



LAKE MICHIGAN[®]
C O L L E G E

FY 2023-2027 5-Yr Capital Plan

October 26, 2021

Contents

- I. Mission Statement..... 2
- II. Instructional Programming 4
- III. Staffing and Enrollment..... 11
- IV. Facility Assessment 16
- V. Implementation Plan 28

Appendix

- Registrar’s Official Program Major Listing..... A
- 2021 Facility Assessment Report B
- Notable Space Updates and Future Space Needs C
- Campus Master Plan D
- Information Technology Strategic Plan..... E
- FY 2023 Capital Project Request F
- Board of Trustee Approvals G

I. Mission Statement

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

Goals		
<p>Academic Excellence <i>Students are well-prepared to excel academically and professionally</i></p>	<p>Student Success <i>Our students explore, define, and reach their goals</i></p>	<p>Community Impact <i>Our educational and cultural experiences improve socioeconomic mobility, strengthen the economy, and enrich lives</i></p>
<p>Strategic Theme</p> <ul style="list-style-type: none"> Quality Programs/Curriculum Student Learning Culture/Environment for/of Learning 	<p>Strategic Theme</p> <ul style="list-style-type: none"> Access Inclusion Retention Student Support 	<p>Strategic Method</p> <ul style="list-style-type: none"> Outreach Communication Workforce/Talent Development Regional Community Enrichment
<p>Measures</p> <ul style="list-style-type: none"> Meeting employer needs Successful institutional transfer Instructional effectiveness 	<p>Measures</p> <ul style="list-style-type: none"> Persistence and retention Goal completion rate and duration Student satisfaction 	<p>Measures</p> <ul style="list-style-type: none"> 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 75 different academic programs, 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 Early College, 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).***

The College offers 52 programs of study at the Associate Degree level and 25 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 seven departments:

- Mathematics and Physical Education and Wellness
- Natural Sciences
- Rhetoric, Communication, and Foreign Languages
- Social Sciences, Humanities, and Education
- Visual and Performing Arts
- Wine and Viticulture Technology

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

- Advanced Manufacturing and Computer Information Systems
- Business, Culinary, and Hospitality

The Health Sciences Education Division is comprised of four departments:

- Allied Health
- Dental Assisting
- Medical Imaging
- Nursing

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:

Academic Program	Requires Structural Needs	Distance Learning Component Included
Brewing	X	X
Cyber Security	X	X
Drone Piloting	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	X	X

B. Unique characteristics of each institution’s academic mission

- 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 154,3166 and a workforce of 94,595. 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 a Director, 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 2021 unduplicated headcount, including Early College students is 3,326.

- In addition, the College has extended its programming to serve Allegan County, at their request. Through the Allegan Tech 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. Planned initiatives which may impact facilities usage

Three recent initiatives are having a major impact on use of College facilities and property. The initiatives include:

- Renovation and Upgrade of the Benton Harbor Main Building (Napier Academic), completed August 2020.
- Renovation and upgrade of the Hanson Theatre, primarily used to support student productions, completed February 2019.
- Renovation and upgrade of the Grand Upton Hall in the Mendel Center, along with a complete upgrade of the Mendel Center's heating and cooling system and auxiliary energy improvements, completed August 2020.

Future programming at our Niles and South Haven campuses will require significant facility alterations. At the Niles campus, upgrades to teaching technology and the infrastructure to support that technology are needed. In addition, classrooms will be renovated to support new Career Technical Education (CTE) programs, including Advanced Manufacturing, several Allied Health programs, and a non-credit Truck Driving program. Similarly, instructional technology at the South Haven campus will

be upgraded and classrooms renovated. Initiatives will include updating the science lab and renovating classrooms to support new programs in Brewing, Physical Therapy Assistant, 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. Programs currently being considered include Public Health, Respiratory Therapy, and Sterile Processor Technician.

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, and STEM fields are critically needed to expand the economic base of southwest Michigan.

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 2021 census unduplicated headcount				
Major	Full-Time	Part-Time	Summary	Campus
Accounting	23	50	73	BH, N, SH
Applications Development	14	25	39	BH, N, SH
Applied Science - General	13	39	52	BH, N, SH
Art	11	22	33	BH
Assoc in General Studies	83	132	215	BH, N, SH
Automation Engineering	1	1	2	BH
Biology	17	17	34	BH, N, SH
Business	75	141	216	BH, AT, N, SH
Business Administration	26	74	100	BH, N, SH
Casino Management	0	5	5	BH, O
Chemistry	2	6	8	BH, N, SH
Child Development	5	33	38	BH, N, SH
Cisco - Cert	3	1	4	BH, N, SH
Communications	4	4	8	BH, N, SH
Computer Science	1	1	2	BH, N, SH
Criminal Justice	29	34	63	BH
Culinary Management	7	17	24	BH
Dental Assisting	5	24	29	N
Dental Assisting - Cert	0	9	9	N
Diagnostic Medical Sonography	16	12	28	BH
Electrical Distribution	1	6	7	BH
Energy Production Technology	0	1	1	BH
Engineering Technology	6	17	23	BH
English	8	12	20	BH, N, SH
Foreign Language	2	1	3	BH, N, SH
General Education Transfer-Cert	1	0	1	BH, N, SH
General Technology	1	12	13	BH, N, SH
Geosp Info Sci & Tech Lev 1 CERT	1	13	14	BH, N, SH
Graphic Design	22	10	32	BH
Graphic Design - Level 1 CERT	1	2	3	BH

Health	0	4	4	BH, N, SH
Health Science	12	37	49	BH, N, SH
History	2	4	6	BH, N, SH
Hospitality Management	6	13	19	BH, N, SH
Humanities	1	0	1	BH, N, SH
Information Tech -Level 1 CERT	2	12	14	BH
Machine Tool - Level 1 CERT	2	11	13	BH
Machine Tool Technology	3	24	27	BH
Machine Tool Technology - Cert	0	8	8	BH
Manu Production - Level 1 CERT	0	1	1	BH
Mathematics	1	2	3	BH, N, SH
Mechatronics Technology	6	9	15	BH
Medical Assisting	10	20	30	BH
Medical Assisting - Cert	1	6	7	BH
Music	13	11	24	BH
Networking	11	17	28	BH, N, SH
Nursing-RN	2	110	112	BH
Personal Interest	9	341	350	BH, N, SH
Pharmacy Technician	0	6	6	BH
Pharmacy Technician - Cert	1	4	5	BH
Philosophy	0	1	1	BH, N, SH
Phlebotomy Tech-Level 1 CERT	2	20	22	BH, N, SH
Physical Education & Wellness	11	7	18	BH, N, SH
Physical Science	5	1	6	BH, N, SH
Physics	2	1	3	BH, N, SH
Political Science	5	4	9	BH, N, SH
Pre-Diagnostic Medical Sonography	13	60	73	BH
Pre-Engineering	21	21	42	BH
Pre-Nursing (Registered)	44	226	270	BH
Pre-Radiologic Technology	15	45	60	BH
Psychology	30	47	77	BH, N, SH
Radiological Technology	25	15	40	BH
Skilled Trades Technology	0	46	46	BH
Skilled Trades Technology-Cert	0	4	4	BH
Small Business Mgmt-Level 1 CERT	1	1	2	BH, N, SH
Sociology/Pre-Social Work	18	34	52	BH, N, SH
Teacher Education	20	32	52	BH, N, SH
Theatre	5	3	8	BH
Undecided (Arts - Transfer)	90	132	222	BH, N, SH
Undecided (Science - Transfer)	40	62	102	BH, N, SH
Web Development - Level 1 CERT	0	6	6	BH, N, SH
Welding Prod Tech-Level 1 CERT	0	10	10	BH
Welding Production Technology	8	18	26	BH

Wine & Viticulture Technology	8	20	28	BH, AT
Summary	823	2,177	3,000	BH
BH = Benton Harbor; AT = Allegan Tech; N = Niles; O = Other; SH=South Haven				

Innovative and Flexible Instructional Delivery

Lake Michigan College offers courses using a variety of delivery methods to meet the unique needs of our students.

Face-to-Face

Students attend scheduled class sessions in person. Programs and disciplines requiring in-person, hands-on learning include Advanced Manufacturing, Culinary, Criminal Justice, Health Sciences, Natural Sciences, Networking, Visual and Performing Arts, and Wine and Viticulture Technology.

Flexible Learning Environment (FLE)

Students can choose to attend each scheduled class session in person, remotely via Zoom, or watch recorded class sessions online.

