges create clearer pathways for students from the beginning of their educational journey to degree completion and/or transfer.
- In 2017, the College was awarded a Title III Grant to continue and support our Guided Pathways work. This five-year, \$3 million grant is a pivotal opportunity for the College to focus efforts on improving student success. The primary goal of the grant is to increase the fall-to-fall, 5-year average retention rate from 49% to 63% by fall of 2022.
- The Welch Center opened August 2019 to support our Wine and Viticulture Technology Program, which is the only teaching winery in the Midwest.

C. Other planned initiatives which may impact facilities usage

Future programming at our Niles and South Haven campuses will require significant facility alterations. At the Niles campus, several classrooms received new teaching technology in 2021, but additional upgrades to teaching technology and the infrastructure to support that technology are needed in the remainder of learning spaces. In addition, classrooms are planned to be renovated to support new Career Technical Education (CTE) programs, such as Advanced Manufacturing, several Allied Health programs, and a non-credit Truck Driving program. Minor renovations at the Niles campus were completed in 2022 to provide a new multi-use Health Sciences Lab for programs such as Phlebotomy and Medical Assistant. This project is the first phase of programmatic space remodeling; the second phase culminates in the current State Capital Outlay Grant request.

Similarly, instructional technology at the South Haven campus was upgraded in a few spaces in 2021, but additional upgrades are planned for new program areas. Renovation of existing space at South Haven Campus will provide a Physical Therapist Assistant (PTA) program. This project will develop a modern classroom and active lab for delivery of the PTA program. Other planned initiatives will include updating the science lab and renovating classrooms to support new programs in Brewing, eSports, and Drone Piloting. Deferred maintenance for both campuses will be addressed as a part of those future capital projects.

As of Fall 2021, the Dental Assisting program runs exclusively from the Niles campus. The space vacated by the Dental Assisting program at the Benton Harbor campus will be renovated to serve the needs of a new Health Sciences program, Respiratory Care.

D. Demonstration of economic development impact of current/future programs

The economic impact of current and projected academic programming at Lake Michigan College is substantial and critical to the growth of southwest Michigan's regional economy.

Current and projected programming described in this document is designed to create a workforce prepared to meet the needs of the existing employers as well as to attract new jobs, businesses, and industries to our area. Studies have repeatedly revealed the availability of an educated workforce as a primary factor in the decisions of employers to create jobs or to relocate and/or expand their business or service organizations. Highly qualified LMC graduates in advanced manufacturing, computer information systems, wine and viticulture, hospitality and culinary, health sciences,

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III. Staffing and Enrollment

A. Description of current full- and part-time student enrollment levels by academic program and define how the programs are accessed by the student (i.e., main or satellite campus instruction, collaboration efforts with other institutions, Internet or distance learning, etc.)

Student Body Composition - Fall 2022 Census Unduplicated Headcount

Below is a comprehensive list of programs at the College and their enrollment status for the Fall 2022 semester by major type. Based those numbers, there were 2,560 total students with 1,836 part-time and 724 full-time. The College offers courses using a variety of delivery modalities to meet the unique needs of our students. All courses, regardless of how they are delivered, may require course assignments to be completed online. The modalities include Face-to-Face, Flexible Learning Environment (FLE), Hybrid, Online, and Remote. Definitions of each modality are provided below.

Major	Full- Time	Part- Time	Summary	Campus
Associate Degrees				
Assoc in General Studies	66	110	176	BH, N, SH
Business Administration	38	57	95	BH, N, SH
Associate in Arts				
Art	4	11	15	ВН
Communications	6	3	9	BH, N, SH
English	7	13	20	BH, N, SH
World Language	2	3	5	BH, N, SH
Graphic Design	12	7	19	BH
History	7	4	11	BH, N, SH
Music	10	7	17	ВН
Philosophy	0	1	1	BH, N, SH
Political Science	5	1	6	BH, N, SH
Psychology	28	32	60	BH, N, SH
Sociology/Pre-Social Work	13	19	32	BH, N, SH
Theatre	5	6	11	BH
Undecided (Arts - Transfer)	94	156	250	BH, N, SH
Associate in Applied Science				
Accounting	14	33	47	BH, N, SH
Applied Science - General	2	15	17	BH, N, SH
Applications Development	8	19	27	BH, N, SH
Automation Engineering	2	6	8	ВН
Business	64	96	160	BH, AT, N, SH

Major	Full- Time	Part- Time	Summary	Campus
Casino Management	0	3	3	вн, о
Child Development	3	17	20	BH, N, SH
Criminal Justice	21	29	50	ВН
Culinary Management	14	16	30	ВН
Dental Assisting	0	4	4	N
Diagnostic Medical Sonography	18	14	32	ВН
Electrical Distribution	0	6	6	ВН
Engineering Technology	4	13	17	BH
General Technology	2	4	6	BH, N, SH
Health	0	1	1	BH, N, SH
Hospitality Management	2	8	10	BH, N, SH
Machine Tool Technology	1	21	22	ВН
Mechatronics Technology	4	8	12	ВН
Medical Assisting	8	15	23	BH, N
Networking	9	19	28	BH, N, SH
Nursing-RN	2	109	111	ВН
Pharmacy Technician	0	4	4	BH, N, SH
Pre-Diagnostic Medical Sonography	18	48	66	ВН
Pre-Nursing (Registered)	31	139	170	ВН
Pre-Radiologic Technology	16	30	46	ВН
Radiological Technology	25	15	40	ВН
Skilled Trades Technology	2	32	34	ВН
Teacher Education	19	23	42	BH, N, SH
Welding Production Technology	6	14	20	ВН
Wine & Viticulture Technology	7	22	29	BH, AT
Associate in Science				
Biology	17	7	24	BH, N, SH
Chemistry	2	1	3	BH, N, SH
Health Science	20	26	46	BH, N, SH
Mathematics	0	3	3	BH, N, SH
Exercise Science & Wellness	8	3	11	BH, N, SH
Physical Science	3	0	3	BH, N, SH
Pre-Engineering	14	16	30	ВН
Undecided (Science - Transfer)	40	44	84	BH, N, SH
Advanced Certificate				
Casino Management	0	2	2	BH, N, SH
Child Development	1	0	1	BH, N, SH
Cisco - Cert	0	1	1	BH, N, SH
Dental Assisting - Cert	0	2	2	N
Hospitality Management - Cert	0	1	1	BH, N, SH
Machine Tool Technology - Cert	0	8	8	ВН
Medical Assisting - Cert	0	2	2	BH, N
Pharmacy Technician - Cert	1	2	3	BH, N, SH

Major	Full- Time	Part- Time	Summary	Campus
Skilled Trades Technology-Cert	0	1	1	ВН
Certificate of Achievement				BH, N, SH
Cybersecurity	1	3	4	BH, N, SH
Geosp Info Sci & Tech CAT CERT	0	5	5	BH, N, SH
Information Tech - CAT CERT	3	6	9	ВН
Machine Tool - CAT CERT	0	18	18	ВН
Manu Production - CAT CERT	0	1	1	ВН
Phlebotomy Tech- CAT CERT	4	17	21	BH, N, SH
Risk Management & Insurance	0	1	1	BH, N, SH
Small Busi Mgmt- CAT CERT	0	1	1	BH, N, SH
Sterile Processing Tech Supervisory Skills	1	1	2	ВН
Welding Prod Tech- CAT CERT	0	5	5	ВН
Personal Interest	10	446	456	BH, N, SH
Summary	724	1,836	2,560	

Modality Definitions

Face-to-Face: All class sessions are scheduled and in person.

Flexible Learning Environment (FLE): Choose to attend each scheduled class session inperson or remotely via Zoom or watch recorded class sessions online.

Hybrid: May include a combination of face-to-face, online or remote.

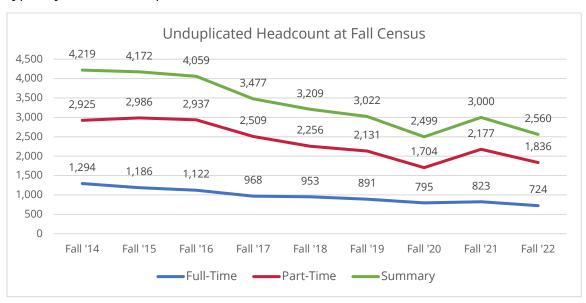
Online: Complete the course entirely online with no scheduled class sessions required. Some online courses are offered through a partnership with Rio Salado College and the Viticulture Enology Science and Technology Alliance (VESTA).

Remote: Attend scheduled class sessions remotely via Zoom.

B. Evaluation of enrollment patterns over the last five years.

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 and particularly down in Fall 2020 when the unduplicated head count was 2,611 at the end of the semester. Due to our Free Tuition initiative in Fall 2021, we saw a 27% increase to an unduplicated head count of 3,326 at the end of the semester. Additional in-person offerings, new programs and the Futures for Frontliners program supported the higher enrollments. To date, there has been about 13% in decline for enrollment from prior year. The numbers are more in line with

enrollment numbers prior to the Free Tuition initiative. The table below shows the enrollment patterns based on unduplicated headcount at the fall census, which is typically taken mid-September.



	Fall '14	Fall '15	Fall '16	Fall '17	Fall '18	Fall '19	Fall '20	Fall '21	Fall '22
Full-Time	1,294	1,186	1,122	968	953	891	795	823	724
Part-Time	2,925	2,986	2,937	2,509	2,256	2,131	1,704	2,177	1,836
Summary	4,219	4,172	4,059	3,477	3,209	3,022	2,499	3,000	2,560

A number of factors have been identified which have positively impacted overall enrollment. These factors have been identified as: 1) increase in high school penetration rates, 2) new and revised academic programming and instructional delivery, 3) partnerships with K-12 schools for the College's Early and Middle College programs, and 4) increased student life.

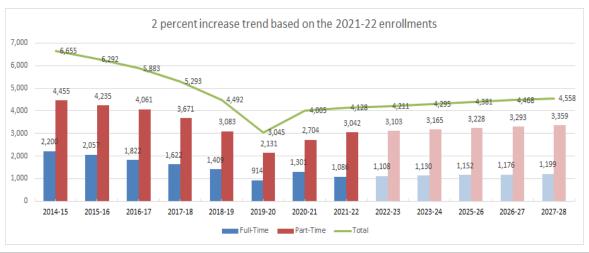
Specifically:

- New programs have been developed in Business (Bookkeeping), CIS, Culinary Management, Manufacturing, Health Sciences, and Wine and Viticulture. Current programs such as Welding have been expanded to full certificate and degree programs.
- New distance education options, including flexible and remote instructional delivery.
- College recruiters visit all area high school seniors each year at their home schools and provide visitation tours to Lake Michigan College.

- The College has strong partnerships with area business and industry, which depend on the College for a skilled workforce.
- Partnerships in Berrien and Allegan Counties offer robust Early Middle College programs.
- The College provides dual enrollment, direct credit, and academies in cooperation with area high schools.
- The College provides outreach services to parents and prospective students including informational events held at all campuses on the following topics:
 - Financial Aid Workshops
 - Dual Enrollment Orientation Sessions for Students and Parents
 - Onsite registration and advising at some area high schools each spring
 - Participation in K-12 administrative meetings throughout the year
 - Transfer Day/College Night
 - Six 8th grade career days to introduce the College to students in this age group

C. Projection of enrollment patterns over the next five years (including distance learning initiatives)

Even though the region's overall populations are projected to decline over the next several years and low unemployment rates will continue to negatively impact community college enrollment, Lake Michigan College's enrollment projections for the next five years will be relatively flat. Below a 2% growth trend graph is shown for the future unduplicated fiscal year headcount through 2028. The College continues with the work of its Strategic Enrollment Management Team (SEMT) to focus on enrollment. The College will continue to focus on four areas for enrollment: (1) greater penetration of the current high school market, (2) unique academic programs not offered by area competitors including: expanding our emerging technologies programs, continued growth of the new wine and viticulture technology program, and the new Culinary program, (3) increasing flexible and distance learning course and program options, and (4) increasing persistence and retention rates. The College is committed to retaining the students who already attend a given semester. Early College Program numbers will continue to be strong and represents approximately 30% of the overall College enrollment.



	2014-	2015-	2016-	2017-	2018-	2019-	2020-	2021-	2022-	2023-	2025-	2026-	2027-
	15	16	17	18	19	20	21	22	23	24	26	27	28
Full- Time	2,200	2,057	1,822	1,622	1,409	914	1,301	1,086	1,108	1,130	1,152	1,176	1,199
Part- Time	4,455	4,235	4,061	3,671	3,083	2,131	2,704	3,042	3,103	3,165	3,228	3,293	3,359
Total	6,655	6,292	5,883	5,293	4,492	3,045	4,005	4,128	4,211	4,295	4,381	4,468	4,558

D. Instructional staff/student and administrative staff/student ratios for major academic programs or colleges.

Unduplicated headcount for Fall 2022 is 2,560. There are 397 full and part-time employees at the College including 51 full-time and 149 part-time faculty, 30 administrators, 74 technical/professional staff, 14 full-time classified staff, 21 (12 FT / 7 PT) facilities personnel, 23 part-time staff (non-faculty), and 35 student workers.

The current student to faculty ratio as reported to both IPEDS and our institutional accrediting body (the Higher Learning Commission) is 14 to 1.

The ratio of full-time students to full-time administrative staff is 11 to 1.

E. Projection of future staffing needs based on 5-year enrollment estimates and future programming changes.

Currently, additional staffing based on 5-year enrollment estimates and future programming changes is limited. To support growing programs, (3) additional full-time Faculty FTEs are also anticipated. Due to the physical changes to the College, including new buildings and associated grounds care, (3) additional Facilities Staff FTEs are anticipated.

F. Current average class size and projected average class size based on institution's mission and planned programming changes.

The College strives to maintain small class sizes to support our college-wide goals of academic excellence and student success. Planned programming changes are not expected to significantly impact average class size. Currently for Fall of 2022 the average class size is 13.

IV. Facility Assessment

Summary: In 2021 Lake Michigan College engaged Progressive AE for professional services to provide a new comprehensive facility assessment for all three campuses, including eight buildings. The assessment work has assisted the College to uncover deferred needs for long term planning as the aging infrastructure and systems approach end-of-useful-life. In addition to the written report included in the Appendix, the assessment included a robust web-based database of all deficiency observations and equipment and system renewals. Since the issuance in 2021, the College has addressed over \$150,000 of estimated value of assessment work through routine capital projects and general operational maintenance. The College continues to use the database to plan and budget work, organize 10-year capital outlay schedules, close-out corrections, and add new observations and renewal projects as needed.