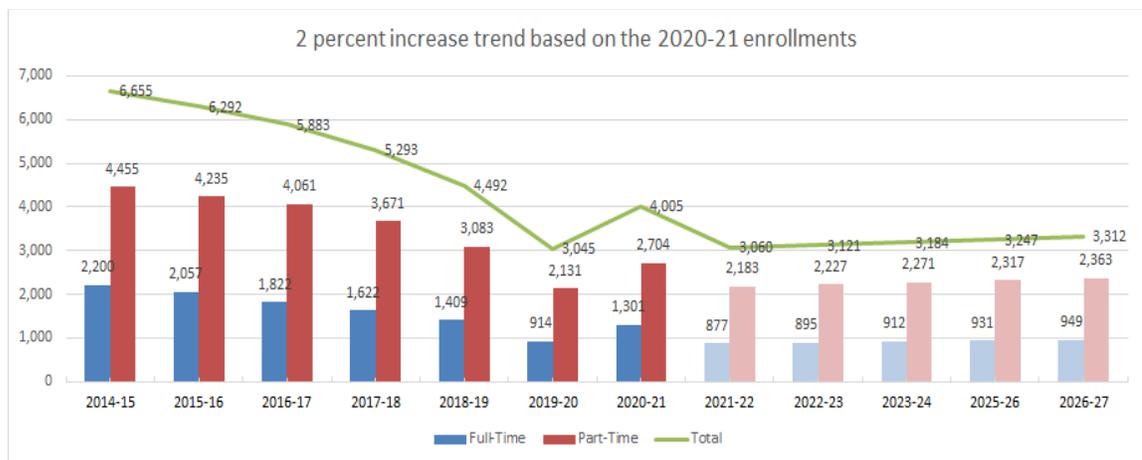
Online

Students complete the course entirely online with no scheduled class sessions required.

Remote

Students attend scheduled class sessions remotely via Zoom.

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



Projection of enrollment patterns over the next five years – 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 flat. 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.

C. 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. We are now seeing growth with a 27% increase to an unduplicated head count of 3,326 for Fall 2021. Additional in-person offerings, new programs and the Futures for Frontliners program both support higher enrollments.

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 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

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

Unduplicated headcount for Fall 2021 is 3,326. There are 406 full and part-time employees at the College including 55 full-time and 140 part-time faculty, 35 administrators, 70 technical/professional staff, 15 full-time classified staff, 19 (12 FT / 7 PT) facilities personnel, 34 part-time staff (non-faculty), and 39 student workers.

The ratio of full-time students to full-time teaching faculty is 15:1.

The ratio of full-time students to full-time administrative staff is 17:1.

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. Due to the physical changes to the College, including new buildings and associated grounds care, (3) additional Facilities Staff FTEs are anticipated. To support growing programs, (3) additional full-time Faculty FTEs are also anticipated.

F. Identify 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. The current average class size is 15. Planned programming changes are not expected to significantly impact average class size.

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 results indicate that Lake Michigan College facilities overall are in good condition with an overall facility condition index (FCI) of .02, 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 low FCI values.

Table 1: Facility Condition Index Summary

Facility Name	Year Constructed	Size (square feet)	Capital Replacement Value	2022 Year Requirement Cost	Facility Condition Index
Beckwith Hall	2014	66,912	\$9,762,795	\$233,650	0.02
Niles*	1998	34,283	\$7,804,248	\$598,000	0.08
Hanson Tech. Ctr.	2016	42,275	\$10,930,973	\$61,700	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
South Haven*	2003	41,222	\$10,023,526	\$304,200	0.04
Todd Center	2002	43,400	\$11,843,081	\$108,548	0.01
Welch Center	2019	13,981	\$6,798,627	\$5,000	0.00
Total/Average		681,450	\$185,935,292	\$3,566,398	0.02

**2022 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 five years old, Hanson Technology Center and Welch Center. The oldest facility, the Main Building (Napier Academic) has currently been renovated 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 seven 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 0.08 would be considered in fair condition and is the focus of the College’s first priority project to address deferred maintenance and academic program needs.

The new comprehensive facility condition assessment has assisted the College to uncover other deferred needs for long term planning given our aging infrastructure and systems approach end of useful life. In addition, the written report included in the Appendix, the assessment included a robust web-based database of all deficiency

observations and equipment and system renewals. The College will use to the database to plan and budget work, organize 10-year capital outlay schedules, close-out corrections, and add new observations as needed.

Table 2: Five-Year Requirement Totals – Including Benton Harbor Campus Site

Facility Name	Requirement Year	
	2022	2023 - 2027
Beckwith Hall	\$233,650	\$425,000
Niles	\$598,000	\$3,651,550
Hanson Tech. Ctr.	\$61,700	\$102,000
Mendel Center	\$1,528,950	\$3,891,960
Main Building	\$726,350	\$2,790,810
South Haven	\$304,200	\$1,837,571
Todd Center	\$108,548	\$997,748
Welch Center	\$5,000	\$9,250
Benton Harbor Campus Site	\$172,200	\$2,257,000
Totals	\$3,738,598	\$15,962,889

Table 3: Requirement Priority by Facility and Site

Facility Name	Urgent (6mons - 1yr)	Critical (1yr)	Moderate (1-5yrs)	Low (5-10yrs)	Total
Beckwith Hall	\$7,700	\$225,950	\$425,000	\$13,500	\$672,150
Niles	\$66,500	\$531,500	\$3,651,550	\$36,200	\$4,285,750
Hanson Tech. Ctr.	\$5,000	\$56,700	\$102,000	\$10,500	\$174,200
Mendel Center	\$84,700	\$1,444,250	\$3,891,960	\$91,200	\$5,512,110
Main Building	\$110,250	\$616,100	\$2,790,810	\$1,843,000	\$5,360,160
South Haven	\$29,850	\$274,350	\$1,837,571	\$346,550	\$2,488,321
Todd Center	\$38,148	\$70,400	\$997,748	\$30,250	\$1,136,546
Welch Center	\$3,500	\$1,500	\$9,250	\$0	\$14,250
Benton Harbor Campus Site	\$86,500	\$85,700	\$2,257,000	\$2,362,200	\$4,791,400
Totals	\$432,148	\$3,306,450	\$15,962,889	\$4,733,400	\$24,434,887

The relative low amount of requirements deemed urgent and critical reflects the general good conditions of our well maintained facilities. This is countered by the higher amount of requirements considered moderate, 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 Building		Mendel Center ²⁾		Niles		Hanson Tech Center		South Haven		Beckwith 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	4,038	1.33					835	1.69	1,970	4.58			3,049	7.03		
Auditorium	10,088	3.33	5,235	3.77												
Biology	5,005	1.65			1,321	3.85										
Chemistry	3,903	1.29			1,539	4.49										
Classroom	52,121	17.19	2,286	1.65	12,811	37.37	4,298	8.71	14,273	33.18	1,756	2.78	15,471	35.65	1,259	9.01
Dining Hall	384	0.13														
Dormitory											48,724	77.08				
Garage	6,864	2.26														
Gymnasium	12,528	4.13														
Laboratory	14,595	4.81	478	0.34	3,204	9.35	20,236	41.02	7,323	17.02					4,191	29.98
Library	22,308	7.36	159	0.11												
Office	30,014	9.90	179	0.13	1,973	5.76	1,519	3.08	3,338	7.76			4,647	10.71	615	4.40
Science	3,252	1.07														
Service	33,630	11.09	131	0.09	2,254	6.57	916	1.86	2,112	4.91	1,548	2.45	3,885	8.95	1,500	10.73
Warehouse	6,488	2.14	272	0.20	370	1.08	-		4,519	10.50						

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

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

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

During the Main Building Renovation and Upgrade many programs were displaced to allow for the work to be completed. Now that the project has been completed, a new comprehensive utilization study is warranted for the Benton Harbor, Niles and South Haven Campuses, but will be on hold until we fully emerge from the COVID-19 pandemic.

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

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

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

- MAERB – Medical Assisting Education Review Board

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

Areas with space shortages, which have already been recently remedied by the 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 Science offerings at Niles will include updates to the dental lab and a renovated space for Medical Assisting and Phlebotomy. In the future, space for Certified Nurse Aide (CNA) programming is needed. There are also plans to renovate space to allow for advanced manufacturing programs. Renovation for both CNA and advanced manufacturing are included in the capital outlay request for fiscal year 2023. 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 2021 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	\$94,898,525	\$45,554,476	\$140,453,001
Mendel Center	\$37,235,666	\$2,751,712	\$39,987,378
Niles	\$7,804,248	\$1,669,280	\$9,473,528
Hanson Tech Center	\$10,930,973	\$1,655,484	\$12,586,457
South Haven	\$10,023,526	\$1,631,077	\$11,654,603
Beckwith Hall	\$9,762,795	\$925,374	\$10,688,169
Todd Center	\$11,843,081	\$891,415	\$12,734,496
Welch Center	\$6,798,627	\$260,100	\$7,058,727
Total	\$185,935,292	\$55,338,918	\$244,636,359

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

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

The Niles at Bertrand Crossing Campus was constructed in 1998. 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. Much of the 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.

The South Haven Campus was constructed 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. Most 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 planned for replacement in phases starting within the next five years.

The Hanson Technology Center was opened for classes in September 2016 and continues to operate reliably. Changes in machine laboratories required increased ventilation requirements which were added in May 2019. The building mechanical system is working well. The main mechanical issue is the multi-stack chiller, whose compressors are requiring 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 targeted for replacement 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. The sole exceptions are two small vehicular bridges and a large pedestrian

bridge, all located at the Benton Harbor Campus.

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

The College's Main Building, Mendel Center, Hanson Technology Center, 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 life, and requires planned replacement. 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.

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

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

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

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 vehicular and pedestrian bridges located at the Benton Harbor Campus are original

construction. They are in fair to poor condition. A bridge study was conducted Spring 2020 to evaluate approaches for repair and/or reconstruction, and safer passage for pedestrians. Improvements have been designated for future routine maintenance work.

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

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.

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.

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

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

In June 2018, the College purchased the Western Michigan University Southwest building, now named the Todd Center for Business, Education and Computer Information Systems. This building is now fully occupied to serve these expanded and relocated programs, allowing growth in our Main Building. As academic programs evolve in the next five years, there is special attention needed on the overall electrical capacity for the Todd Center building.

In 2020, an energy upgrade project replaced the heating and cooling plant for the Mendel

Center. However, end of life mechanical systems at the Mendel Center will need to be addressed to support the continued growth in Visual and Performing Arts program.

The changes on the Benton Harbor Campus have required the College to address the new pedestrian and vehicular patterns associated with the larger campus environment. In conjunction with the improvements made at our Benton Harbor Campus over the 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 has 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. An exterior pedestrian campus map at the Main building entry provides new overview of all of the Benton Harbor Campus. Additional phases of exterior signage upgrades are planned. 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 will also be upgraded in the Main building in late 2021.

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

We have completed several energy audits over the last ten years with a variety of firms and consultants including Honeywell Energy Services, 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 upgrading the Todd Center controls to bring onto our standard building automation system platform and perform retro-commissioning. 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. Ultimately, we would like to have all buildings have similar level of controls 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	Michigan	Benton Harbor Campus	263.00 acres
1905 Foundation Drive	Niles	Michigan	Niles at Bertrand Crossing	12.99 acres
125 Veterans Blvd.	South Haven	Michigan	South Haven Campus	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	Michigan	<i>none</i>	2.06 acres

1486 Yore Avenue	Benton Harbor	Michigan	<i>none</i>	2.06 acres
1508 Yore Avenue	Benton Harbor	Michigan	<i>none</i>	1.98 acres
2840 Territorial	Benton Harbor	Michigan	<i>none</i>	23.80 acres
321 Vernon Road	Benton Harbor	Michigan	<i>None</i>	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?

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

Lake Michigan College has submitted a request to renovate and upgrade the 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% (34,283 square feet) of the existing facility, 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 project total budget is \$8,600,000.

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 2023 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 \$19,701,487 deferred maintenance and capital projects. Of this backlog, we have only identified \$3,738,598

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 0.02, which is very good. Overall our facilities are in good condition and have been well maintained.

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. Similarly, an exterior envelope study was conducted at the Niles Campus building in 2020. There, a number of 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.

While newly constructed and generally operating without major issue, the Hanson Technology Center humidity control within the building has been challenging. Excessive humidity has caused machine equipment to have increased maintenance due to rust formation. A study in 2018 identified some immediate changes to improve humidity, but more costly equipment changes were identified as future potential projects.

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 stair towers, upgrade site and emergency exit lighting, install new security cameras, and repair to sidewalks and pavement. In the next year, new guard railing at the green roof plaza at our Main building will be completed.

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.

Facility	Project Status
South Haven Campus	Complete and operational
Todd Center (Newly 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 will be conducted in 2021.

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 will be conducted in 2021.

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.

The College will continue smaller energy projects, including LED lighting upgrades and installation of higher efficiency equipment, as possible and partner with local utilities for rebate opportunities.

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

The College has recently upgraded teaching technology in classrooms at all three campuses to support flexible and distance learning. However, 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
- 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 2023 through fiscal year 2027.

Project Description	Estimated Cost	Implementation Year
Mendel Center - Exterior Upgrades	\$1,80,0000	FY23-24
Mendel Center – HVAC Upgrades	\$1,680,000	FY23-24
Replace Mendel Center Parking Lot 3	\$1,189,000	FY23

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 2020-21

10-13-21

Associate Degrees

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

Associate in Arts

3. Art
4. Communication
5. English
6. Foreign 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. Dental Assisting
27. Diagnostic Medical Sonography
28. Electrical Distribution
29. Engineering Technology
30. General Technology
31. Hospitality Management

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

Associate in Science

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

Advanced Certificate

1. Casino Management – Four Winds
2. Child Development
3. Cisco
4. Dental Assisting
5. 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. Geospatial Information Science
and Technology
13. Graphic Design
14. Information Technology
15. Machine Tool
16. Manufacturing Production
17. Mechatronics Technology
18. Phlebotomy Technician
19. Risk Management & Insurance
20. Sales & Customer Service
21. Small Business Management
22. Spanish Certification
23. Supervisory Skills
24. Web Development
25. Welding Technology

Totals Reported to HLC:

Associates 52

Certificates 25

Appendix B – 2021 Facilities Condition Assessment

Table of Contents

SUMMARY	2
General Description	
Assessment Approach	
Best Practices	
• Accessibility	
• Asset Renewal	
• Hazardous Materials	
Asset Renewal	
Facility Condition Index	
GENERAL OBSERVATIONS AND RECOMMENDATIONS	5
Benton Harbor Campus	
• Site	
• Welch Wine Center	
• Hanson Technology Center	
• Beckwith Hall	
• Todd Center	
• Mendel Center	
• Main Building	
Niles Campus	
South Haven Campus	
PROJECTED EXPENDITURES	16
APPENDIX	17
Site Plan	
Building Floor Plans	

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	
<i>High traffic areas (corridors, etc.)</i>	<i>5 years</i>
<i>Lower traffic areas</i>	<i>10 years</i>
Caulking	5 years
Acoustical Ceiling Tile	30 years
Ceramic Tile	50 years
Carpet	
<i>High traffic areas (corridors, etc.)</i>	<i>5-10 years</i>
<i>Lower traffic areas</i>	<i>10-15 years</i>

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.

Building	Year Constructed	Size (sf)	Capital Replacement Value	2022 Requirement 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.

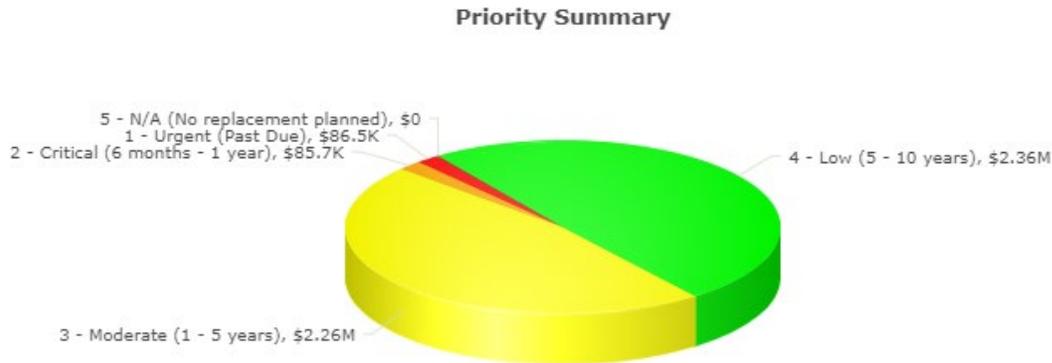


Figure 1 – Cost of Improvements by Priority

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.

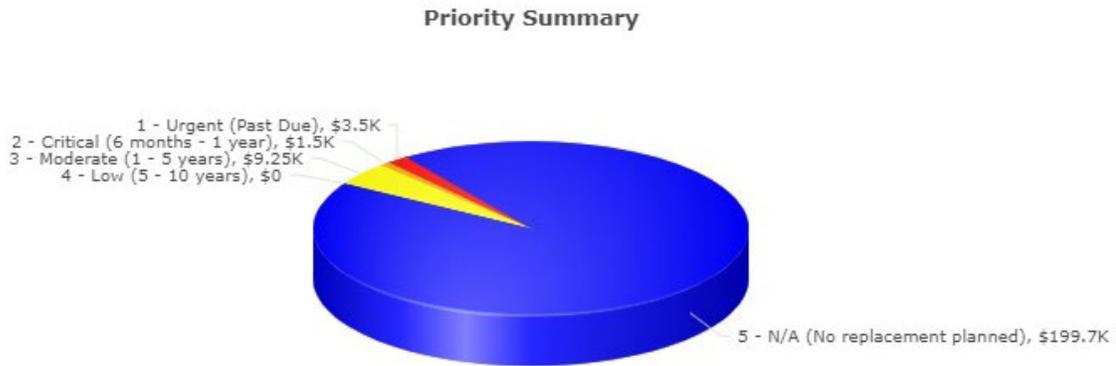


Figure 2 – Cost of Improvements by Priority

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.