The updated summary shown in Table 1 indicates that Lake Michigan College facilities overall continue to be in good condition. Based on 2023 requirements the facility condition index (FCI) is .04, where anything below .05 is considered good condition. The facilities are well maintained and the College's investment in new facilities and major upgrades is reflected in the relatively low FCI values. However, deferred maintenance at Niles, the Mendel Center, and the Benton Harbor pavement and athletic field infrastructure is becoming more critical.

Table 1: Facility Condition Index Summary

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	Year	Size	Capital	2023 Year	Facility								
Facility Name		(square	Replacement	Requirement	Condition								
	Constructed	feet)	Value	Cost	Index								
Beckwith Hall	2014	66,912	\$13,734,000	\$244,650	0.02								
Niles*	1998	34,283	\$9,584,000	\$3,667,000	0.39								
Hanson Tech. Ctr.	2016	42,275	\$14,295,000	\$72,700	0.01								
Mendel Center	1978	138,688	\$48,272,001	\$3,210,110	0.07								
Main Building	1968	300,689	\$95,603,000	\$872,650	0.01								
South Haven*	2003	41,222	\$13,393,000	\$433,000	0.03								
Todd Center	2002	43,400	\$13,808,000	\$92,448	0.01								
Welch Center	2019	13,981	\$6,851,000	\$6,500	0.00								
Total/Average		681,450	\$215,540,001	\$8,625,058	0.04								

^{*2023} requirement costs do include site costs as they relate to the campus. The Benton Harbor Campus site is assessed separately due to the magnitude of the infrastructure and the interrelationship with buildings and athletic fields.

Two buildings are less than six years old, Hanson Technology Center and Welch Center. The oldest facility, the Main Building (Napier Academic) was recently renovated in 2020

and therefore has seen a drastic decrease in the FCI. The second oldest facility, the Mendel Center, had the heating and cooling plant replaced in a project completed in August 2020, which has lowered the FCI from previous years. Beckwith Hall, residential building, is now eight years old and renewal investment is needed for finishes such as carpet and painting. South Haven campus facility and Mendel Center have major HVAC equipment coming to the end of useful life. Niles campus facility at an FCI of 0.38 would be considered in poor to critical condition and is the focus of the College's first priority project to address deferred maintenance and academic program needs.

Table 2: Requirement Priority by Facility and Site

Facility Name	Urgent (Past Due)	Critical (6mons - 1yr)	Moderate (1 - 5yrs)	Low (5 - 10yrs)	Total
Beckwith Hall	\$7,700	\$236,950	\$411,500	\$13,500	\$669,650
Niles	\$66,500	\$3,626,500	\$568,550	\$23,700	\$4,285,250
Hanson Tech. Ctr.	\$2,500	\$70,200	\$82,000	\$10,500	\$165,200
Mendel Center	\$84,700	\$3,125,410	\$2,389,900	\$91,200	\$5,691,210
Main Building	\$95,250	\$777,400	\$2,660,250	\$1,843,000	\$5,375,900
South Haven	\$29,850	\$403,150	\$1,692,371	\$360,550	\$2,485,921
Todd Center	\$27,248	\$65,200	\$940,748	\$74,500	\$1,107,696
Welch Center	\$0	\$6,500	\$1,750	\$0	\$17,250
Benton Harbor	\$86,500	\$585,700	\$1,633,000	\$2,362,200	\$4,667,400
Campus Site					
Totals	\$400,248	\$8,897,010	\$10,380,069	\$4,779,150	\$24,456,477

The relatively low number of requirements deemed urgent reflects our well-maintained facilities; however, this year many of the moderate priorities shift into a more critical timeline. Moderate priorities also continue to be driven by equipment that is beyond its useful or expected lifetime.

Please see the appendix for additional information: **2021 Facility Assessment Report**.

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

	Main B	uilding	Mendel	Center ²⁾	Ni	les		n Tech nter	South	Haven	Beckw	ith Hall	Todd (Center	Welch	Center
Building Type	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾	Sq. Ft	% ¹⁾
Administrative																
Auditorium	4,209	1.40	48,030	34.63												
Biology																
Chemistry																
Classroom	42,045	13.98	8,916	6.43	10,767	31.41	4,237	10.02	14,498	35.17			15,776	36.35	1,286	9.20
Dining Hall	1,748	0.58														
Dormitory											55,019	82.23				
Garage	7,119	2.37														
Gymnasium	15,401	5.12														
Laboratory	22,159	7.37			5,706	16.64	19,960	47.21	1,784	4.33					4,293	30.71
Library	22,896	7.61														
Office	55,804	18.56	5,535	3.99	2,385	6.96	2,228	5.27	6,356	15.42			7,617	17.55	658	4.71
Science																
Service	3,406	1.13			890	2.6			2,451	5.95						
Warehouse/Storage	11,369	3.78	5,658	4.08	443	1.29	713	1.69	139	0.34			2,926	6.74	260	1.86

Percentage is based on gross square footage of each facility.
 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.

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 some facilities operating 8:00 a.m. – 12:00 p.m. on Saturday. The Niles and South Haven Campuses are as a minimum 8:00 a.m. – 9:30 p.m., Monday through Thursday; 8:00 a.m. – 5:00 p.m., Friday. During the COVID-19 pandemic, these hours were reduced to core business hours 8:00 a.m. – 5:00 p.m., Monday through Friday; however, the College has generally shifted back to a pre-pandemic operating schedule. Weekend activities have increased, but still only a couple of classes are running on Saturdays just at the Benton Harbor Campus.

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, an internal review of utilization has been completed for the Benton Harbor, Niles and South Haven Campuses. It is important to understand that since the pandemic, alternative online instruction delivery is still about 31% of the course offerings.

The College's facilities house a variety of instructional spaces ranging from traditional general-purpose classrooms to specialty labs. As specialty labs are dedicated for specific purposes and used based on times required by the curriculum (example: Health Science Simulation Lab), they are not included in the utilization calculations, since it would not adequately reflect the demand for general-purpose classrooms within each facility.

Based on the number of instruction spaces and a minimum of 40 hours each week of availability the overall average utilization of only general-purpose classrooms by instruction is approximately 24%. Continued evaluation is in progress since some spaces are available more than 40 hours each week and other activities for external community clients as well as College business also get scheduled in general-purpose classrooms.

The College will be continuing to refine the space utilization data and methodologies. New strategies for space use are warranted in the post-pandemic reality of online learning and remote working. Community use and continued partnerships offer opportunity for increased utilization of the College's facilities, as well as modifying space to better serve programmatic needs.

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.

Areas with space shortages, which have already been recently remedied by the Benton Harbor Campus, Main Building Renovation and Upgrade project, include Health Sciences, Transitional Studies, Tutoring and Testing Services, Culinary and Hospitality programs, assembly, and collaboration space. The Benton Harbor Campus also houses the Manufacturing and Industrial Arts programs at the Hanson Technology Center, the Business and Information programs at Todd Center, Wine and Viticulture programs at Welch Center, and the Visual and Performing Arts programs at Mendel Center.

With the program and curriculum growth at our branch campuses, we anticipate additional and changed space needs at those campuses in the future, particularly at the Niles Campus. Enhancement of our Health Sciences offerings at Niles includes the recent remodeling of space for Medical Assisting and Phlebotomy, the first phase of changes required for the growing Health Sciences programs at the Niles campus. In the future, space for Certified Nurse Aide (CNA) programming is needed as well as updates to the dental lab. There are also plans to renovate space to allow for programs such as advanced manufacturing. Renovation for both CNA and advanced manufacturing are currently included in the capital outlay request for fiscal year 2024. Without renovation to existing space, none of these programs can grow in the current facility layout.

The South Haven Campus anticipates growth in the following programs: Health Sciences, Brewing, Biotechnology/Food Safety, Cyber Security, Drone Piloting, Geographic Information Systems, Truck Driving, Marine Technician, none of which are feasible based on the current layout and use of College facilities. Without renovation to existing space, none of these programs can grow in the current facility layout.

Please see the appendix for additional information: **Notable Space Updates and Future Space Needs**.

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

The building replacement values, and machinery and equipment values noted below are based on a July 2022 summation of replacement value by MASB-SEG Property/Casualty Pool. Excluded from the replacement values below are site related parking and pavement structures, campus utilities, underground tanks, and athletic field structures.

Facility	Building	Furnishings & Equipment	Total
Main Building	\$95,603,000	\$10,402,000	\$106,005,000
Mendel Center	\$48,272,001	\$2,743,000	\$51,015,001
Niles	\$9,584,000	\$1,636,000	\$11,220,000
Hanson Tech Center	\$14,295,000	\$1,888,000	\$16,183,000
South Haven	\$13,393,000	\$1,659,000	\$15,052,000
Beckwith Hall	\$13,734,000	\$913,000	\$14,647,000
Todd Center	\$13,808,000	\$915,001	\$14,723,001
Welch Center	\$6,851,000	\$428,000	\$7,279,000
Total	\$215,134,001	\$20,584,001	\$236,124,002

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 completed in 2020, 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. Areas that were not remodeled are an opportunity for continued lighting and controls upgrades. Some existing panels are nearing full capacity and will require further study for any future construction.

The Mendel Center was constructed over a period of years from approximately 1980 through 1990. 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, but most of the air handling units are at the end of useful life. LED upgrades were made for a majority of the building except for theatrical lighting, Grand Upton Hall work lights, and miscellaneous interior and exterior spaces. An envelope study was conducted for the Mendel Center in May 2019 which identified masonry repairs, sealant replacement and sloped window replacement. These envelope repairs and the replacement of mechanical systems which are at the end of useful life are in critical need of investment.

The Niles Campus was constructed in 1998 in the Bertrand Crossing Business Park. In 2011, the Niles boiler was replaced with two gas-fired package units to improve energy efficiency and reliability; one of the two package units required early replacement in 2020. The chiller is also at end-of-life and is identified for replacement. Lighting throughout the building is fluorescent with no or limited controls. 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 and re-roofing the building. Lighting is original fluorescent fixtures and needs to be upgraded. These building systems are an essential part of the proposed capital outlay project as the College's highest priority.

The South Haven Campus was constructed in 2003. The building mechanical systems are running well, but heating and cooling equipment is approaching the end of life. Most of the interior lighting in the building is fluorescent with many fixtures not working or having a low performance. Exterior lighting for the building is fluorescent or high-pressure sodium.

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. LED lamps have been retrofitted for most fixtures in common areas; additional LED lamp retrofitting is needed in student suites. The self-contained packaged terminal A/C units used for the resident suites are currently in rotation for replacement, which will continue on asneeded bases for the next five to seven years until all are updated.

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. The building mechanical system is working well, however humidity continues to be a challenge that impacts the lab machinery. The main mechanical issue is the multi-stack chiller, whose compressors require early replacement.

Todd Center was purchased by the College in 2018 but was originally built in 2002. The

building has aged well, but mechanical 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 front-end was upgraded in 2021, but equipment controls are at the end of useful life and are included in a project planned for completion in 2022. Lighting is original fluorescent fixtures and needs to be upgraded.

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

Please see the appendix for additional information: **2021 Facility Assessment Report**.

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. Additionally, there are two small vehicular bridges and a large pedestrian bridge, all located at the Benton Harbor Campus.

The College's Main Building, Mendel Center, Hanson Technology Center, Todd Center, and Beckwith Hall share common infrastructure including over 800,000 square feet of asphalt paving. Some parking and roadways have been improved over the last 3 years but much of the pavement is still unimproved, at end of useful life, and requires planned replacement. With the winter freeze/thaw cycles recently, a substantial portion of the access roadway on the west side of the campus was significantly damaged. It was determined that the clay soil composition was at the root of the damage. New roadway was completely reconstructed on an emergency basis in late spring of 2022. Other areas of heavy clay and silt composition, including the College's parking lots, are vulnerable to similar deterioration.

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, many of 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 same year the Mendel Center north entrance was replaced. In late summer 2022 new concrete walks replaced deteriorated areas around the south side of the Mendel Center.

In Summer 2020 the entire northwest parking (Lot 1c) at the Main building was reconstructed adding much needed accessible parking and safe sidewalks to access

building entries. The northeast parking (Lot 2a) was also upgraded at the same time to support shipping/receiving and operations.

The Main building also has a large green roof plaza. Some improvements to 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 and a new guardrail has been installed along both sides.

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 were designated for routine maintenance work; but the work was not successfully bid and awarded. It will be repackaged and bid for spring of 2023 work.

Work at the Beckwith Hall parking entries improved drainage and provided safer pedestrian access to the adjacent parking area in Summer 2019 and in Summer 2020 new accessible ramp was added at the main entry walk.

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. However, the west campus area, particularly the softball and baseball fields are plagued with water issues given clay soils and low wetlands topography. The entire west campus area is the focus of a current study which includes the evaluation of turf to improve and extend the playing seasons.

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.

Additionally, there are numerous erosion issues, particularly around the pond. A pavement study for the Benton Harbor Campus in late 2017 identified an overall pavement maintenance and repair masterplan for the next ten years.

Niles Campus and South Haven Campus facilities are less than twenty-five years old and the utility infrastructure is in good condition. However, both campuses are experiencing asphalt pavement deterioration and erosion issues. 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 focused on crack repair and sealant with limited mill/repair was conducted in Summer 2021. Future mill/repair work is planned.

Please see the appendix for additional information: **2021 Facility Assessment Report**.

H. Adequacy of existing utilities and infrastructures system to current and 5-year projected 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.

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. As academic programs evolve in the next five years, there is special attention needed on the overall electrical capacity for the Todd Center building.

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 2020, an energy upgrade project replaced the heating and cooling plant for the Mendel Center. However, building-wide end of life mechanical systems components at the Mendel Center will need to be addressed to support the continued growth in Visual and Performing Arts program. These envelope repairs are also in critical need of investment.