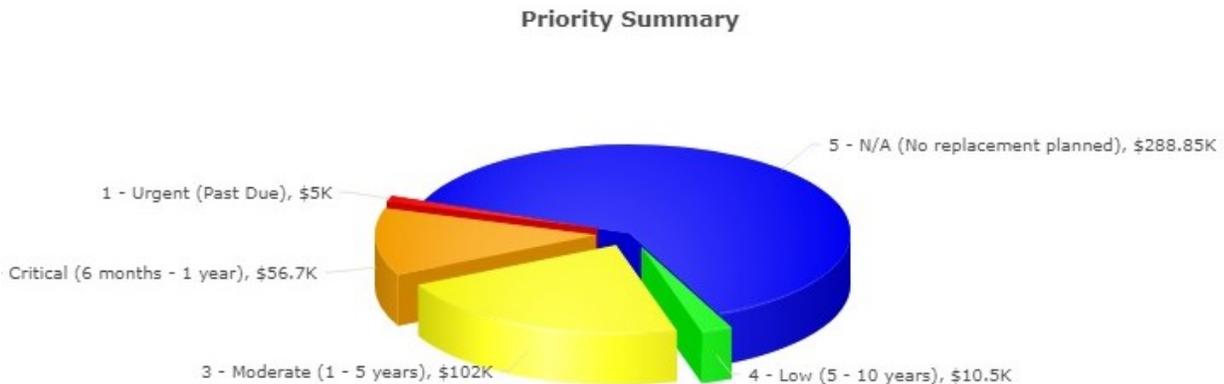


Figure 3 – Cost of Improvements by Priority

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.

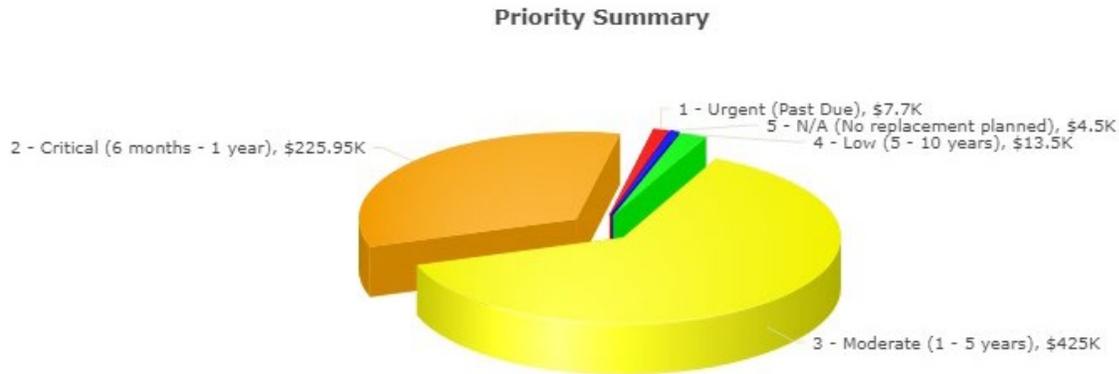


Figure 4 – Cost Improvements by Priority

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.

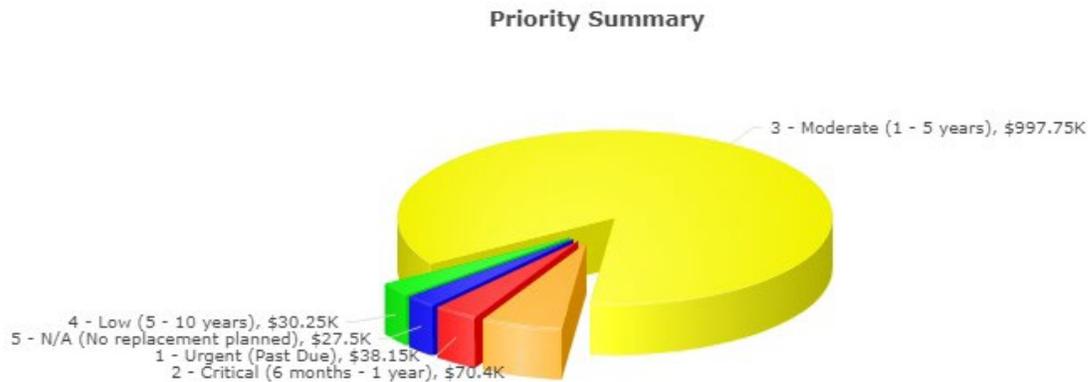


Figure 5 – Cost of Improvements by Priority

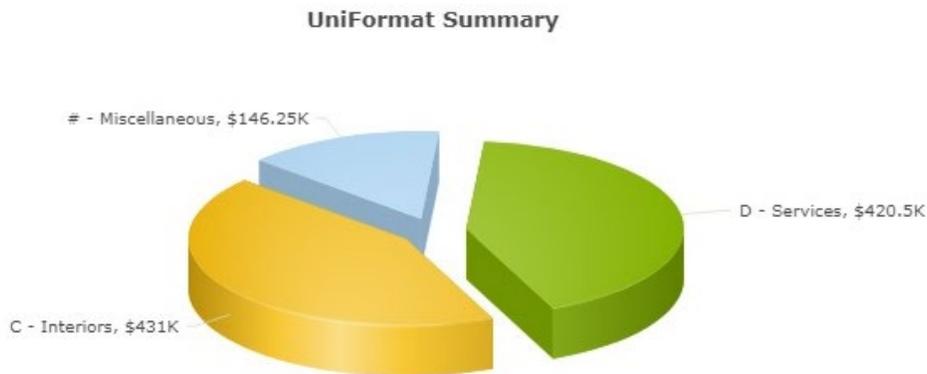


Figure 6 – UniFormat Summary of Moderate Replacement items

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.

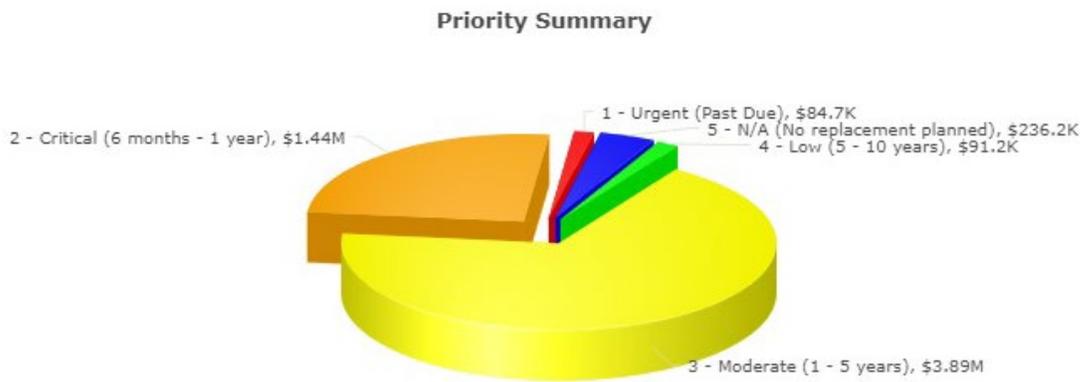


Figure 7 – Priority Cost Improvements

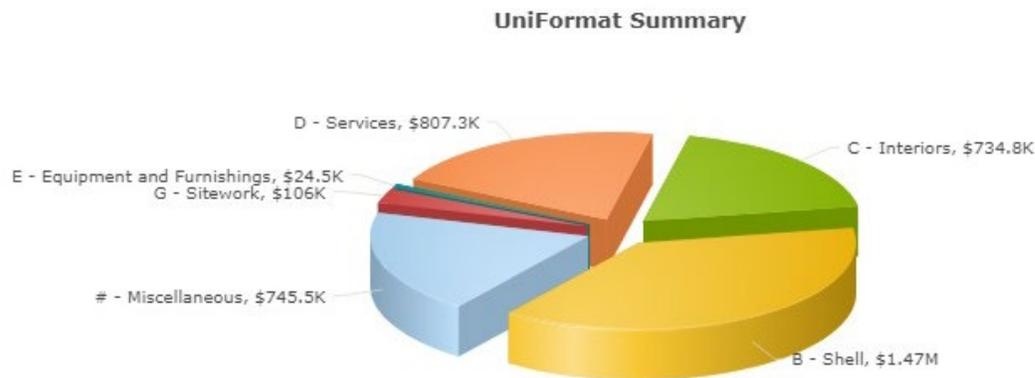


Figure 8 – Improvements Required in 1 to 5 years

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.

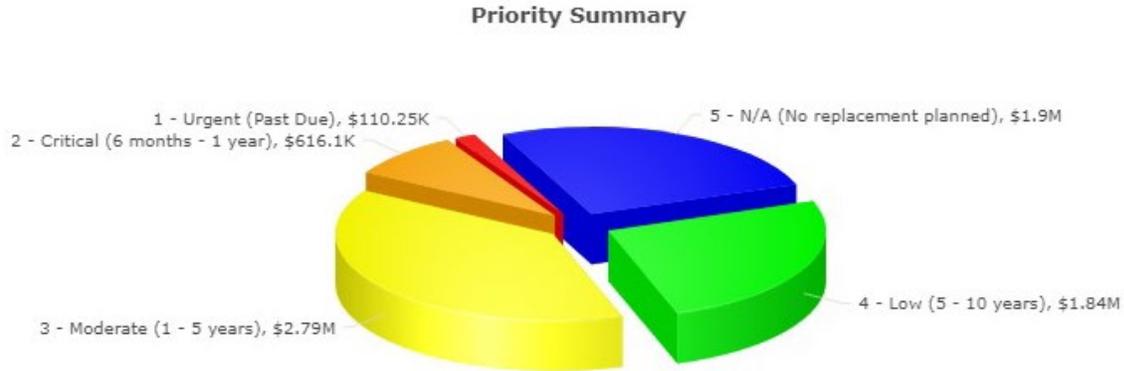


Figure 9 – Main Building Improvement Cost by Priority

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.