The changes to 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 several years, we expect increased campus activity to drive facility and infrastructure expansion improvements of our College as we emerge from the COVID-19 pandemic. The College developed a wayfinding master plan to improve movement between facilities for students, guests, and employees. New exterior signage has completed the first phase which included our main entrance marquee upgrade and wayfinding signage at each entry point; a second phase is under evaluation. The new interior signage standard laid the groundwork for the resigning of all Main Building spaces with new ADA compliant signage as a part of the Main Building (Napier Academic Building) Renovation and

Upgrade project. The interior wayfinding sign system was upgraded in the Main building in 2022. Future interior wayfinding improvements are being considered for Todd Center and Mendel Center.

The western portion of the Benton Harbor campus needs to be upgraded in the next five years to provide modern, sustainable and functional sports facilities that allow for the successful growth of athletic programs at the College. There is a vision to better connect athletics and recreation to student life, which will improve the overall student experience on campus. To meet growing housing needs, an additional residence hall is envisioned to create diverse and inclusive learning communities.

South Haven campus has some renewal projects required, but the core infrastructure continues to support the programmatic needs for the next five years. The Niles Campus also has renewal projects required but are more significant. The current envelope issues regularly disrupt education, and the building spaces need to be upgraded to support the projected areas of growth. Together issues cause the Niles Campus to be the primary focus of current and proposed projects in the next five years.

Please see the appendix for additional information: 2021 Facility Assessment Report, Notable Space Updates and Future Space Needs, Campus 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 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, VFA, and Progressive Architecture & Engineering Services as part of our facilities condition assessment. The results of these planning efforts have been built into our facilities improvements. Additionally, our Commissioning Agents at Catalyst Partners and Peter Basso & Associates have helped lead our recent major renovation projects and are now assisting with verification efforts.

Over the past five years, Lake Michigan College has invested over \$43 million in physical plant upgrades, enhancements, and expansions at the Benton Harbor campus. 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. We are continuing to expand our building automation system controls to cover more of our facilities. Working with our utility providers, we have participated in both electrical and natural gas utility rebate programs on several projects. These rebates have been allocated to our general fund to support future capital renovations.

Currently, we are beginning Phase 2 of the Todd Center controls upgrade to our standard building automation system platform. This platform grants the College visibility and control over current operations of boilers, chillers, cooling towers, air handling units, air terminal units, and cabinet heaters. The platform also allows the College to schedule areas to be occupied or unoccupied at certain times to provide better energy use management. Unoccupied areas are scheduled for higher cooling and lower heating temperature set points for lower energy use. We would like to have all buildings have similar levels of control and scheduling to better manage energy use.

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.

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

Address	City	State	Facility	Acreage
2755 E. Napier Avenue	Benton Harbor	MI	Benton Harbor Campus	263.00 acres
1905 Foundation Drive	Niles	MI	Niles at Bertrand Crossing	12.99 acres
125 Veterans Blvd.	South Haven	MI	South Haven Campus	7.73 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	MI	none	2.06 acres
1486 Yore Avenue	Benton Harbor	MI	none	2.06 acres
1508 Yore Avenue	Benton Harbor	MI	none	1.98 acres
2840 Territorial	Benton Harbor	MI	none	23.80 acres
321 Vernon Road	Benton Harbor	MI	None	0.25 acres

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

At the Benton Harbor Campus, 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.

At the Niles Campus, approximately 5 acres are maintained, and as noted above, sufficient property exists to support future development. 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.

In 2020, LMC divided a 14.6 acre parcel at the South Haven Campus to transfer 6.87 acres back to the City of South Haven. The South Haven Campus still includes land for at least one additional facility.

In summary, we have planned for and acquired land for our future development needs.

Please see the appendix for additional information: **Campus Master Plan.**

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?

Facility	Obligated in:	Expires in:
Main Building	2020	2060
South Haven Campus	2003	2043
Todd Center Building*	2002	2037

^{*}LMC acquired the building in June 2018

V. Implementation Plan

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

A. Prioritized 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 Niles Campus facility, built in 1998. The proposed project will expand high-skill, high-wage, high-demand program offerings in advanced manufacturing and health sciences education, increase building occupancy utilization, enhance operations and energy efficiency, and address safety deficiencies.

The scope of this project is to architecturally renovate approximately 20% of the existing facility (about 6,850 square feet of the existing 34,283 square foot building), update the mechanical systems and controls, upgrade fire alarm and lighting throughout the entire building. Most of the work focuses on spaces for learning, academic support, collaboration, and improved access to services, with the level of renovation varying depending on location, from infrastructure and finishes only, up to full interior reconfiguration. The College intends to make deferred site maintenance part of the project as well. The project total budget is \$10,600,000.

The 2021 College-wide Facilities Assessment laid the groundwork for future capital replacement and renewal costs looking forward 10 years. Together with new academic needs and utilization studies, the College is developing an update to the comprehensive 10-year capital improvement plan with funding support from both the existing millage and College reserves.

Please see the appendix for additional information: FY 2024 Capital Project Request, Campus Master Plan and 2021 Facility Assessment.

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 \$24.4M deferred maintenance. Of this backlog, we have identified \$9.3M of currently critical deferred

maintenance items that have safety, regulatory or collateral damage implications within one year. With the completion of the Main Building (Napier Academic) Renovation & Upgrade and the Mendel Center Energy Upgrades, our overall deferred maintenance as a percentage of capital replacement value (Facility Condition Index) has dropped from 0.13 in 2018 to 0.04, which is good. Overall our facilities are in good condition and have been well maintained; however the Mendel Center and Niles campus have critical systems to address.

Our largest and oldest assets have the largest backlog of deferred maintenance; they include the Benton Harbor Campus grounds, Mendel Center and Main Building.

An exterior envelope study was conducted at the Mendel Center in 2019. Deferred maintenance was identified for masonry and window systems. Mendel Center also has end-of-life mechanical equipment in critical need of replacement. To support programmatic needs, tired spaces need to be refreshed and have reliable heating, cooling and ventilation. Original finishes in the academic spaces of the building are overdue for replacement.

An exterior envelope study was also conducted at the Niles Campus building in 2020. There, several short-term maintenance updates were identified, but also deficiencies in the original envelope design and construction which require significantly more funding to fully address. The envelope and roof deficiencies regularly cause disruption to instruction due to water intrusion. The short-term solutions, thus far, have only temporarily addressed the issues.

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 recent projects to replace guard railing in the Main building green roof plaza, upgrade site and emergency exit lighting, install new security cameras, and repair to sidewalks and pavement.

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>	Project Status
South Haven Campus	Complete and operational
Todd Center (Transferred ownership from WMU)	Complete and operational
Main Building (Napier Academic) Renovation & Upgrade	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.

Several recent projects had targeted energy savings. Original estimates indicated that the College will save \$320,000 annually in utility costs for the next 20 years by replacing the existing HVAC system with an energy efficient, sustainable system at our Main Building on the Benton Harbor Campus. Evaluation of this operational savings was planned to begin September 2020, but with the COVID-19 pandemic and changes of building use the operational energy review began in 2021 and is still in progress.

The College completed an Energy Upgrade and Modernization project, which was projected to reduce energy and provide operational efficiencies in the Mendel Center of approximately \$92,000, and operational savings of \$17,000 respectively, for the next 20 years. Evaluation of this operational savings was also planned to begin September 2020, but with the COVID-19 pandemic and changes of building use the operational energy review began in 2021 and is still in progress.

In addition, other projects, particularly exterior envelope repair at our Main Building, while not resulting in an annual cost savings, do represent an eventual cost savings in reduced collateral damage to adjacent building infrastructure. Future building envelope upgrades are planned for the Niles Campus building and the Mendel Center.

The College will continue smaller energy projects, including LED lighting upgrades and installation of higher efficiency equipment. Partnering with local utilities for rebate opportunities continues to be a strategy that we have recently used for the Main building gym lighting upgrades in 2020 and the Main building B-Wing lighting upgrade in 2022.

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

The College has recently upgraded some teaching technology in classrooms at all three campuses to support flexible and distance learning; more are slated to be updated in the coming year. However, spaces to accommodate both in-person and remote instruction simultaneously are a challenge and will require new hybrid-ized rooms.

While distance learning has become increasingly important, some programs still require hands-on learning for effective instruction.

Programs requiring hands-on instruction include:

- Advanced Manufacturing: Automation Engineering, Electrical Distribution, Engineering Technology, Machine Tool Technology, Mechatronics Technology, and Skilled Trades Technology
- Culinary Management
- Criminal Justice
- Health Sciences: Certified Nurse Aide (CNA), Dental Assisting, Diagnostic Medical Sonography, EKG Technician, Emergency Medical Technician (EMT), Medical Assisting, Nursing, Pharmacy Technician Phlebotomy Technician, Physical Therapy Assistant (under development), and Radiologic Technology
- Natural Sciences
- Networking
- Visual and Performing Arts
- Welding
- Wine and Viticulture Technology

F. Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2024 through fiscal year 2028.

Project Description	Estimated Cost	Implementation Year
Niles Campus Renovation & Upgrade (Capital Outlay Request including exterior envelop and building infrastructure upgrades and replacement)	\$10,600,000 (LMC portion 52%)	FY23-25*
Mendel Center - Exterior Upgrades (including roof and masonry repairs, and sealant and sloped window replacement)	\$2,000,000	FY23-24
Mendel Center – Renovation (including HVAC replacement and interior finishes refresh over multiple phases)	\$3,000,000	FY23-25
Reconstruct Benton Harbor Parking Lot(s) (including design for lot reconfiguration and full reconstruction in some locations)	\$4,500,000	FY23-24

^{*}Project submitted for Capital Outlay, pending approval. Project timeline is dependent on funding.

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 \$300,000 for non-routine maintenance projects, equipment and required renovations.

Appendix A - Registrar's Official Program Major Listing

Academic Year 2022-23 10-01-22

Associate Degrees

- Associate in Business Administration
- 2. Associate in General Studies

Associate in Arts

- 3. Art
- 4. Communication
- 5. English
- 6. World Language
- 7. Graphic Design
- 8. History
- 9. Music
- 10. Philosophy
- 11. Political Science
- 12. Psychology
- 13. Sociology
- 14. Teacher Education
- 15. Theatre
- 16. Undecided Transfer

Associate in Applied Science

- 17. Accounting
- 18. Applied Science General
- 19. Applications Development
- 20. Automation Engineering
- 21. Business
- 22. Casino Management Four Winds
- 23. Child Development
- 24. Criminal Justice
- 25. Culinary Management
- 26. Cybersecurity (pending Board/HLC approval)
- 27. Dental Assisting
- 28. Diagnostic Medical Sonography
- 29. Electrical Distribution
- 30. Engineering Technology

- 31. General Technology
- 32. Hospitality Management
- 33. Machine Tool Technology
- 34. Mechatronics Technology
- 35. Medical Assisting
- 36. Music
- 37. Networking
- 38. Nursing
- 39. Pharmacy Technician
- 40. Radiologic Technology
- 41. Skilled Trades Technology
- 42. Teacher Education
- 43. Welding Production Technology
- 44. Wine and Viticulture Technology

Associate in Science

- 45. Biology
- 46. Chemistry
- 47. Engineering
- 48. Health Science
- 49. Mathematics
- 50. Exercise Science & Wellness
- 51. Physical Science
- 52. Physics
- 53. Undecided Transfer

Advanced Certificate

- 1. Casino Management Four Winds
- 2. Child Development
- 3. Cisco
- 4. Dental Assisting
- Liberal Arts
- 6. Hospitality Management
- 7. Machine Tool Technology
- 8. Medical Assisting
- 9. Pharmacy Technician
- 10. Skilled Trades Technology

Certificate of Achievement

- 11. Bookkeeping
- 12. Chocolate & Confections
- 13. Cybersecurity
- 14. Geospatial Information Science and Technology
- 15. Graphic Design
- 16. Hospitality Management
- 17. Information Technology
- 18. Machine Tool
- 19. Manufacturing Production
- 20. Mechatronics Technology
- 21. Phlebotomy Technician
- 22. Registered Behavior Technician
- 23. Risk Management & Insurance
- 24. Sales & Customer Service
- 25. Small Business Management
- 26. Spanish Certification
- 27. Sterile Processing Technician Supervisory Skills
- 28. Web Development
- 29. Welding Technology

Totals Reported to HLC: Associates 53 Certificates 29

Appendix B - 2021 Facilities Condition Assessment

Note: This report was completed in 2021 working with contracted Architectural and Engineering services provider. Since its completion the College has been working within the comprehensive database established by the assessment to address deferred maintenance work and to plan future work. The 2021 report is provided as reference.

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Summary

General Description

Lake Michigan College has three campuses: Benton Harbor, Niles and South Haven totaling nearly 300 acres of property. These three campuses contain eight buildings, totaling over 680,000 square feet ranging in age from 2 to 53 years. These buildings create spaces for thousands of students to learn and grow every year.

While the College cares for its facilities, a third-party comprehensive facility audit was needed to provide both an overall view of the state of the facilities as well as a prioritization of needed repairs. There have been numerous upgrades and projects in the past to ensure the students have the best environment to learn. To continue to provide safe and comfortable learning environments for every student, the buildings require certain maintenance and improvements. This assessment report summarizes thousands of observations in an attempt to understand the scope and types of risk the College faces with respect to its facilities and to provide an understanding of the current state of the College's facilities.

A robust database of observations, recommendations, and associated costs accompanies this report. This database is a living document for LMC Facilities to update and add to for the purpose of tracking facility deficiencies and capital project planning.

This facility assessment report is based on walk-throughs of the noted buildings and properties starting in late May 2021 through early July 2021, as well as a review of drawings and reports made available by the College. General observations are broken down by campus and building and are based on the current state of the facility as of the walk-throughs.

Assessment Approach

Architecture and engineering professionals walked the buildings and properties of Lake Michigan College, identifying deficiencies and making observations and recommendations for improvements or replacements for the systems and components of the buildings and their surroundings. These recommendations have been assigned a priority rating and brief description as follows:

- Urgent (past due) Items with life safety implications or heavily impacting critical programs or function.
- Critical (6 months to 1 year) –Items that have failed or are close to failure and could have a chain reaction, causing other things to fail.
- Moderate (1 year to 5 years) Items impacting accessibility or equal access and items at or near
 the end of life that should be considered for proactive, planned replacement to minimize cost and
 minimize risk to programs.
- Low (5 years to 10 years) Items that should be budgeted and planned for in the future.
- N/A (No replacement planned) Observations not requiring action, for information only; systems
 equipment that are new but should be tracked because they will require capital investment 10 to
 20 years down the road.