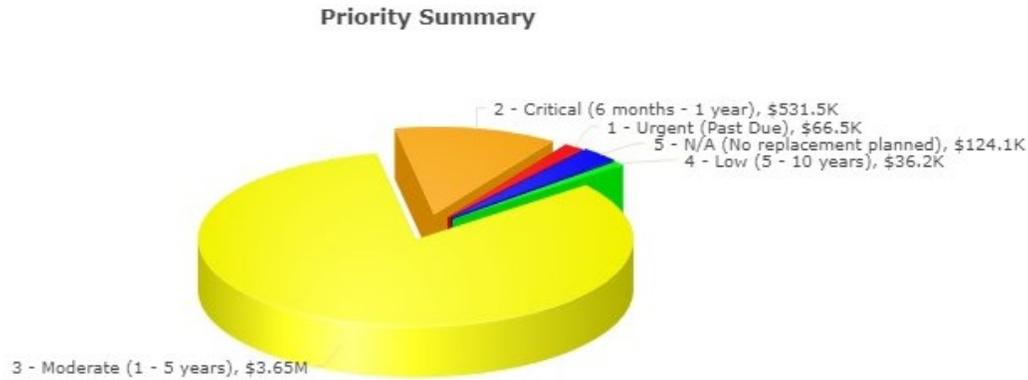


Figure 10 – Cost of Improvements by Priority



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, 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.

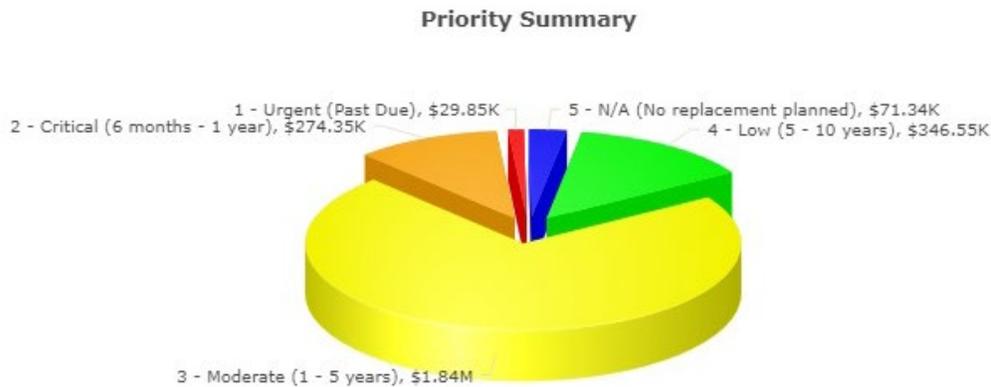


Figure 12 – Cost of Improvements by Priority

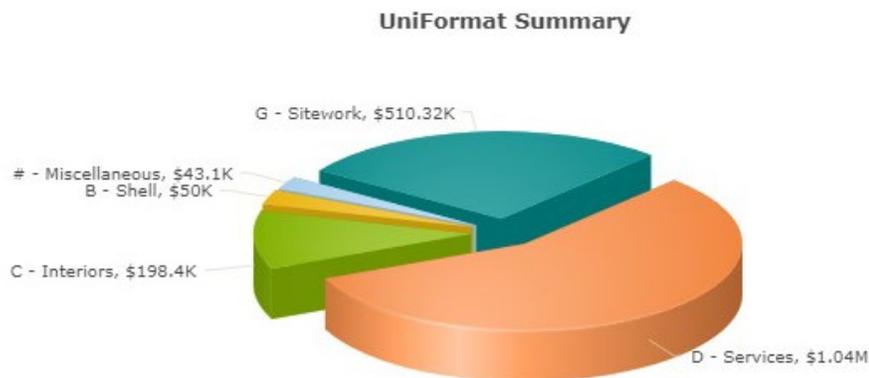


Figure 13 – Moderate Priority Recommendations

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.

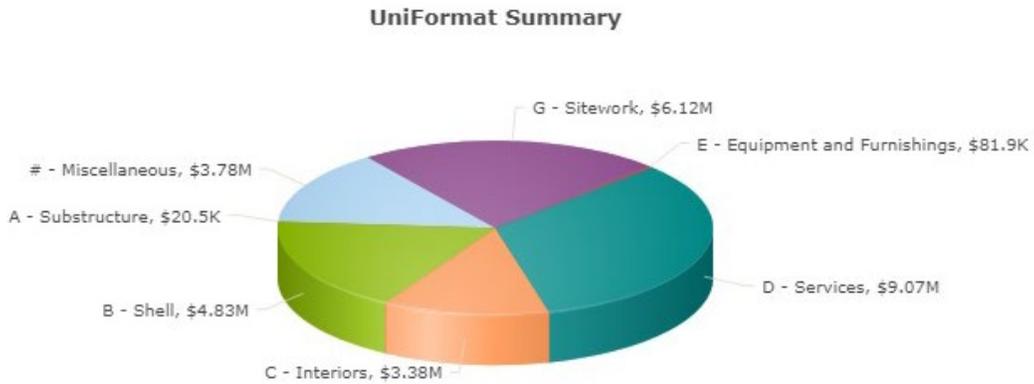
While employees are responsible for complying with safety-related work practices and procedures provided by the employer, arc flash labeling is the responsibility of the employer. In order to comply with the label requirement of NFPA 70E, labeling is required for any piece of electrical equipment that 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



Appendix

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.
- 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.

- Relocated faculty offices to be adjacent to student learning support spaces.
- Co-located all health sciences disciplines into one central zone of C-Wing.
- Right-sized classrooms for effective instruction using updated instructional technology.
- 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.
- 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 new 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 new 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.
- Constructed new Phlebotomy Lab to meet community needs.

South Haven Campus

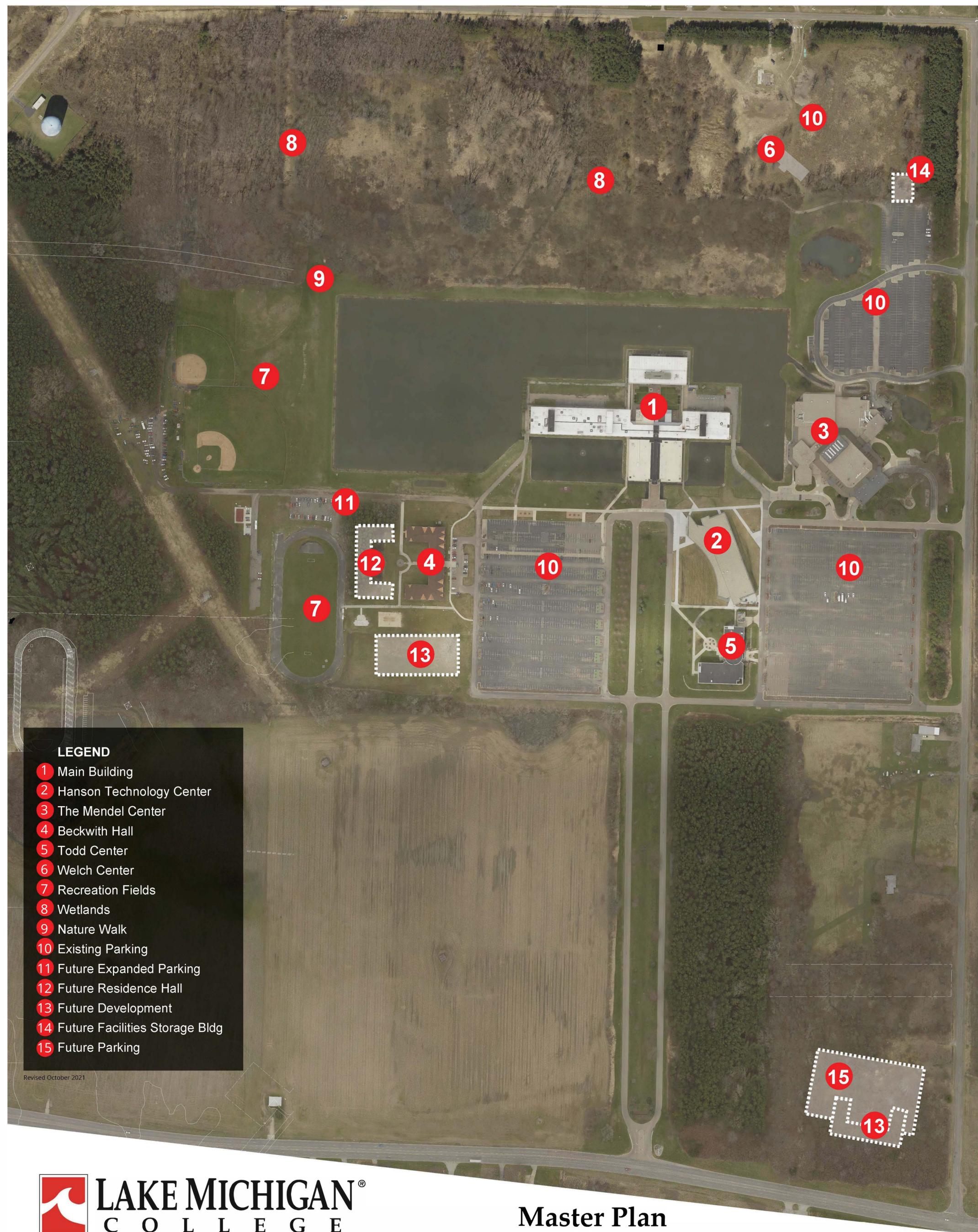
- South Haven Public Schools – entered into partnership with local K-12 district for dual enrollment classes to be offered on South Haven Campus.
- Renovated space to provide a Certified Nursing Assistant (CNA) and Phlebotomy lab to allow program expansion to meet community needs.
- Renovated Biology 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:

- Renovation of existing space at the Niles Campus to support Advanced Manufacturing, Certified Nursing Assistant (CNA), Phlebotomy, and Medical Assisting
- Upgrading the Dental Assisting Lab at the Niles Campus.
- Expansion of Career and Workforce Education programs, particularly in advanced manufacturing and health sciences education.
- 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. New programs under consideration include Physical Therapy Assistant, Drone Piloting, and Craft Brewing.
- Renovation of the existing Benton Harbor space to expand health sciences program opportunities.
- Support partnerships with local K-12 district for dual enrollment classes to be offered on Benton Harbor Campus.

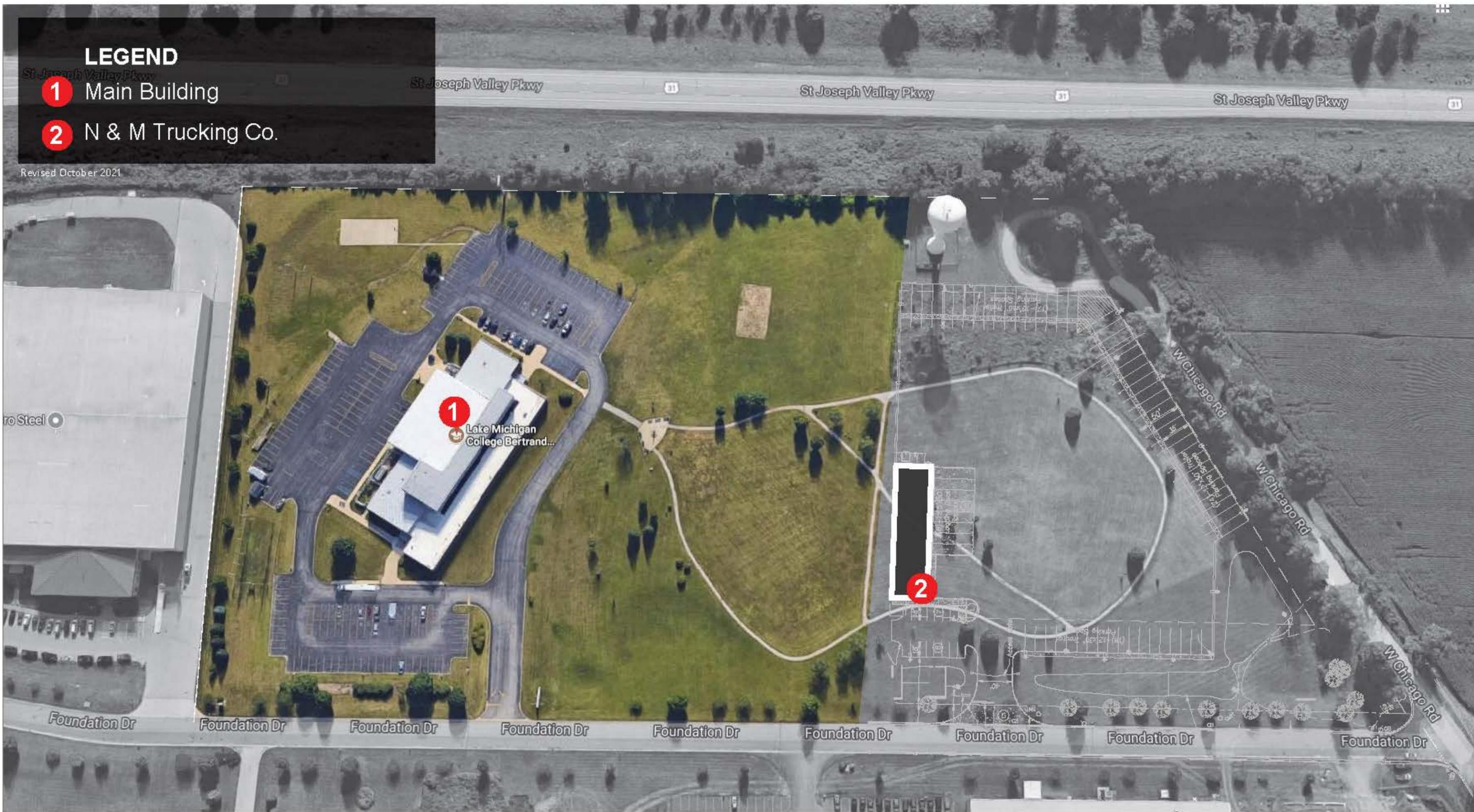
Appendix D – Campus Master Plans



LEGEND

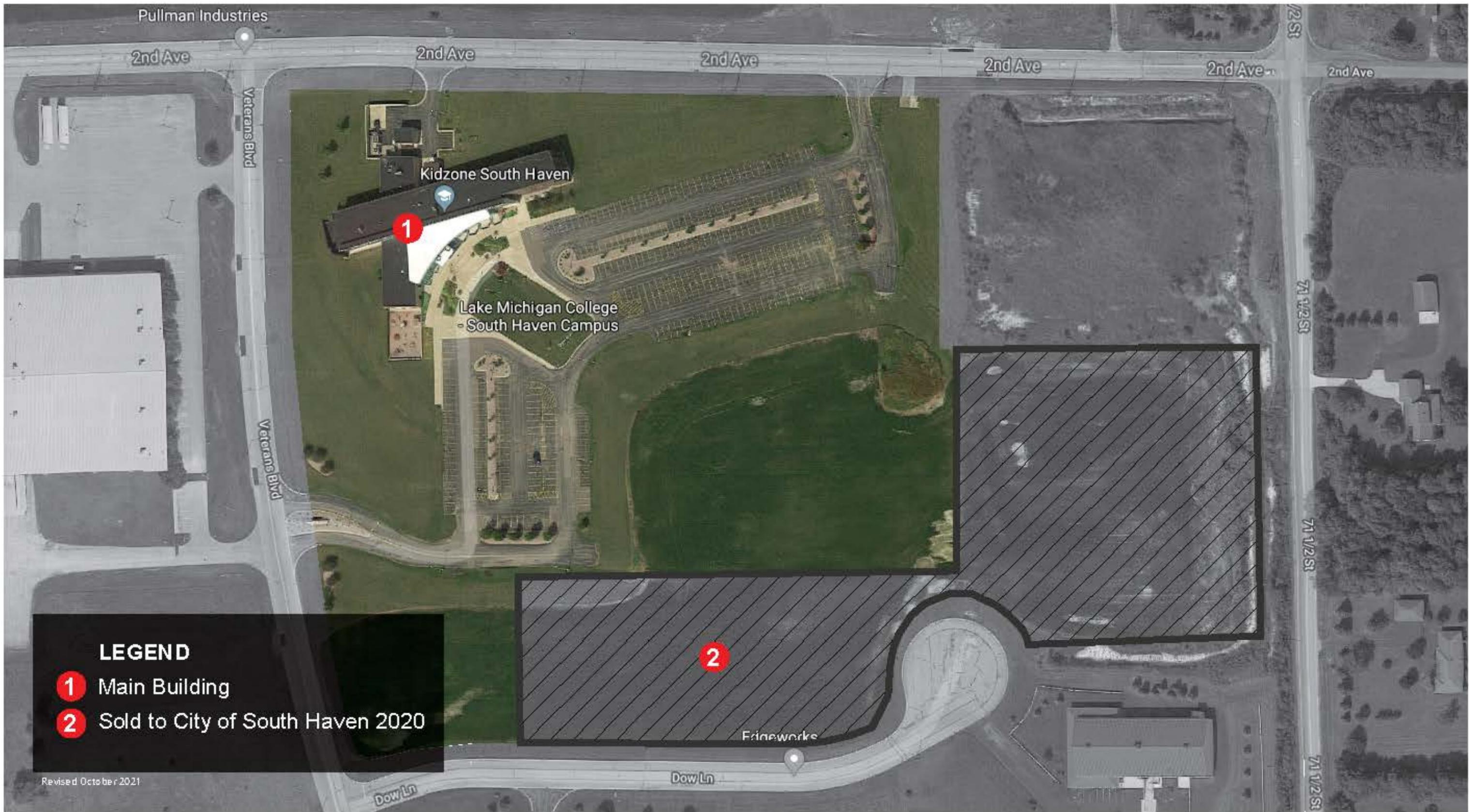
- 1 Main Building
- 2 Hanson Technology Center
- 3 The Mendel Center
- 4 Beckwith Hall
- 5 Todd Center
- 6 Welch Center
- 7 Recreation Fields
- 8 Wetlands
- 9 Nature Walk
- 10 Existing Parking
- 11 Future Expanded Parking
- 12 Future Residence Hall
- 13 Future Development
- 14 Future Facilities Storage Bldg
- 15 Future Parking