Observations also include a reason for the improvement or replacement which include the following:

- Code/Regulatory Items that do not meet current building codes and standards.
- Age/Useful Life Equipment/systems/elements that are reaching end of useful life.
- Energy Efficiency Items that are causing excessive energy consumption or improvements that could increase energy efficiency.
- Life Safety/Health Items that pose a life safety or occupant health risk.
- Accessibility Items that do not meet current ADA standards or do not provide equitable accommodations for all bodies.

The evaluations included functionality ratings ranging from 1 (non-functioning) to 5 (all functions perform) to assist the observation team in data collection and establishing useful life expectancy. However, there is

no direct connection to the Priority Rating or Project Expenditure reason, but instead, the information was used as a contributing component to the overall evaluation. The Evaluation Ratings are as follows:

- 5 All functions perform (functions well, well-maintained, meets applicable codes and standards).
- 4 Most functions perform (functions well, may require some maintenance or repair, minor issue with codes/standards).
- 3 Some functions do not perform (may have some operational issues, requires repair or renewal, code issues).
- 2 Most functions do not perform (barely functional, requires renewal or replacement).
- 1 Non-functioning (not operational or performing intended purpose, requires replacement).

Observations are generally organized by asset type category (UniFormat) as follows:

- # Miscellaneous: Code and regulatory items
- A Substructure: Foundations and slabs
- B Shell: Superstructure, vertical (walls, windows and exterior doors) and horizontal (roof) enclosures.
- C Interiors: Interior doors and walls, ceilings, finishes, casework and furnishings.
- D Services: Plumbing, HVAC, fire alarm and protection, electrical, communication and elevators.
- E Equipment and Furnishings: Furniture, casework, window treatments
- G Sitework: Parking walks, exterior barrier-free access and stormwater.

This assessment was conducted in a non-invasive, non-destructive manner from the floor, grade or other accessible level based on visual observation only. It provides an overall condition assessment of the requested buildings and properties. This assessment should not be considered all-inclusive of issues or concerns that might exist with the facility, but instead serves as advisement based on what Progressive AE was able to observe on the day of the on-site evaluation and from review of available documents.

In addition, the Opinion of Probable Cost included in this report is a ballpark installed cost estimate (labor and materials only) based on today's marketplace value. Soft costs such as design and contractor fees are not included. Once fully designed, documented, and submitted for bids to contractors, the cost may vary due to a number of reasons such as unforeseen conditions, material and labor cost fluctuations, and escalation factors related to when the work is completed.

In closing, this report is based on a snapshot in time of the conditions as presented on the walk-through evaluation and any additional information provided by Lake Michigan College. It is intended to be used by the College for general operations and maintenance as well as a planning tool for future master planning efforts.

Best Practices

Accessibility

All buildings and paths of travel on the site were evaluated against the 2010 ADA Standards for Accessible Design. The scope of these standards is wide-ranging and many instances of non-compliance were found. Although compliance is not necessarily required for construction that predates the standard, the standard is a helpful guide for creating an environment that is safe and inclusive for all, providing equitable accommodation for all bodies.

Not all deficiencies are equal in terms of risk and cost to correct. For the purposes of this assessment, we categorized deficiencies with a risk of trip and fall or direct bodily injury as critical risk, whereas deficiencies that do not allow equal accommodation or have a more indirect risk of injury like items out of the reach of a wheelchair user were categorized as moderate risk.

Asset Renewal

Items that require periodic renewal like finishes were not generally included in the observations, but here are some general rules of thumb for finishes and building elements:

Item	Expected Life			
Interior Paint				
High traffic areas (corridors, etc.)	5 years			
Lower traffic areas	10 years			
Caulking	5 years			
Acoustical Ceiling Tile	30 years			
Ceramic Tile	50 years			
Carpet				
High traffic areas (corridors, etc.)	5-10 years			
Lower traffic areas	10-15 years			

These rules of thumb are variable depending on care and use. Where the observation team noticed finishes could be better preserved by corner guards or chair rails, it was noted in the observations.

Facility Condition Index

To objectively assess facilities, the Facility Condition Index (FCI) is a standard for higher education management. The FCI is a ratio of the current year's required renewal cost to the current building replacement value. The total cost for building improvements is divided by its replacement cost. The lower the FCI, the less money is required to maintain the facility. Below is the estimated FCI for each building on the Lake Michigan College Campus. All of the buildings are in good condition. An FCI score of <.02 is considered good.

	Year	Size	Capital Replacement	2022 Requirement	
Building	Constructed	(sf)	Value	Cost	FCI
Welch Center	2019	13,981	\$6,798,627	\$5,000	0.00
Hanson Tech Center	2016	42,275	\$10,930,973	\$61,700	0.01
Beckwith Hall	2014	66,912	\$9,762,795	\$233,650	0.02
Todd Center	2002	43,400	\$11,843,081	\$108,548	0.01
Mendel Center	1978	138,688	\$37,235,666	\$1,528,950	0.04
Main Building	1968	300,689	\$94,898,525	\$726,350	0.01
Niles	1998	34,283	\$7,804,248	\$598,000	0.08
South Haven	2003	41,222	\$10,023,526	\$304,200	0.03
Total/Average		681,450	\$189,297,441	\$3,566,398	0.02

General Observations and Recommendations

Benton Harbor Campus

Site

The 263 acre Benton Harbor campus dates back to the 1960s and has over 800,000 square feet of asphalt paving. Selected areas have been replaced and routine maintenance has been performed on all lots which are shown in Figure 1. Almost all of the recommended improvements are either low or moderate priority to be looked at over the next 5 to 10 years.

Priority Summary

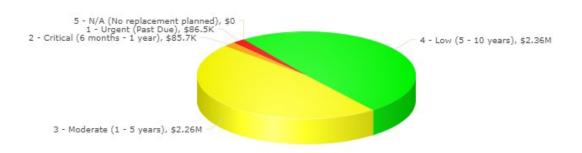


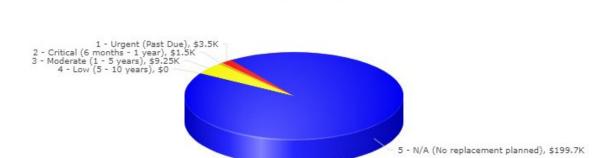
Figure 1 – Cost of Improvements by Priority

The site pavement has been evaluated and detailed in a study prepared by Abonmarche in 2018. This study outlined several improvements for parking and roadways. Some parking and roadways have been improved over the last 3 years but much of the pavement is still unimproved, at end of life, and requires planned replacement since much of it has reached the age where resurfacing is effective for a shorter and shorter duration. The observations by Progressive AE also identify erosion issues that should be addressed.

Electrical site systems include campus parking lot lighting and decorative lampposts along key entry drives. The site lighting has seen routine maintenance, but no upgrades. There is an opportunity for energy savings from upgrading to more efficient lamps.

Welch Wine Center

The Welch Center is nearly 14,000 square feet and was opened in 2019. This building is only 3 years old and since they are new, the majority of the building systems have no planned replacement as shown in Figure 2. The Critical and Urgent items are typical building maintenance items that are typical to every building as they are used.



Priority Summary

Figure 2 – Cost of Improvements by Priority

The site parking and walks are in good condition; however, the evaluation identified several areas of erosion that should be addressed before they cause more damage.

All other building systems and components were found in good condition with only a few minor items to address. With good building care and under current usage, building finishes should not require planned renewal for 10 years other than occasional paint touch-ups.

Hanson Technology Center

The Hanson Technology Center is around 42,000 square feet and was opened in 2016. This building is 5 years old and has very few urgent items needing replacement. Some critical items should be addressed within the next year, cracking on the concrete floor and leaking outside air louver. Figure 3 shows the cost of improvements/replacements sorted by priority recommendation.

Priority Summary

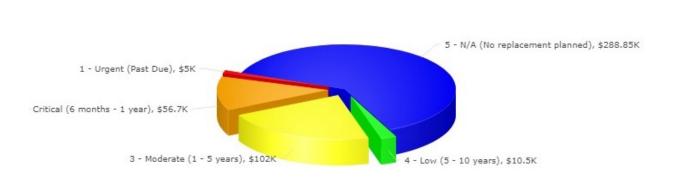


Figure 3 – Cost of Improvements by Priority

The building finishes and architectural elements have held up fairly well. Some minor building envelope issues should be addressed including some curtainwall water intrusion and exterior metal cladding that needs to be refastened. There is some floor cracking that requires further investigation to understand the cause and remedy. Occupants report some acoustical concerns that also may be worth further study.

The main building mechanical system is working well. The main mechanical issue is the multi-stack chiller, whose compressors are requiring early replacement. Progressive AE suggests adding 1 or 2 small

10-ton compressor modules onto the multi-stack for better part-load operation and to prevent the large compressors from over-cycling as they do currently.

The electrical system is in good working condition with no major issues to report.

Beckwith Hall

Beckwith Hall is a 67,000 square-foot dormitory built in 2014. Figure 4 shows the cost of improvements by priority. There are not many urgent improvements that need to be addressed. The largest recommended improvement is carpet replacement at \$150,000 which is a moderate priority in the next 1 to 5 years.

Priority Summary

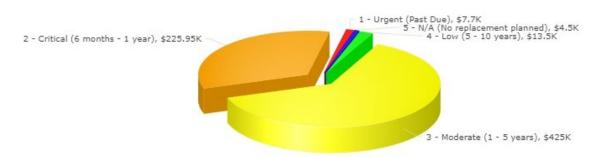


Figure 4 – Cost Improvements by Priority

The building has held up well, showing the normal wear and tear of the student residential facility. Finishes in residential facilities require regular renewal. Painting and carpeting in public areas like lobbies and corridors should be replaced every 5 years. Residential suites should have paint touched up every year and carpet and paint completely redone every 10 years.

Accessibility of the facility has been evaluated in the past and was evaluated again for this assessment. ADA units require improvements in the bathrooms that are planned for next year. When the opportunity arises, kitchens in the ADA units should also be upgraded to facilitate the use of the appliances by individuals with disabilities.

Beckwith Hall mechanical systems are furnace units for the common areas and packaged terminal air conditioning (PTAC) units for the apartments. These systems seem to be in good condition. The typical lifespan of this type of equipment is 15 to 20 years; however, our understanding from facilities staff is that some of the apartment units are already failing. With this knowledge, we recommend evaluating the type and quality of replacement units to try to get a longer life out of the equipment and considering extending the building management system into the building and controlling heating and cooling units in the apartments centrally, allowing occupants to control within a limited range.

The electrical system is in good condition with recommended arc energy and arc flash updates for the 2500A main electrical switchboard to comply with NEC 240.87 and NFPA 70E. The existing fire alarm system is in good working condition with no issues to report.

Todd Center

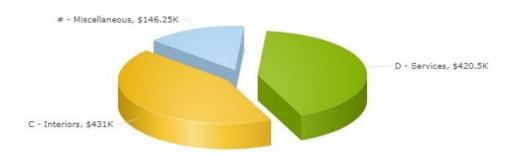
The Todd Center is 43,000 square feet and was built in 2002. The building was constructed with high-quality systems; however, at 20 years of age, it is reaching the point where many systems require renewal. Figure 5 shows that a majority of the items are of moderate priority and in the next 5 years will need to be replaced. Figure 6 shows that most of the moderate priority items are building services.

4 - Low (5 - 10 years), \$30.25K

3 - Moderate (1 - 5 years), \$997.75K

5 - N/A (No replacement planned), \$27.5K
1 - Urgent (Past Due), \$38.15k
2 - Critical (6 months - 1 year), \$70.4K

Figure 5 — Cost of Improvements by Priority



UniFormat Summary

Priority Summary

Figure 6 – UniFormat Summery of Moderate Replacement items

Building finishes are holding up fairly well since the building has not been heavily utilized. Carpets and ceilings should be planned for renewal in 5 to 10 years. The building exterior is also in generally good condition, but some maintenance work is required to ensure the longevity of the building materials. The building elevator system is not operating smoothly and requires some maintenance work.

The mechanical systems are all running well at this time, but some equipment is near the end of life and upgrades would provide the opportunity to improve energy efficiency and system reliability. The energy recovery units are not currently operating as intended and require a controls contractor and commissioning agent to come out to help replace the actuators and restore proper operation. The unit controls should also be brought over to the LMC standard of Tridium Schneider to make them easier to monitor and maintain. The boilers and air-cooled chiller are nearing the end of life and replacement should be scheduled and budgeted in the next 5 years to allow for a planned replacement and avoid unplanned outages.

The electrical system appears to be added onto over the years with current documentation not reflecting current conditions. Further attention is recommended to the existing panel ratings, breaker sizes, feeders and labeling. With several panels nearing full capacity, a load study is recommended for all future work involving increased electrical load. The generator is approximately 19 years old and is not planned to be replaced at this time.

Lighting is an ongoing issue in the building, as fixtures reach the end of life and new ballasts are added to replace the failing ones which cause issues with the remaining fixtures. Most lighting is fluorescent and not energy efficient. Lighting controls throughout the building do not meet ASHRAE 90.1-2013, the current Michigan Energy Code. The building is a good candidate for a lighting upgrade for fixtures and

controls by either re-lamping existing fixtures with LED lamps or replacing the entire fixture with an LED fixture. Location of the fixture, fixture type, owner preference and the condition of the fixture housing all may assist in deciding on whether a re-lamp or complete fixture replacement is the best decision. AEP incentives could likely fund much of the material costs.

Mendel Center

The Mendel Center is 138,000 square feet. Initial construction was in 1978, with the building completed and fully open to the public in 1992. The building has had some renewal/renovation efforts in the Mainstage lobby, Grand Upton Hall and Hanson Theater. An energy conservation project also upgraded most of the building's non-theatrical lighting and upgraded the heating and cooling plants. Figure 7 shows the cost of future improvements sorted by priority. This graph shows that there are a lot of improvements that will be required in the next 5 years. Figure 8 shows the types of improvements that are recommended in 1 to 5 years, most of these improvements are building shell improvements and building services.

Priority Summary

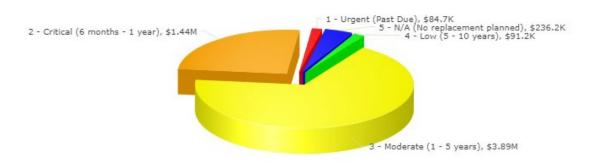


Figure 7 – Priority Cost Improvements

UniFormat Summary



Figure 8 – Improvements Required in 1 to 5 years

A condition assessment of the building envelope, including thermal scans, was performed in 2019 by SME. The assessment recommended replacing the sloped windows on the Mainstage atrium lobby as well as a variety of masonry repairs and sealant replacement. Those costs have been incorporated into the facility assessment system.

Building finishes have been updated in the areas noted above. The remainder of the carpets and ceilings in the building are at end of life and should be planned for replacement. Very high traffic areas like the

main entry for Grand Upton Hall should be budgeted for carpet replacement every 1 to 5 years. Mainstage lobby carpet should be planned for replacement every 5 to 10 years.

ADA compliance is a concern throughout the facility in areas like the ticketing and support spaces at the north entry. These two spaces also have life safety code concerns due to improper fire separation between public and service. Building restrooms also require remodeling to meet current ADA standards.

Most of the Mendel Center air handling units are at the end of useful life and many are leaking badly from rust and corrosion. These units should be scheduled for planned replacement in the next 2 to 3 years as reliability will only continue to decline and maintenance and energy costs to operate them will only increase. Failure of these units will result in a lack of ventilation for the building the inability to hold events at the Mendel Center. Replacing this equipment should be considered critical to the future reliability of the building. It should also be noted the unreliability of the current equipment is the cause of the out-of-control humidity levels that frequently occur in the building, causing the decline of absorbent materials in the building like carpets, upholstery, and theatrical curtains.

The electrical system is functioning but arc flash updates are recommended for the 3000A main electrical switchboard to comply with NFPA 70E. Several panelboards throughout the building are not clearly labeled and the facilities staff indicated that it has been extremely difficult to locate branch circuits. Therefore, it is recommended to develop 'As-Built' panelboard schedules and an electrical one-line diagram to provide reference documents for future work. The diesel generator performs all functions according to maintenance reports, but is nearing the end of life and should have provisions made for replacement soon.

The majority of lighting in the building has been re-lamped to LED, but there remain some interior and exterior areas that contain inefficient lamps that should be addressed. Minimal lighting controls with multiple manufacturers are also present throughout the building and it is recommended to update lighting controls for the entire building to meet ASHRAE 90.1-2013 and better increase energy efficiency. A large number of exit signs are not illuminated and repairs to existing exit signs only last a short time according to the facilities staff. It is recommended to replace all exit signs with LED for increased reliability. Lastly, the existing fire alarm system is an EST3 and appears to be in good working condition with no known issues to report.

Main Building

The Main Building dates back to 1968 and is over 300,000 square feet. The building has undergone many additions and renovation projects in selected areas, including replacing much of the major mechanical equipment and refreshing finishes in the last couple of years. Figure 9 shows the cost of future improvements. This graph shows that there are very few items that are Critical or Urgent priority (1 and 2) and many items that have recently been replaced (Priority 5). Lake Michigan College has done a great job at maintaining and improving the facility.

Priority Summary

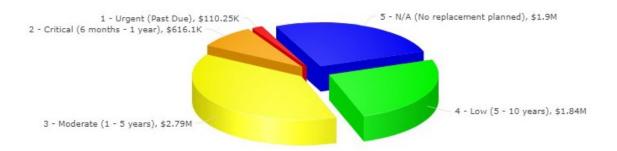


Figure 9 – Main Building Improvement Cost by Priority

A study of the building envelope was done by SME in 2018. The report provides several recommendations to stop moisture intrusion into the building, including extensive work around the Plaza Deck and replacing problematic windows. Much of this work was completed in the renovation project in 2020.

While areas of the building that have been renovated in the last 10 years meet current accessibility standards many of the areas that have not been renovated recently do not and have been noted in the observation report.

The new mechanical systems seem to be operating reliably and well; however, the new cooling tower is having debris get caught in the top drain basin, causing it to periodically plug up and overflow. Adding an inline filter and deep clean and flush of the system is recommended. There are some rooms on the top floor of C-wing and B-wing that seem to have room pressure issues. Additional return air grilles or transfer ducts may need to be added if the system cannot be balanced as is.

The electrical system is in good working condition with no major issues to report. A major renovation in recent years has updated the main electrical gear, generator and many of the panelboards throughout the building. The fire alarm system has also been upgraded along with a large amount of lighting. Notable issues include several panels nearing full capacity and a load study should be performed if future construction takes place. Some light fixtures are also still fluorescent and updating these to LED will improve energy efficiency along with adding controls that meet ASHRAE 90.1-2013.

Niles Campus

The Niles Campus is 13 acres. The 34,000 square foot building was built in 1998. Figure 10 shows the cost of future improvements sorted by priority. This graph shows that there are a lot of improvements that will be required in the next 5 years. Figure 11 shows the types of improvements that are recommended in 1 to 5 years, most of these improvements are Sitework, building shell improvements and building services.

Priority Summary

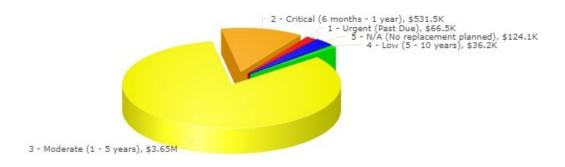


Figure 10 – Cost of Improvements by Priority

UniFormat Summary



Figure 11 – Moderate Priority Recommendations

The site pavement has been evaluated and detailed in a study prepared by Abonmarche in 2018. This study outlined several improvements for parking and roadways. Some of these recommendations are included in a project currently under construction. In general, pavements are near the end of their useful life and numerous erosion issues should be addressed.

The building enclosure was evaluated by SME in 2020 and many water infiltration issues were identified. A series of patches and sealants can reduce water infiltration and preserve the building interiors for a time, but the long-term need is to remove roofing and siding to install proper weather cladding and sheathing underneath. The recommendations from this report and their associated costs were incorporated into the assessment database.

The mechanical systems are well-maintained, but some of the major pieces are at the end of their useful life. There is also some pipe corrosion occurring and the boilers are failing prematurely suggesting that there are some water quality issues in the building. A water quality test is recommended to determine if a water softener should be added or if a different chemical treatment is necessary. The chiller is also at end of life and should be planned for replacement in the next year or two.

The electrical system is operating reliably with recommended arc flash updates for the 1200A main electrical switchboard to comply with NFPA 70E. With several panels nearing full capacity, a load study is recommended for all future work involving increased electrical load.

Much of the lighting throughout the building is fluorescent with no or limited controls. Appreciable energy savings could be realized by updating all lighting to LED by either re-lamping existing fixtures with LED

lamps or replacing the entire fixture with an LED fixture and adding lighting controls that meet ASHRAE 90.1-2013. Location of the fixture type, owner preference, and the condition of the fixture housing all may assist in deciding on whether a re-lamp or complete fixture replacement is the best decision.

The current fire alarm system is not a voice fire alarm system as required by current Michigan Building Codes. Recommend replacing the existing fire alarm system with a new voice fire alarm system.

South Haven Campus

The South Haven Campus is 22 acres. The 41,000 square foot building was built in 2003. Figure 12 shows the cost of future improvements sorted by priority. This graph shows that there are a lot of improvements that will be required in the next 5 years. Figure 13 shows the types of improvements that are recommended in 1-5 years, most of these improvements are Sitework and building services. The biggest costs will be boiler replacement, lighting replacement and parking lot re-pavement.

Priority Summary

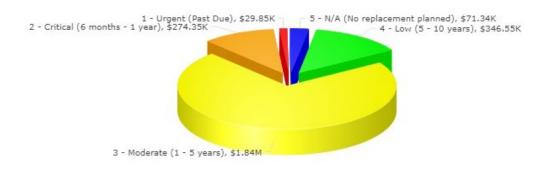


Figure 12 – Cost of Improvements by Priority
UniFormat Summary

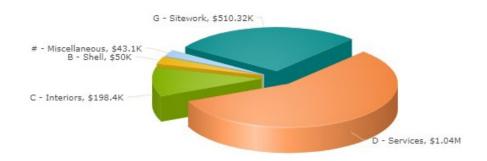


Figure 13 – Moderate Priority Recommendations

The site pavement has been evaluated and detailed in a study prepared by Abonmarche in 2018. This study outlined several improvements for parking and roadways. Some of these recommendations are included in a project currently under construction. Individual entries for parking and drives with costs for improvements have been entered based on this study and additional observations by Progressive AE. In general, pavements are near the end of their useful life and numerous erosion issues should be addressed. The main entry plaza has some cracks and salt damage. This should be reviewed and repaired annually with a plan to replace the plaza in 5 to 10 years.

The building has been well-cared for; however, some finishes, like carpet are nearing the end of life. Carpet in high-traffic areas like corridors and KidZone should be planned for replacement every 5 years. Classrooms should be planned for replacement every 10 to 15 years, depending on usage.

The building exterior has some issues with sealants and weeps that should be addressed to ensure the longevity of the building enclosure.

The building mechanical systems are running well, but heating and cooling equipment is approaching the end of life. Within the next 5 years, a planned replacement should be budgeted and scheduled to avoid the added cost and inconvenience to building programs of an emergency replacement.

The electrical system is in good condition with recommended arc energy and arc flash updates for the 1200A main electrical switchboard to comply with NEC 240.87 and NFPA 70E. The natural gas generator performs all functions according to maintenance reports and does not plan on being replaced at this time.

Most of the interior lighting in the building is fluorescent with many fixtures not working or having a low performance. Most exterior lighting for the building is fluorescent or high-pressure sodium. It is recommended to upgrade all lighting to LED fixtures or re-lamp with LED for appreciable energy savings. Location of the fixture, fixture type, owner preference, and the condition of the fixture housing all may assist in deciding on whether a re-lamp or complete fixture replacement is the best decision.

The facility staff also indicated that they are replacing lamps more frequently at the South Haven campus compared to other Lake Michigan College buildings, which may be attributed to a power quality issue. Lighting controls were present in some areas in the building; however, it is recommended to update lighting controls for the entire building with occupancy sensors, photocells and dimmers to meet the 2015 Energy Code to better increase energy efficiency.

The existing fire alarm system was installed in 2002 and is in good working condition with no known issues; however, the system is not a voice fire alarm system as required by the current Michigan Building Code. It is recommended to replace the fire alarm system with a voice fire alarm notification system.

Arc Flash

Nearly all the facilities evaluated had issues with arc flash labeling and reduction. Arc flash is a phenomenon when an electric current leaves its intended path and travels through the air from one conductor to another. In recent decades OSHA has identified arc flash as a risk near electrical panels and other electrical gear that should be identified and mitigated where possible.

While employees are responsible for complying with safety-related work practices and procedures provided by the employer, arc flash labeling is the responsibility of the employer. In order to comply with the label requirement of NFPA 70E, labeling is required for any piece of electrical equipment that may need examination, adjustment, service or maintenance while energized, creating the potential for an arc flash incident to occur. An arc flash study should be performed if changes in the electrical system can influence the results or at intervals not to exceed five years.

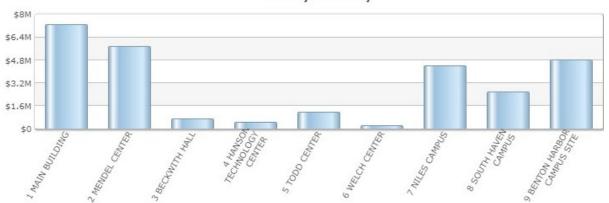
Arc energy reduction was first introduced in the 2011 National Electrical Code, which was adopted by Michigan in 2013. The code section is regarding "the highest continuous current trip setting for which the actual overcurrent device installed in a circuit breaker is rated or can be adjusted is 1200 A or higher". Arc-energy reduction is designed to reduce the amount of arc-energy that may occur while a worker is servicing energized equipment. Under the Michigan Electrical Code, "Electrical systems lawfully in existence at the time of the adoption of this [Arc Energy Reduction] code shall be permitted to have their use and maintenance continued if the use, maintenance, or repair is in accordance with the original design and no hazard to life, health, or property is created by this electrical system as determined by the code". Although further action may not be required by code where existing systems were installed before implementation of the code and where no major electrical alterations have occurred since the arc-energy reduction is a safety precaution and it is recommended to add to systems where it is possible.

While this assessment has done a cursory look at arc flash considerations, a comprehensive arc flash study of all buildings is recommended to understand the full scope.