Revised October 2021



Niles at Bertrand Crossing Campus Master Plan





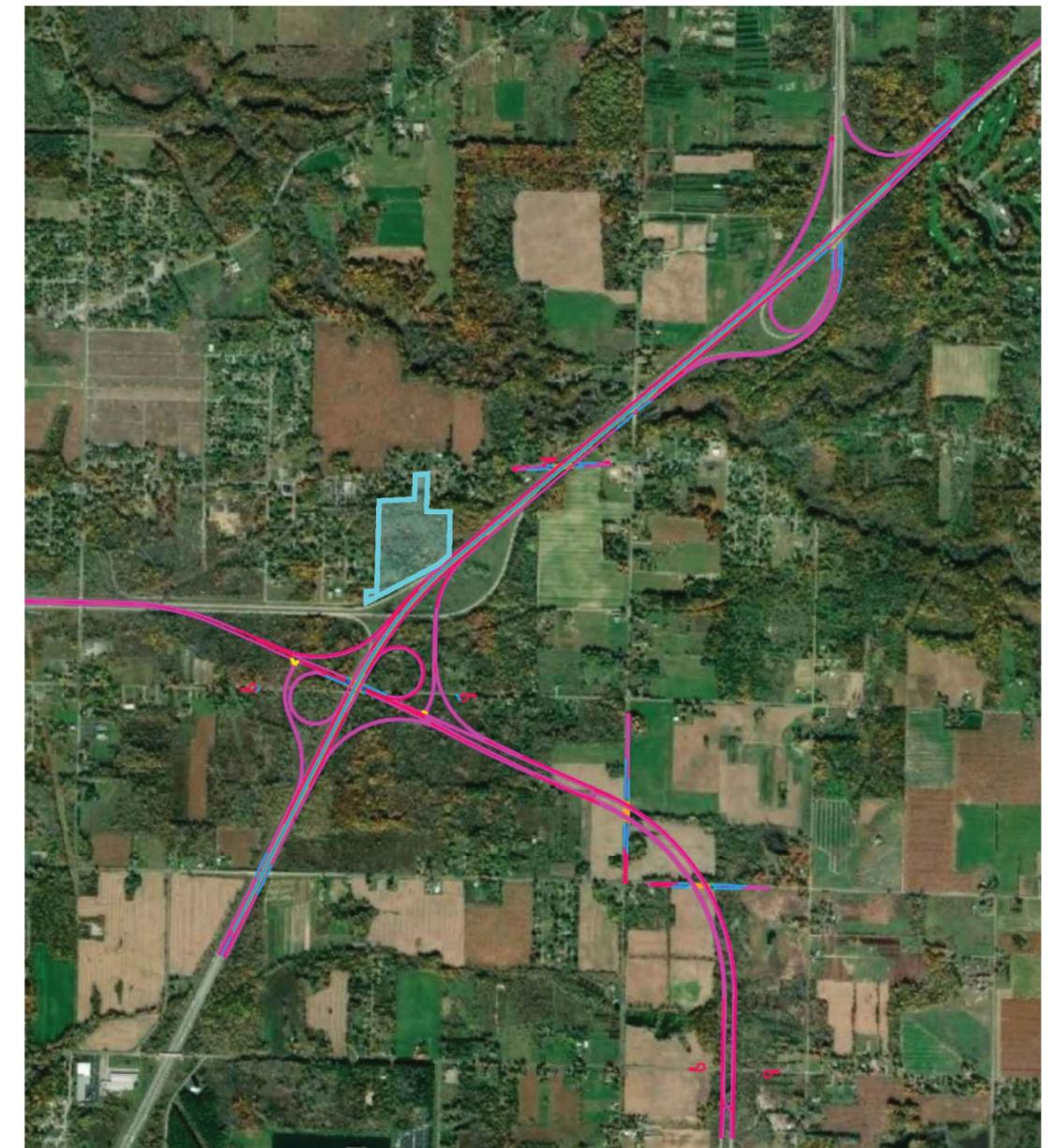
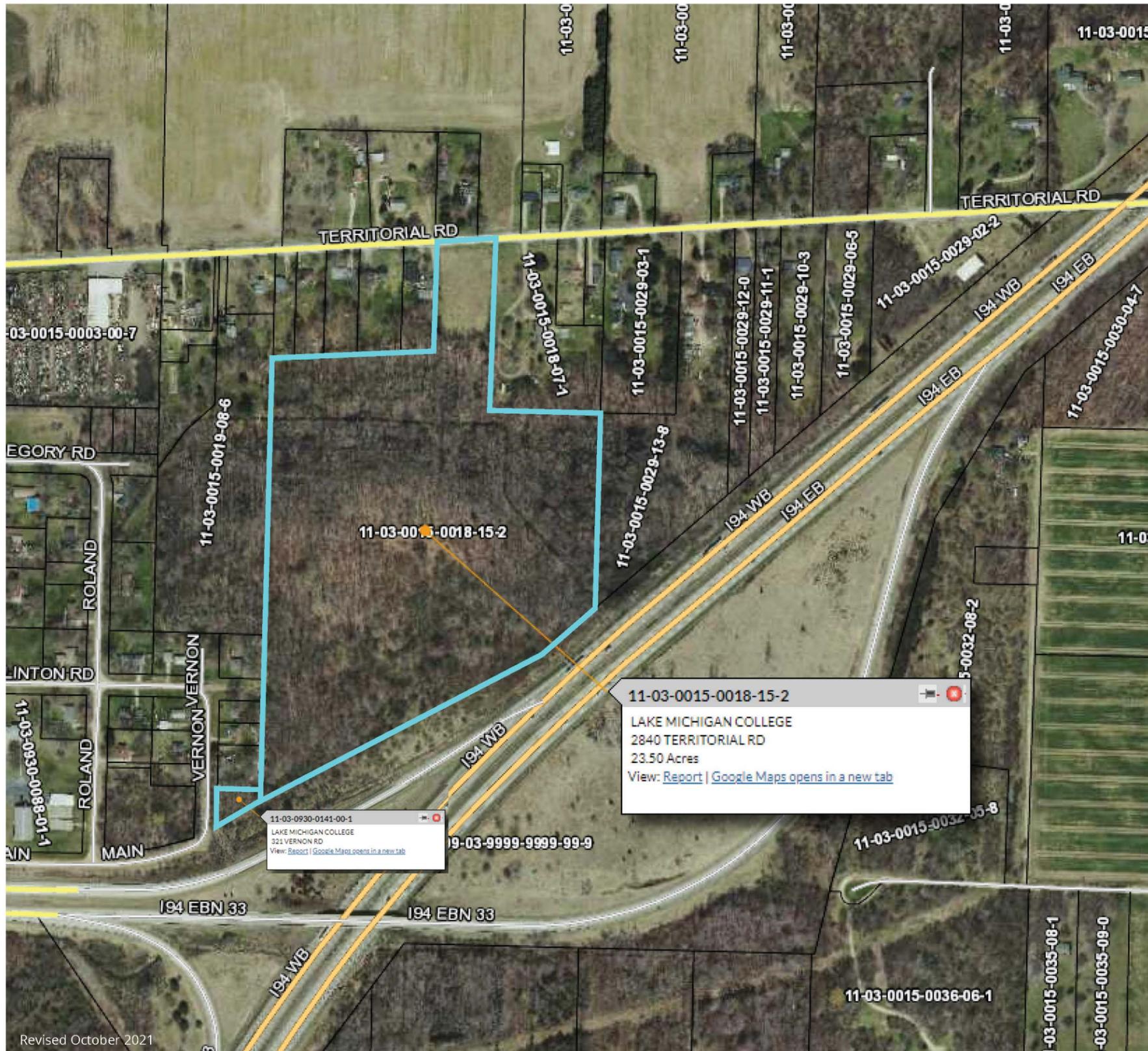
LEGEND

- 1** Main Building
- 2** Sold to City of South Haven 2020

Revised October 2021

South Haven Campus Master Plan





Future Bi-Pass

2840 Territorial Rd & 321 Vernon Rd



Appendix E – Information Technology Strategic Plan



Information Technologies Strategic Plan 2023-2027



October 15, 2021

Table of Contents

Introduction 3
Mission of IT 3
Primary Service Objectives..... 3
IT Risk Management & Security 4
FY22 Accomplishments..... 5
IT Mission and Strategy Roadmap 6
Conclusion 7

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 accountable and cost-effective.