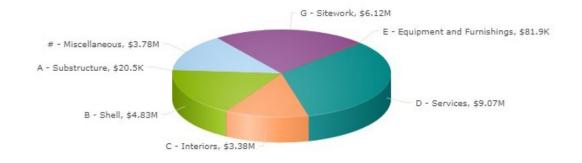
Project Expenditures

Summary of Costs

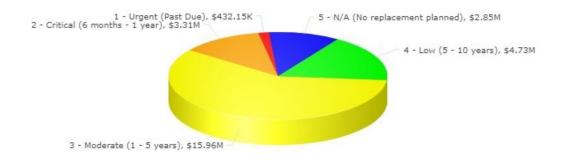




UniFormat Summary



Priority Summary



Appendix C -

Notable Space Updates and Future Space Needs

The College reviews space needs on an annual basis to align with programming needs. Over the last ten years notable facility changes include the following:

Benton Harbor Campus

- Constructed a two-story student center (Hawk's Nest) with activity space on the lower floor and study space and conference room for use by student clubs on the second floor.
- Renovated the College café, supporting ability to offer a broader menu to students and increased seating capacity.
- Constructed 188-bed Beckwith Hall residence life facility, which opened to student residents in July 2014.
- Expanded Health Science facilities to upgrade Nursing classrooms and labs and support new EMT/Paramedic, Medical Assistant, Pharmacy Technology, and expanded CNA programming.
- Opened a new culinary education center in 2017.
- Added 43,400 GSF of space through the purchase of the Western Michigan University Southwest building, now called the Todd Center, which houses our Business, Computer Information Systems, and Teacher Education programs. The Todd Center includes (17) classrooms including (3) classrooms which open to a larger multifunctional meeting space, faculty and staff offices, café commons, and open study and collaboration space.
- The Wine & Viticulture Technology facility (Welch Center) is a new facility on the Benton Harbor Campus, which opened in 2019. The Welch Center includes (2) classrooms, faculty and staff offices, fully functional teaching winery, and open collaboration space.
- Modernized Mendel Center including an energy system retrofit replacing equipment near end of life was completed summer 2020.
- Remodeled the Mendel Center Hanson Theatre which supports the Visual & Performing Arts programs with new finishes, acoustics enhancements, and new house and stage lighting in 2019 and 2022.
- Retrofit two existing rooms to create Fitness Lab for students and employees, completed in February 2020.
- As part of the recent Main Building Renovation, the following components were completed in summer of 2020:

- Renovated approximately 50 classrooms and 2 lecture halls with updated teaching technologies to improve distance education delivery, enhance active learning and student success, and better prepare students for the use of "real-world" technologies at work or in advanced studies.
- o Relocated faculty offices to be adjacent to student learning support spaces.
- o Co-located all health sciences disciplines into one central zone of C-Wing.
- Right-sized classrooms for effective instruction using updated instructional technology.
- o Improved flow of student services to make processes clearer and enhance the student enrollment experience for first-time and non-traditional students.
- Improved student learning environment by upgrading heating and cooling systems.
- Created an Instructional Design & Teaching Technology to assist faculty with redesigning curricula, identifying and learning new instructional technologies, expanding and improving distance teaching and learning, and incorporating innovative technologies into the classroom.
- Created new collaborative learning and engagement spaces that provide students with group study and classroom project preparation areas.
- Developed an English as a Second Language and Writing Lab to support our diverse student body.
- Expanded and upgraded culinary and hospitality spaces to address increased demand and certification requirements.
- o Addressed numerous student and employee safety and security concerns.
- Constructed and opened Hanson Technology Center Fall 2016, which houses:
 - Advanced Manufacturing and Welding programs, and
 - Fab Lab open access digital fabrication studio and collaborative workshop.
 Provides access to information, tools/machines (including laser cutters, 3D printers, commercial sewing machines, vinyl cutters, woodshop, CNC router and hand tools), software and space for anyone who has an interest to learn and create.

Niles Campus

- Constructed Chemistry and Biology labs and associated prep spaces increased student capacity and brought labs up to standard established by Title III renovation at Benton Harbor Campus.
- Constructed two classrooms each has capacity of 30 or more to meet student needs and provide options for community meeting space.
- Constructed new Dental Lab replaced existing lab, tripling student capacity.

 Renovated existing space at the Niles Campus to support Phlebotomy and Medical Assisting

South Haven Campus

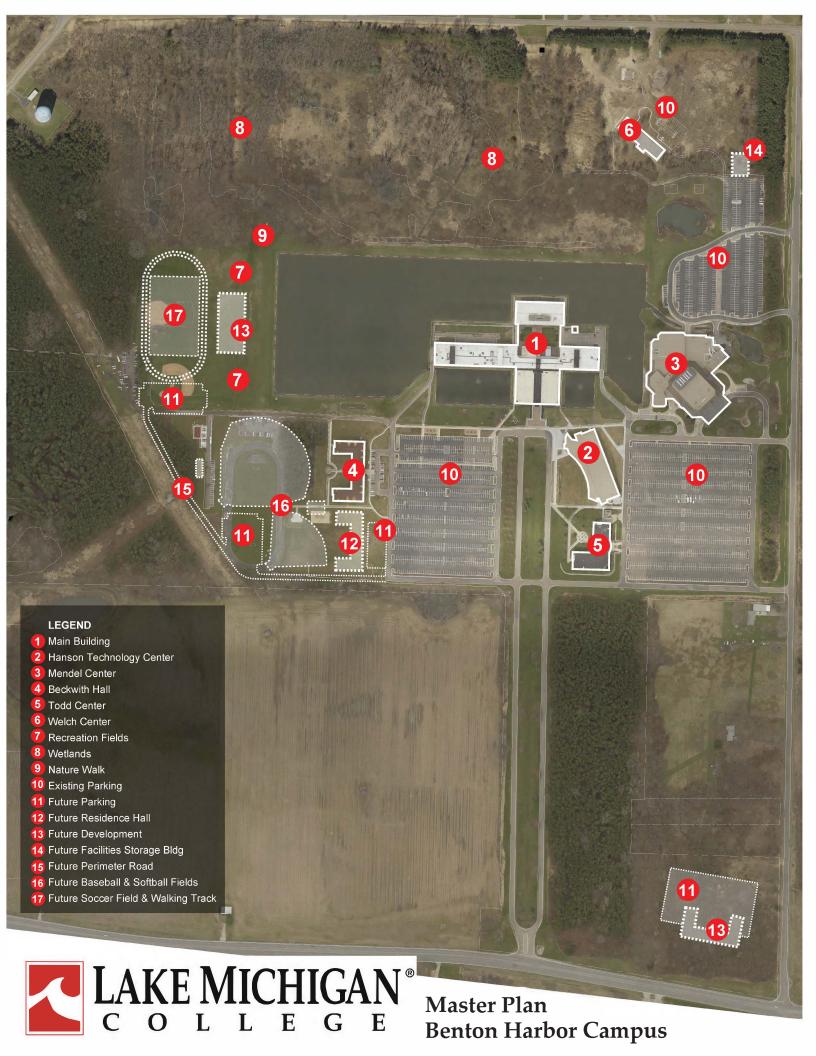
- South Haven Public Schools entered into partnership with local K-12 district for dual enrollment classes to be offered on South Haven Campus.
- Renovated space to provide a Certified Nursing Assistant (CNA) and Phlebotomy lab to allow program expansion to meet community needs.
- Renovated Biology and Chemistry labs.
- Constructed a Pearson Vue Assessment Center.
- Expanded the campus community room to support larger programming needs.

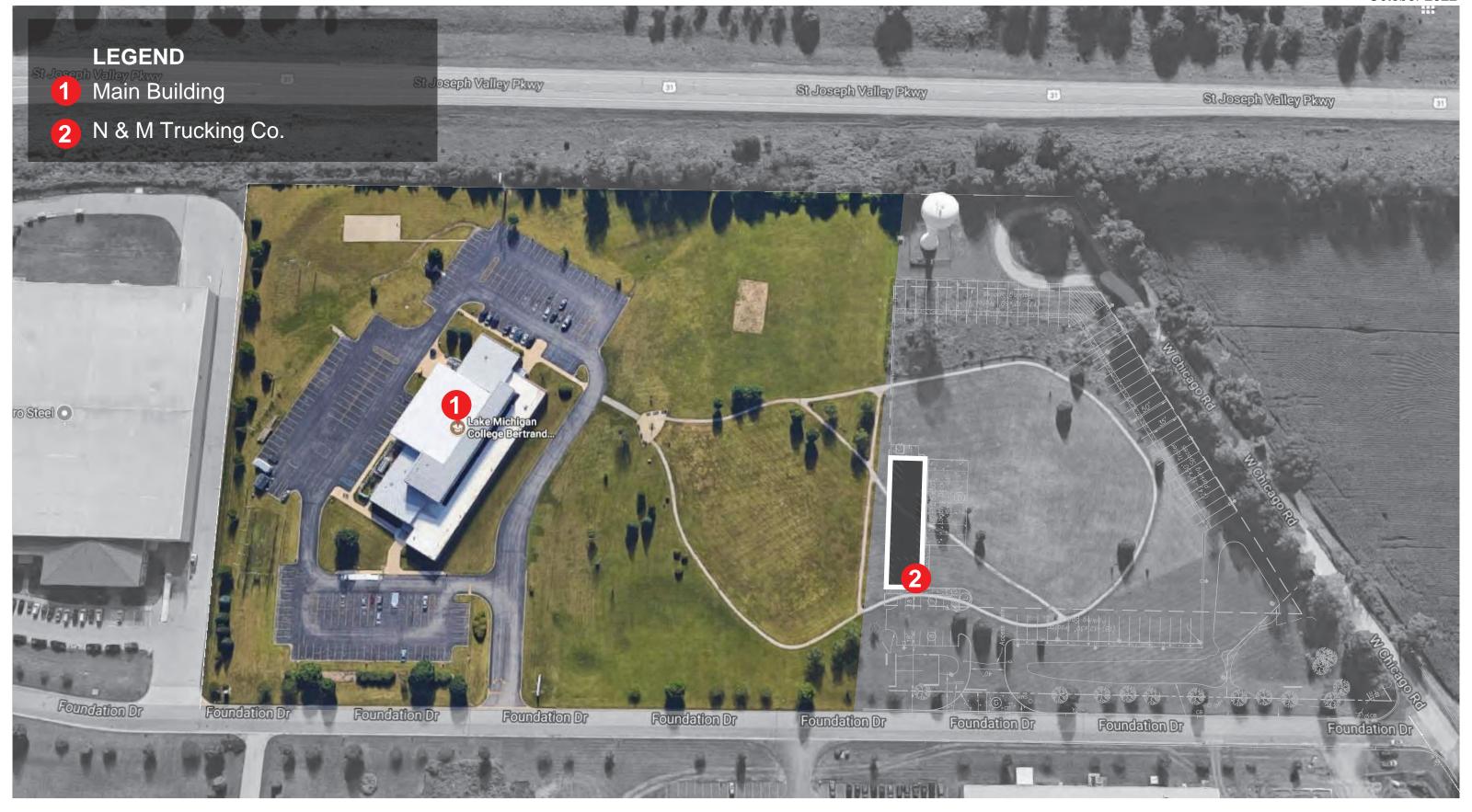
Future Identified Space Needs

The College is prioritizing for funding additional projects that support academic excellence, student success, and community impact. They include:

- Expansion of Career and Workforce Education programs, particularly in advanced manufacturing.
 - Renovation of existing space at the Niles Campus to support Advanced Manufacturing (Mechatronics and Computer Numerical Control(CNC))
- Expansion of Health Sciences Education programs, including:
 - Renovation of existing space at the Niles Campus to support Certified Nursing Assistant (CNA)
 - Upgrading the Dental Assisting Lab at the Niles Campus.
 - Renovation of existing space at the South Haven Campus to support Physical
 Therapy Assistant programming and natural sciences curriculum
 - Renovation of the existing Benton Harbor space to expand health sciences program opportunities to include a new Respiratory Care program.
- Review of existing space at the South Haven Campus to identify opportunities for expansion of College enrollment, programs, and services to meet the workforce needs of the communities served by those campuses, such as Drone Piloting, Craft Brewing, and eSports Competition Space.
- Support partnerships with local K-12 district for dual enrollment classes to be offered on Benton Harbor Campus.