Mission of IT

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

Primary Service Objectives

In addition to support of hardware, software, and other technology services, IT has three primary service objectives as it provides services and solutions for the College based upon the College-Wide Goals of academic excellence, student success, and community impact.

- The first objective targets the focus on IT leadership and the need to implement the strategic plan and become collaborative to gain input from the academic and administrative representation within the College to ensure the needs of the students, staff/faculty, and community are met
- The second objective is a progressive focus on improving the integration of the ITIL guiding principles to better service the LMC community through project management
- The third focuses on the strategic execution of technology to evaluate all current customer and third-party apps to remove duplication of capabilities and implement new technologies with the guidance of IT governance and change controls that follow the ITIL Framework to promote academic excellence, student success and create a positive community impact.

#1 IT Leadership

IT leadership's transition throughout the fiscal year will focus on governance, planning, communication, and transparency. In FY23, IT will transition from a dual leadership model to a single-leadership model. Below are the critical areas of leadership focus

- Continue improving Technology Governance where proposals are documented & shared; priorities are weighed against the College strategic plan & collaborative input from academic & administrative representatives via IT Governance (e.g., software

- purchase requests)
- Continue to improve ERP components and strengthen use within the College
 - Continue to maintain a culture of short, medium & long-range technology planning, including multi-year project plans with funding
 - Consistently align IT with the Lake Michigan College strategic goals & objectives
 - Create a comprehensive Technology Communication Plan including maintenance periods, software upgrade schedule/testing plan, etc.
 - Integrate ERP, Service, and Operations into a single team unit
 - Continue to create a technology project roadmap

#2 Scrum Integration

Scrum is a framework for developing, delivering, and sustaining products in a complex environment, with an initial emphasis on software development, although it has been used in other fields, including research, sales, marketing, and advanced technologies.

- Delivering maximum value to customers
- Optimizing resources and capabilities
- Offering services that are useful and reliable
- Planning processes with specific goals in mind
- Gathering project requirements

#3 Disaster Recovery Plan

Disaster Recovery involves a set of policies, tools, and procedures to enable the recovery or continuation of vital technology infrastructure and systems following a natural or human-induced disaster. IT must partner with key organizations within the College to manage alerts, communication, reporting, and other disaster recovery components. Development of the disaster recovery plan focuses on issues that might occur and provides timely communication during the research and resolution process.

- Create a disaster recovery team
- Identify and assess disaster risks
- Determine critical applications, documents, resources
- Specify backup and off-site storage procedures
- Test and maintain the DRP; tabletop exercises

IT Risk Management & Security

As the IT department improves technology execution and Banner optimization, 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 such 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
- 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.

- Implemented new employee dashboard for staff and faculty
- Implemented a new student dashboard for students
- Installed new Teaching hardware, including touchscreen short-throw projectors in multiple classrooms
- Upgraded KVM
- Gained approval for updated Acceptable Use Policy
- Replaced Pearson Servers
- Replaced EOL Non-video phones
- Replaced EOL access points
- Replaced EOL server room AC units
- Upgrade File Servers
- Update PCs to Windows 20H2
- Replaced End of life hardware
- Replaced Core Switches
- Replaced multiple closet switches
- Installed Housing solutions software for Beckwith Hall
- Installed package locker system at Beckwith Hall
- Implemented TargetX admission CRM
- Passed multiple new project initiatives through the IT Governance program
 - Coursedog
 - Ellucian Talent Management
 - Titanium
 - Electronic Time and Effort
 - DegreeWorks SEP
- Gained approval for new fiber connectivity to increase redundancy and bandwidth
- Increased security cameras to over 560 across all campuses and buildings
- Implemented log correlation software
- Integrated email forensics software
- Procured MFA software
- Worked collaboratively to prepare all staff and faculty to work remotely during COVID-19 stay-at-home orders

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

- Integrate Scrum into project planning
- Develop an ERP plan
- Software inventory documentation plan
- Data Security Incident Response Plan
- Continue ITIL Adoption
- Copier Fleet Replacement RFP
- End of Life Hardware
- Upgrade Data Center Routers
- Increase of Bandwidth and Redundancy for AWS Cloud
- Two-Factor Authentication
- Migrate 20% of remaining On-Prem Servers to AWS
- Files Services Migration
- Domain Controller Upgrades
- Continue for Cloud-First Strategy
- Reduce Physical Servers by 12%

FY24 Major Initiatives

- Increase ITIL Maturity
- Enhance ITSM Solutions
- Align Project & Portfolio Management with IT Governance
- EOL PC replacements (5 yr cycle)
- EOL AP replacements (5 yr cycle)
- Cloud-First Strategy: Migrate 20% of remaining on Premise Servers to AWS
- Plan onsite virtualization and storage infrastructure Replacement
- Reduce Physical Servers by 13%
-

FY25 Major Initiatives

- Plan for End-of-Life Hardware Replacements
- EOL PC replacements (5 yr cycle)
- Review EOL Data Projector replacements (5 yr cycle)
- Cloud-First Strategy: Migrate 20 of remaining on-Premise Servers to AWS
- Replace On-premise Virtualization and Storage Infrastructure

FY26 Major Initiatives

- Plan for End-of-Life Hardware Replacements
- Top of Rack switch replacement
- EOL PC Replacements

FY27 Major Initiatives

- Plan for EOL hardware replacements
- Review/replace EOL Core switches
- Review EOL closet switches

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 and 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 2023 Capital Project Request

**FISCAL YEAR 2023
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: \$8,600,000
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 Engineering Technology, Machine Tool, and Mechatronics Technology equipment and programming. Facility renovations will 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 envelope, rebuilding entry ways to improve insulation, replacing windows at their end-of-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.

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 support existing programming and make expanded programming in Advanced Manufacturing and Health Sciences education possible. These programs provide educational pathways to numerous occupations listed on *Michigan's Hot 50 Job Outlook*, the *Southwest Michigan Career Outlook*, and the *Southwest Michigan Job Demand Dashboard*, including CNC Machine Tool Programmers, Heavy and Tractor-Trailer Truck Drivers, Home Health Aides, Industrial Machinery Mechanics and Machinists, Medical Assistants, Nursing Assistants, and Personal Care Aides. Locally, our high school partners

have requested additional programming in Advanced Manufacturing and Health Sciences to expand early and middle college opportunities for students.

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.

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, hands-on 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 is up 18 percent. In Fall of 2021, classrooms on our Niles campus are used for credit courses from 8:00 a.m. to 9:30 p.m. on Mondays, Tuesdays, and Wednesdays; from 8 a.m. to 5 p.m. on Thursdays; and from 8:00 a.m. to 2:00 p.m. on Fridays. The Niles Campus is also currently utilized by our local high schools and ISD Monday through Friday from 9:00 a.m. until 2:00 p.m.

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 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.

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 50% 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?

Due to many competing priorities, LMC cannot commit to supporting the project with its own resources beyond what is typically required. LMC is, however, committed to the 50% match requirement if authorized for construction at our Niles Campus facility.

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 significantly impact operating costs. Updates to cooling and lighting systems should provide some operating efficiencies, which are anticipated to 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, 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 is planning 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. We anticipate this first phase to be completed by the Fall semester of 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.

With a facility condition index of .08, 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 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

FY '23 State Of Michigan Submission Five-Year Capital Outlay Plan

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

Lake Michigan College recently received a State of Michigan capital outlay grant for renovation of the College's Benton Harbor Campus Main Building.

Action

It was recommended that the Lake Michigan College Board of Trustees approve the submission of the FY' 23 Five-Year Capital Outlay Plan, as proposed.

Motion by Ms. Tomasini with support by Ms. Burghdoff to approve the submission of the FY' 23 Five-Year Capital Outlay Plan, as proposed.

Roll Call Vote

Yeas: John Grover, Joan Smith, Mary Jo Tomasini,
Vicki Burghdoff

Nays: None

Absent: Jeff Curry, Debra Johnson, Michael Lindley

Approved

FY '23 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.

The Niles Campus facility was constructed in 1998. Based on the recent 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 \$8,600,000 and, if authorized, would require the College to fund 50% of the project.

Minutes -DRAFT UNTIL APPROVED AT NEXT SCHEDULED MEETING

Lake Michigan College
Board of Trustees Meeting
October 26, 2021

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

Action

It was recommended that the Lake Michigan College Board of Trustees approve the submission of the FY23 Capital Outlay Grant Request, as proposed.

Motion by Ms. Burghdoff with support by Ms. Smith to approve the submission of the FY23 Capital Outlay Grant Request, as proposed.

Roll Call Vote

Yeas: John Grover, Joan Smith, Mary Jo Tomasini,
Vicki Burghdoff

Nays: None

Absent: Jeff Curry, Debra Johnson, Michael Lindley

Approved