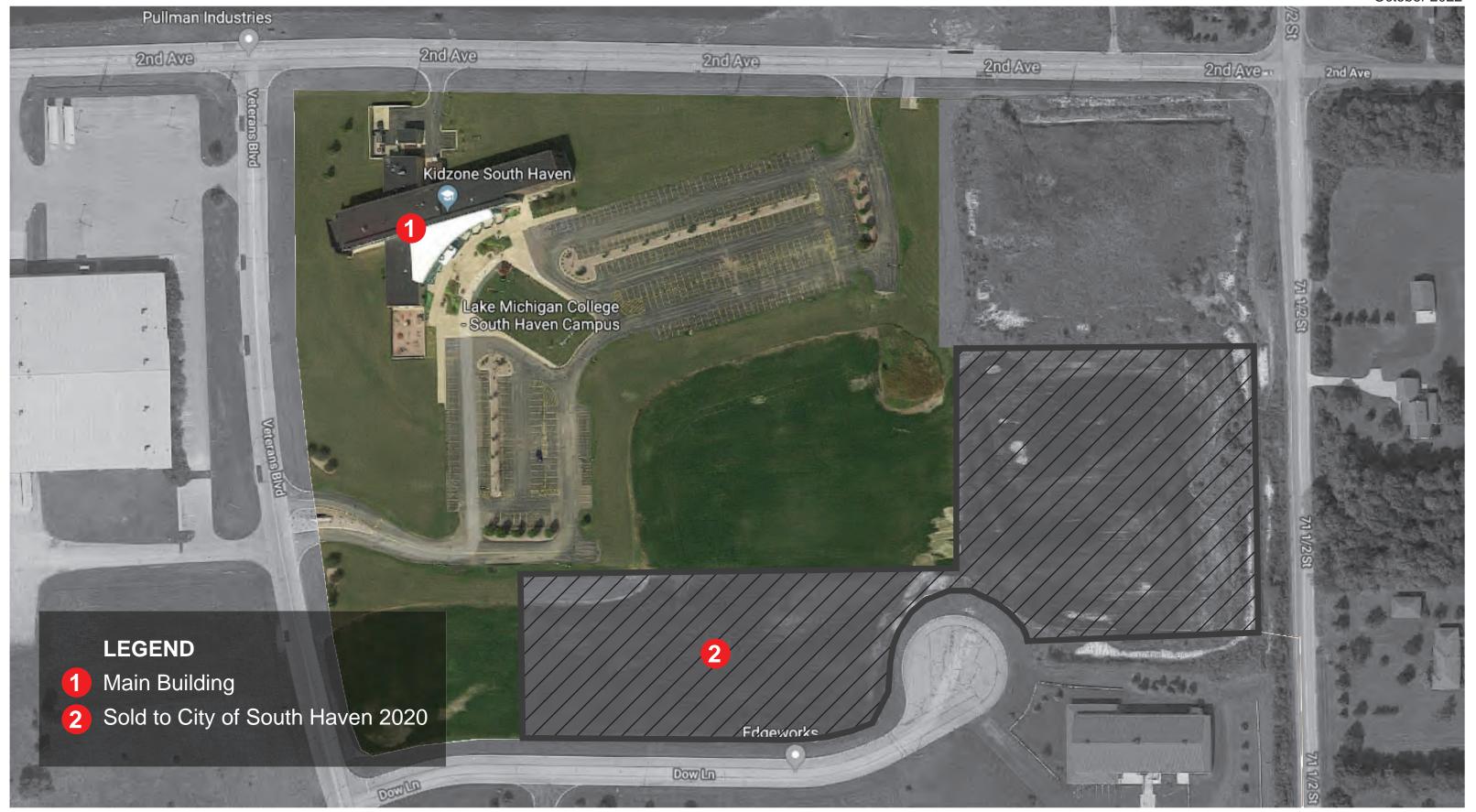
Appendix D – Campus Master Plans





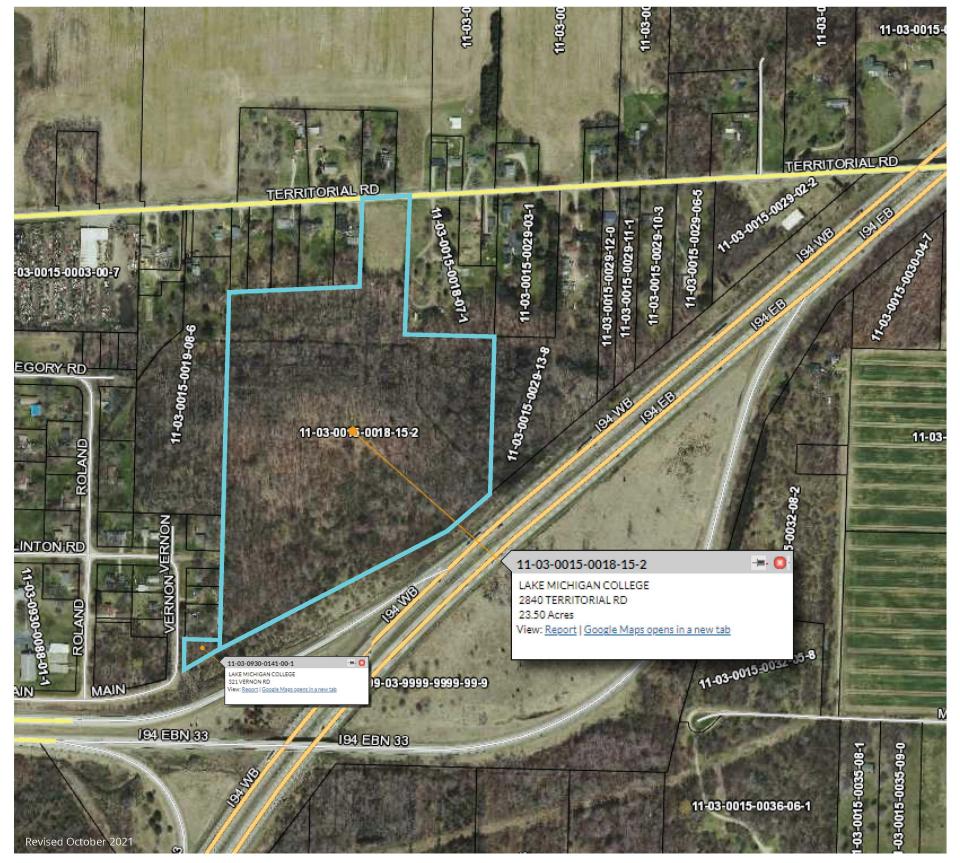
Niles at Bertrand Crossing Campus Master Plan

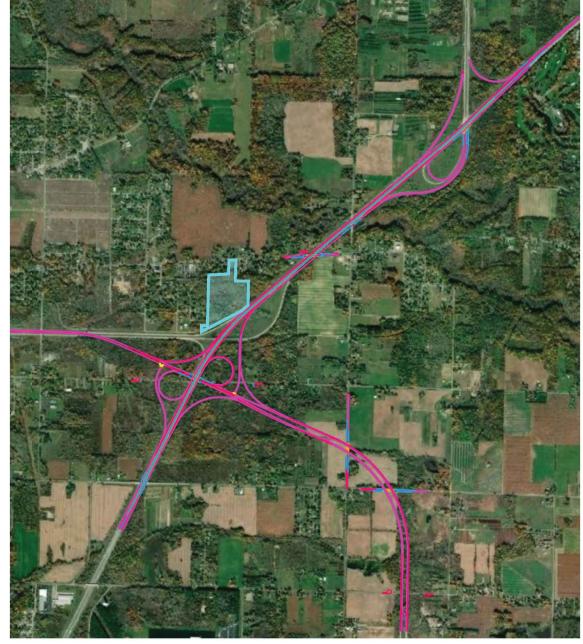




South Haven Campus Master Plan







Future Bi-Pass

2840 Territorial Rd & 321 Vernon Rd



Appendix E - Information Technology Strategic Plan



Lake Michigan College

Information

Technologies

Strategic Plan 2024-

2028

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Introduction

Information Technology is vital to the success of any organization and involves arranging the right mix of skilled individuals who share common objectives and defined processes to deliver services and solutions that support the mission of the College. Lake Michigan College is served by a dedicated team whose purpose is to deliver technology to students, faculty, and staff in an accountable and cost-effective manner.

Mission of IT

Together we empower people and communities to thrive through education, innovation, and experiences.

Primary Service Areas

IT has three areas in which it provides services and solutions for the College based upon the College Wide Goals of academic excellence, student success, and community impact.

- Service and Operations
- Enterprise Resource Planning (ERP)
- Institutional Research (IR)

Service and Operations

The Service and Operations Team supports the day-to-day operations of the College's Information Technology Services Department including:

- Support to students, faculty, staff
- Classroom technology
- Wired/wireless network support
- Campus printing support and computer lab maintenance
- Asset Management
- Manage on-premises and multi cloud operations including networking,

- servers, data storage and backup and recovery
- Information Technology Security
- Create a comprehensive Technology Communication Plan including maintenance periods, software upgrade schedule/testing plan, etc.
- Continue to create technology project roadmap
- Ensure security compliance for network and other technology solutions

Enterprise Resource Planning (ERP)

The Enterprise Resource Planning (ERP) team provides systems support, data administration and innovative solutions to meet the College's administrative business and student needs. The ERP team is responsible for ensuring the security and integrity of the College's Banner system and database, including.

- Banner
- Banner Self-Service
- Degree Works
- Automic
- MyLMC
- Other Enterprise systems

Institutional Research (IR)

The Institutional Research team provides leadership and support for data-driven decision-making that advances the vision, mission, and values of the college. Specifically, IR is responsible for:

- Collecting and analyzing data for internal and external reporting requirements
- Provides information to enable data-driven decisions that support student success and equity
- Provide data that is intentionally inclusive and focused on increasing the accessibility and timely use of data to continuously improve student outcomes
- Establishing and reporting on measures of institutional effectiveness
- Supporting continuous improvement of institutional outcomes and other measures of student success
- Supporting accreditation activities

IT Risk Management & Security

As the IT department works toward improving technology execution, Banner optimization, and Data Governance, risk and security are at the forefront of every decision. To maintain high standards that minimize risk, the IT department will work diligently to collaborate so a possible event that could cause loss/ harm or affect the ability to achieve objectives is minimized and mitigated early. The steps in dealing with risk include identifying the risk, analyzing the risk, and managing the risk. Areas covered in risk management include:

- Problem management
- Change Management
- Data Management
- Service Delivery
- Availability Management
- IT Service Continuity

FY22 Accomplishments

Despite the impact of COVID-19, the IT service and operations department accomplished multiple tasks over the course of the fiscal year. Some of the accomplishments include those listed below.

- Service and operations
 - o Upgraded Windows Build
 - o Reimaged PCs across the campuses
 - o Copier Fleet Replacement RFP
 - Added redundant Fiber connection from redundant ISP
 - o Created secondary VPN connection to cloud provider
 - o Upgraded older servers to new OS
 - o Implemented Automated patching solution for servers
 - o Multifactor Authentication Pilot
 - Implemented JAMF
 - o Implemented Manage Engine
 - o Network Core Layer Replacement
 - o Network WAN Layer Replacement
 - Network Access Layer Replacement
- Enterprise Resource Planning (ERP)

- o Continual Banner Upgrades
- Maintain Security Patching
- Testing ILP Implementation
- Implemented The Housing Director
- Institutional Research
 - Engagement with Dynamic Campus
 - o Reengineer Reporting Environment.
 - Utilization of Office 365 Power BI for dashboard and reporting.
 - o Rebuild Core Reports on Refactored Reporting Environment.

IT Mission and Strategy Roadmap

The following roadmap outlines the major initiative goals of the LMC IT department over the next five fiscal years. Each goal will be re-evaluated annually and adjusted as necessary.

FY23 Major Initiatives

- Service and Operations
 - Continue ITIL Adoption
 - Upgraded Windows Build
 - End of Life Hardware
 - Prepare for Cloud-First Strategy
 - Data Security Incident Response Plan Update
 - Reduce remaining Physical Servers by 20%
 - o Hypervisor Migration from Hyper-V to VMware
 - o Virtualization hardware replacement with HCI Solution
 - Enterprise SAN replacement
 - o Enterprise Backup solution migration to Veeam
 - o Multifactor Authentication Enterprise rollout
 - Replace remaining soon to be EOS servers to new OS
 - Active Directory Domain Controllers Upgrades
 - Windows Certificate Authority Upgrade
 - Microsoft Exchange Upgrade
 - Microsoft Endpoint Configuration Manager Upgrade
 - o Implement Automated Desktop Third Party Application Patching
 - o Implement Automated Linux Server Patching
 - Deploy Cisco DNA Spaces for location Services
 - Cisco IP Phone Refresh
- ERP

- Federal Data at Rest Requirement
- CPOS Implementation
- Review Document Management solutions
- Banner Credential Management
- Banner Ellucian Experience
- DegreeWorks responsive dashboard rollout
- Refactoring student notification processes (Move from Custom apps)
- A+ for attendance Canvas integration
- Institutional Research
 - Data validation reports/ for clean-up data and definition of data entry standards
 - Integration of other source systems to the reporting environment, such as Degree Works, Target X, Survey Monkey.
 - Rebuild Core Reports on Refactored Reporting Environment.
 - Strength Data Governance program across the college
 - Completion of data dictionary and business glossary.

FY24 Major Initiatives

- Service and Operations
 - o Increase of Bandwidth and Redundancy for AWS Cloud
 - Two-Factor Authentication
 - Migrate 20% of remaining On-Prem Servers to AWS
 - Domain Controller Upgrades
 - Reduce Physical Servers by 12%
 - Wireless Controller Replacement
 - Wireless Access Point Replacements
 - Network Bandwidth Management Appliance Deployment
- ERP
 - Sunset Banner 8 Self-Service
 - Refactor Banner Security for more control over roles
- Institutional Research
 - Promote Data Literacy
 - Strength Data Governance program across the college
 - Rebuild Core Reports on Refactored Reporting Environment.
 - Implementation of predictive analytics.

FY25 Major Initiatives

- Service and Operations
 - Increase ITIL Maturity
 - Enhance ITSM Solutions
 - o Align Project & Portfolio Management with IT Governance
 - Cloud-First Strategy: Migrate 20% of remaining on Premise Servers to AWS
 - o Plan onsite virtualization and storage infrastructure Replacement
 - Reduce Physical Servers by 13%
 - Network Access Layer Replacement
- ERP
 - Continual Banner upgrades and patching
 - Security updates and patching
- Institutional Research
 - Promote Data Literacy
 - o Rebuild Core Reports on Refactored Reporting Environment.
 - Report automation for main data survey collection, such as IPEDS, CEPI, etc.

FY26 Major Initiatives

- Service and Operation
 - o Plan for End-of-Life Hardware Replacements
 - Cloud-First Strategy: Migrate 20% of remaining on-Premise Servers to AWS
 - Network Core Layer Replacement
- ERP
 - o Continual Banner upgrades and patching
 - Security updates and patching

0

- Institutional Research
 - Full implementation of Data Governance across college.

FY27 Major Initiatives

- Service and Operation
 - o Plan for End-of-Life Hardware Replacements
 - o Replace On-premise Virtualization and Storage Infrastructure
 - Network WAN Layer Refresh
- ERP

- o Continual Banner upgrades and patching
- Security updates and patching

0

- Institutional Research
 - o Review and rebuild Core Reports on Refactored Reporting Environment.

Conclusion

The IT Service department will track all progress via JIRA, our internal ticketing system. Doing so will allow for Key Performance Indicators (KPIs) to be reported showing progress in all areas mentioned above, as well as other areas of the IT Service department. Updates and progress of projects will also be shared via the employee portal to provide transparency.

Appendix F – FY 2024 Capital Project Request

FISCAL YEAR 2024 CAPITAL OUTLAY PROJECT REQUEST

Institution Name:Lake Michigan College

Project Title:Niles Campus Renovation and Upgrade

Project Focus: Academic & Plant Renewal

Type of Project: Renovation & Addition

Program Focus of Occupants:..... Academics and Student Success

Approximate Square Footage:......34,283 square feet

Total Estimated Cost: \$10,600,000

Estimated Duration of Project:......22 months, including design and construction

Is the Five -Year Plan posted on the institution's public internet site? Yes _ No

Is the requested project the top priority in the Five-Year Capital Outlay Plan?..... Yes _ No

1. Does the request clearly describe the purpose, scope, and program focus of the project?

Project Purpose: Lake Michigan College (LMC or the College) is applying for Capital Outlay funding to renovate and upgrade the Niles Campus facility, built in 1998. The proposed project will expand high-skill, high-wage, high-demand program offerings in Advanced Manufacturing and Health Sciences education, increase building occupancy utilization, enhance operations and energy efficiency, and address safety deficiencies.

Scope of Project: The proposed project includes the renovation of approximately 20% of the existing building. Specific project components include:

- Update traditional classroom spaces to leverage instructional technology that supports engaging and flexible teaching and learning environments to support existing and expanded academic programming.
- Advanced Manufacturing will be expanded to include 2,000 square feet of lab space, a multipurpose classroom, and increased space for mechanical support.
- Renovate 860 square feet of existing space to create a Certified Nurse Aide (CNA) classroom with space and equipment necessary for compliance with State of Michigan regulations.
- Add collaborative learning spaces where students can engage in learning outside the classroom and expand self-serve vending options.

- Relocate administrative offices to improve traffic flow and student/visitor access to student support and administrative services.
- Updates to improve accessibility and compliance with the Americans with Disabilities Act (ADA) design guidelines.
- Create a safer learning environment by adding exterior security lighting and cameras and replacing interior doors to meet contemporary safety standards.
- Life safety systems improvements, including a fire alarm upgrade with an emergency voice notification system as currently required by Michigan Building Code.
- Replace the existing envelope, including new roofing and metal siding to create a weather tight barrier.
- Improve energy efficiency by increasing insulation in the exterior envelop, rebuilding entry ways to improve insulation, replacing windows at their endof-life cycle, and transition to LED lighting and controls.
- Update end-of-life building heating and cooling systems, including replacement of the air-cooled chiller. Upgrade the existing HVAC controls.
- Site improvements, including but not limited to asphalt reconstruction, concrete walkway repairs, addressing accessibility issues, energy efficient lighting, and addressing erosion.

Program Focus: The programmatic focus of the project is threefold, 1) to increase academic programming to meet local, regional, and state workforce needs by expanding Advanced Manufacturing and Health Sciences education programs, 2) to modernize classrooms to support engaging and flexible teaching and learning for face-to-face and remote instructional delivery, and 3) improve student support and success.

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

This project will be the catalyst for a public-private partnership with the Berrien Regional Educational Service Agency (Berrien RESA), local school districts, private sector employers, and LMC to form a career-technical center in southern Berrien County for youth apprenticeship programming. The regional workforce in southwest Michigan is down more than 12,000 workers over the last ten years, and this project and partnership will help grow our talent pipeline locally. Located in a border county with Indiana, this will help Michigan stay competitive in growing occupations. Advanced Manufacturing and

Health Sciences are two of the largest employment sectors in the area. These programs provide educational pathways to several occupations listed on <u>Michigan's Hot 50 Job Outlook</u> and the <u>Southwest Michigan Career Outlook</u>, including CNC Machine Tool Programmers, Heavy and Tractor-Trailor Truck Drivers, Home Health Aides, Industrial Machinery Mechanics and Machinists, Medical Assistants, Nursing Assistants, and Personal Care Aides.

By creating this technical training apprenticeship facility inside the Niles campus, LMC is connecting the next generation workforce directly to local employers. The state investment eliminates duplication and costs for K-12 districts and addresses the area's number one economic development issue – workforce and talent. This directly impacts the three biggest issues in our region and in Michigan – the aging workforce, the smaller workforce, and educational achievement levels by linking students to high paying careers.

Local business and industry partners have also requested that LMC expand these programs to meet their workforce needs. There continues to be a shortage of Certified Nurse Aides (CNA) within our communities. Like many workforce industries, health care is experiencing continuing shortages in many areas, including long-term care. Local manufacturers have reported a significant loss of manufacturing employees, while the pipeline for new and replacement personnel has been severely disrupted. Furthermore, local high school districts have increasingly discontinued industrial programming due to the prohibitive cost of maintaining equipment and faculty training.

3. How does the project enhance the core academic, development of critical skill degrees, and/or research mission of the institution?

This project closely aligns with LMC's mission to *empower people and communities to thrive* through education, innovation, and experiences and directly supports our college-wide goals of academic excellence, student success, and community impact. The project will also support new and existing programs that lead to critical skill degrees in Advanced Manufacturing and Health Sciences education.

Manufacturing is critically important to southwest Michigan and is the backbone of our regional economy. The region has a long history of manufacturing and is home to approximately 455 manufacturing companies. Due to advances in manufacturing technology, our future workforce must be more highly skilled and specialized. Regional manufacturers have also diversified their businesses from being heavily dependent on the auto industry to supporting pharmaceuticals, agriculture, defense, energy, and medical equipment industries, which require different skillsets.

Certified Nurse Aide (CNA) is a critical-skill profession important to the long-term care industry and the well-being of our region's aging population. Southwest Michigan is home to approximately 20 long-term care facilities. A new CNA program will enhance LMC's offerings in career and technical education, help meet the workforce needs of our local health care industry, and serve as a career ladder into other employment opportunities in health care.

In addition to critical skills degrees, the investment in the Niles campus facility has a vital long-term impact on the sustainable delivery of core academics to students in this region. Core academics will not only provide significant impact to the college's Advanced Manufacturing and Health Sciences initiatives, they will also support the college's partnered programs such as Early Middle College and direct credit coursework. These initiatives will also help to support district wide community partnerships such as Spectrum Health and manufacturing businesses by adding more qualified employees available for employment. To support this, the Niles Campus will offer a comprehensive list of core academic courses in order to provide students with a broad range of academic knowledge that will help aid in their individual development. The advisory committees supporting these program areas also note the importance of these skills related to job success.

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

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

The proposed project repurposes the existing facility on the Niles Campus, which anchors a thriving Niles/Buchanan industrial park (Bertrand Crossing) in southern Berrien County. Due to the cost savings measures to construct the building 23 years ago, the envelope has been a continuous maintenance challenge. The structure, however, is physically sound and there has been considerable investment in improving science labs in 2013 to meet enrollment needs. Renovating and updating the existing building is a fiscally responsible approach to meeting the needs for in-demand academic programming that leads to credentials in high-skill, high-wage, high-demand occupations, while also improving student support services in this key area of Berrien County.

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

Yes, the project will provide for a significantly safer, healthier learning environment.

Facility enhancements—including updated original fire alarm to be interactive, the addition of exterior security lighting and security cameras, and correction of many non-compliant ADA accessibility issues identified in the recent facility assessment—will improve safety. Improved building envelope, including properly re-cladding, will eliminate the frequent threat of water leaks into active learning environments, improve overall air quality, and support a healthier building.

In 1998, the Niles Campus was constructed as the founding anchor of a now thriving industrial park. At the time of original construction, limited availability of funds resulted in the College constructing a simple, one-story, single-spine facility with entrances at both ends. Issues with the existing fire rated coiling door housing have forced the College to permanently close the main administrative office opening to the main entry lobby, thereby further reducing visual access to the east entrance. Designated visitor entry at the west end of the building and clearer access to the newly centralized administrative offices will mitigate a vulnerable safety concern by controlling pedestrian traffic flow and allow for increased monitoring by positioning a building reception area visible from both entrances.

7. 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?

Due to the COVID-19 pandemic, existing and available utilization benchmarks for higher education facilities no longer seem relevant. The COVID-19 pandemic has necessitated a shift in instructional delivery models toward more flexible options for students. In response, the College is updating classroom technology to ensure that the curriculum is delivered effectively both in-person and remotely. While remote instructional delivery (online, synchronous remote, and HyFlex¹) is being utilized now more than ever, handson instruction remains critical for students in many academic programs, including Advanced Manufacturing and Health Sciences education on the Niles Campus.

Despite the pandemic and a national higher education enrollment decline, LMC's Fall 2021 enrollment increased 18 percent. But then fell 13 percent for Fall 2022. In Fall of 2022, classrooms on our Niles campus are used for credit courses from 8:00 a.m. to 9:30 p.m. on Monday through Thursday and from 8:00 a.m. to 5:00 p.m. on Friday. Unique partnerships at the Niles Campus also allow the facility to be utilized by our local high schools and Berrien RESA from 9:00 a.m. until 2:00 p.m. Monday through Friday,

increasing the overall facility utilization. Investment in the facility will ensure that space continues to be available for area partnerships.

This project will improve the utilization of existing space at the Niles Campus through reconfiguration of classrooms and expansion of academic programming based on economic growth initiatives at the local, regional, and state levels. The transformation of traditional classroom space into program-specific, hands-on lab space with contemporary equipment, and updated traditional classroom instructional technology to serve the needs of face-to-face and remote students, will enable the College to attract more students from southwest Michigan to in-demand career fields in manufacturing and health care. Furthermore, relocation of administrative offices and student support services, and the addition of student collaboration spaces and expanded vending options, will support retention and recruitment strategies that are expected to improve overall facility utilization.

¹ A course delivery model that leverages instructional technology to allow students to attend each class session in person, remotely via Zoom, or watch recorded class sessions online.

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

Lake Michigan College has planned this project with sustainable efforts in architecture, engineering, planning, and interior design at the forefront to enhance efficiency and operations of the Niles Campus facility. The most critical aspect of energy efficiency will be the improvement of the building envelope. Operationally, the improved envelope will eliminate frequent emergency response efforts to address water leaks and air infiltration. New mechanical equipment will allow for greater energy efficiency, better indoor air quality, and reduced noise nuisance. Sustainable design practices will include such items as working closely with the architect to select high-quality, energy-efficient lighting for retrofitting current fixtures; utilizing daylight harvesting to reduce overhead lighting; coordinating lighting controls with operable window coverings to optimize lighting quality, minimize glare, and save energy; and specification of products with low VOC and renewable products. Any new equipment will have EnergyStar™ rating, when available. All new mechanical systems will be commissioned, as well as the building envelope work.

9. 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?

The College has match resources available for the proposed project. Match resources, totaling 52% of the total project costs, will come from the Lake Michigan College Foundation, cash reserves, and/or short- or long-term borrowing. The College has a non-voted legal debt margin available of approximately \$85 million (with an internally calculated debt capacity of approximately \$3.1 million), calculated after investing institutional support for renovations at its Benton Harbor Campus. The College's credit rating by Standard & Poor's is AA+. Resources from the College and its Foundation are available immediately and funds from borrowing could be available within 30-90 days of receiving official notification and the College completing necessary paperwork.

10. If authorized for construction, the state typically provides a maximum of 75% of the total costs 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?

LMC is committed to the match requirement if authorized for construction at our Niles Campus facility. Given the timing of the project, the College also intends to commit an additional \$450,000 for site improvements, reducing the State's share to only 48% of the project total.

11. 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.

The completed project will not increase operating costs. Updates to cooling and lighting systems will provide some operating efficiencies, but the majority of energy savings will be due to the improved building envelope. Energy savings will more than offset any new lab equipment operation costs. Additionally, we expect that enrollment growth will increase revenue.

12. What impact, if any, will the project have on tuition costs?

This project will have no impact on student costs. As indicated in our response to question 8, the College will fund the required match for this project with funds from the Foundation, cash reserves, and/or short-term or long-term borrowing. Additionally, it is expected that new in-demand academic programming and dual enrollment opportunities that will result from this project will lead to increased enrollment and additional revenue.

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

Lack of capital outlay funds will inhibit the College's capacity to expand hands-on academic programming in Advanced Manufacturing and Health Sciences education to support Michigan's talent enhancement, job creation, and economic growth initiatives and significantly compromise student access to local programs aligned with labor market needs. Consequently, students interested in training for in-demand careers may seek alternate postsecondary institutions in northern Indiana.

Additionally, the delay of proposed building repairs and deferred maintenance will continue to impact the health and safety of students, employees and visitors with regard to fire safety, ADA compliance, heating and cooling comfort, ventilation safety, and water issues caused by the existing poor building envelope conditions.

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

The Niles Campus is a one building facility and the College's only facility serving southern Berrien County. Project alternatives included new construction adjacent to the existing facility or replacing the existing building. The Niles Campus is located on a 13-acre site with capacity for at least one additional facility. However, based on enrollment and space utilization trends, the existing facility has been and continues to be a suitable size. The College completed a renovation to renovate existing space to create a new Phlebotomy and Medical Assisting classroom as the first phase of changes to meet in-demand academic programming needs in 2022. Additionally, the College invested \$1.7 million in 2013 to construct new Chemistry and Biology labs with associated prep spaces, renovated its Dental Assisting Lab, and constructed two 30-seat capacity classrooms to meet student needs and provide space for community events.

This year the facility condition index shifted to 0.39 as many of the moderate maintenance replacement needs moved into a critical nature. Despite the upgrades needed, the existing facility is structurally sound, and space can be retrofitted to meet future academic programming and student support needs. Investment in this existing facility is an appropriate sustainable and fiscally responsible strategy based on its suitable size and ideal location that will produce results every bit as effective as new construction.

Appendix G – Board of Trustee Approvals

Minutes – DRAFT UNTIL APPROVED AT NEXT SCHEDULED MEETING Lake Michigan College Board of Trustees Meeting October 27, 2022

FY '24 Capital Outlay Grant Proposal

In response to the State Budget Office invitation to participate in the capital outlay budget development process, colleges may elect to submit a capital outlay project request for state cost participation. Requests for state funding of capital outlay projects are to be a logical extension of information contained in the comprehensive Five-Year Capital Outlay Plan.

Overview

The College is proposing a capital outlay grant for renewal of the Niles Campus including:

- 1. Infrastructure improvements;
- 2. Renovate to support growing Health Sciences programs, specifically creating a new Certified Nurse Aide (CNA) classroom;
- 3. Renovate to support advanced manufacturing in engineering and mechatronics technology;
- 4. Better identify main building entrance and relocate administrative/student support offices to center of building;
- 5. Provide student collaboration space;
- 6. Site pavement improvements.

The Niles Campus facility was constructed in 1998. Based on the 2021 Facility Assessment and the comprehensive building envelope study in 2020, significant building elements need replacement because they are at or near the end of useful life. The scope of this project is to architecturally renovate 20% (34,283 square feet) of the existing facility, replace the metal roofing and siding systems with proper weather barrier, replace windows, update the mechanical systems and controls, including new chiller, and upgrade fire alarm, security and lighting systems throughout the building. Accessibility improvements to address ADA compliance identified in the Facility Assessment are also included. The interior architectural work focuses on spaces for learning, academic support, collaboration, and improved access to services, with the level of renovation varying depending on location, from infrastructure and finishes only, up to full interior reconfiguration.

The project total budget proposed in the capital outlay request is 10,600,000 8,600,000 and, if authorized, would require the College to fund 52% 50% of the project.

Approval of the submission to the State Budget Office does not bind the College; this request can be revised in the future.

ACTION:

We recommend that the Lake Michigan College Board of Trustees approve the submission of the FY24 Capital Outlay Grant Request, as proposed. amended with a total project cost of \$10,600,000 and a 52% match.

Minutes - DRAFT UNTIL APPROVED AT NEXT SCHEDULED MEETING

Lake Michigan College Board of Trustees Meeting October 27, 2022

MOTION:

By Mr. Brian Dissette with support from Ms. Vickie Burghdoff to approve the policy as presented

VOICE VOTE

In Favor:

ΑII

Opposed:

None

APPROVED

FY '24 STATE OF MICHIGAN SUBMISSION - FIVE-YEAR CAPITAL OUTLAY PLAN

Annually, the State of Michigan requires all community colleges to update their capital outlay plans and post them on their respective college websites. Complying with this request allows community colleges to request and receive capital outlay grant funding.

ACTION:

We recommend that the Lake Michigan College Board of Trustees approve the submission of the FY' 24 Five-Year Capital Outlay Plan, as proposed.

VOICE VOTE

MOTION:

By Ms. Joan Smith with support from Mr. Brian Dissette to approve the policy as presented

In Favor:

ΑII

Opposed:

None

APPROVED