Northwestern Michigan College

Five-Year Capital Outlay Plan

Fiscal Year 2025

Approved by the NMC
Board of Trustees
October 23, 2023

Prepared By:
Troy Kierczynski
VP of Finance and
Administration
231-995-1147
tkierczynski@nmc.edu

NORTHWESTERN MICHIGAN COLLEGE
FIVE-YEAR CAPITAL OUTLAY PLAN
FISCAL YEAR 2025

Northwestern Michigan College (NMC) was the first comprehensive community college chartered in the state of Michigan in 1951. Since its founding, NMC has provided quality, affordable access to higher education for learners of all ages and backgrounds. NMC is integrally woven into the economic, social and cultural fabric of the region, providing leadership and support for key initiatives that shape our communities and prepare our learners for rich and meaningful lives.

NMC provides programming at five principal sites in Traverse City:

- Main Campus located in Traverse City on East Front Street at the base of the Peninsula
- Great Lakes Campus located at the base of West Grand Traverse Bay
- Aero Park Campus located in the Traverse City airport industrial park
- University Center Campus located on Boardman Lake off of South Cass Street
- Rogers Observatory site located in Garfield Township a few miles South of Main Campus

I. Mission Statement

Mission
Northwestern Michigan College delivers lifelong learning opportunities to transform lives and enrich our communities.

Vision
We aspire to be a global community where all learners unlock their full potential.

Values
Our individual and collective efforts create the legacy of NMC. In order to achieve our mission, we are individually committed and responsible to live these values:

- **Learning**: We are lifelong learners; learning is foundational to a thriving community and is at the center of all we do.
- **Integrity**: We act with the highest degree of ethics, personal responsibility, fairness and openness ensuring that we match our actions with our words.
- **Collaboration**: We embrace co-creative solutions and celebrate the joy of working together, empowering each other and nurturing community partnerships for the benefit of our learners.
- **Respect**: We demonstrate mutual regard and appreciation for one another to assure a culture of trust.
- **Inclusion**: We foster belonging and build organizational capacity that celebrates diversity and promotes equity.
- **Innovation**: We are agile, imaginative and forward thinking, taking risks to meet future needs of the college and our communities.
- **Stewardship**: We practice stewardship by investing responsibly in the human, physical, financial and environmental resources entrusted to our care.
- **Excellence**: We commit to the highest standards of quality and service, and to exceeding the expectations of our learners and communities through continuous improvement.

Purposes
To meet our mission, we are fully engaged in each of the following purposes, with the result that our learners meet their goals of being college-ready, transfer-ready, career-ready and ready for lifelong-learning:

- Associate degree, certificate, and transfer education in liberal arts and sciences and occupational studies
- Career/occupational education and workforce development
- Bachelor degrees in select programs
- Cultural and personal enrichment
- Baccalaureate and graduate program facilitation
- Regional economic development

Strategic Plan Initiatives
In order to accomplish NMC's stated Mission, Vision, and Purposes, organizational activities focus on achieving the following strategic goals:

- **Future-Focused Education**: Enhance offerings through flexible academic pathways, innovative instructional delivery models and relevant, hands-on educational experiences to empower global learners for the future.
- **Student Engagement and Success**: Develop and deliver comprehensive support services, robust engagement opportunities and a vibrant collegiate experience to foster learner success, goal completion and employability.
- **Diversity, Equity and Inclusion**: Cultivate an inclusive environment that fosters a sense of belonging and delivers equitable opportunities so all are able to thrive and succeed.
- **Community Partnerships and Engagement**: Enhance collaborations that advance community engagement, economic and workforce development and innovative opportunities for lifelong learning.
- **Institutional Distinction and Sustainability**: Leverage distinctive programs that strengthen institutional sustainability and expand global connections for our learners and communities.

II. Instructional Programming

At NMC, you'll find more than 60 areas of academic study, all of which feature dedicated faculty, small classes and personal attention. NMC offers transfer courses, bachelor's degrees in select areas, two-year associate degrees and professional certificates, with access to BA and advanced degrees through our University Center partners. To provide flexible learning options and more accessibility for our students, we offer a variety of traditional in-person, online, and hybrid courses.

As part of our capital outlay planning process, we assess our current academic programs, ongoing College initiatives, regional and national workforce needs, and trends in delivery to help determine our academic facilities and infrastructure needs. Section II-A addresses current academic programming and future growth.

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

See this link for an A-Z listing of NMC's current programs: https://catalog.nmc.edu/programs-az/

New and Projected Programming Changes

Changes to NMC's programming and other offerings are influenced by the following factors:

- Current and projected enrollment and industry trends
- Community workforce needs
- Contributing to the economic development of our region
- Improving the success rates of our learners
- Ensuring the fiscal stability of the College

NMC has developed the following certificates and programs during the last five years:

- Audio Technology—AAS
- Engineering Technology-Biomedical Technician—AAS
- Culinary-Baking and Pastry Arts—Level II Certificate
- Engineering, Associates of Science in Engineering
- Surveying—AAS
- Early Childhood Education—AAS
- Carpentry Technology – Level II Certificate
- Maritime Culinary Certificate (Fall 2023)
- Uncrewed Aerial Systems (UAS) - AAS (Fall 2023)
- Water Quality and Environmental Technology—AAS (Fall 2023)
- Nursing Articulation Agreement—ADN to BSN (Fall 2023)
- Esports Management - Level I Certificate (Spring 2024)
- Computer Support Specialist - Level I Certificate (Spring 2024)
- Sports Performance Nutrition Certificate (in development for Fall 2024)

As the College assesses current and future programming, we give consideration to the related capital, structural, and technology needs to ensure we can deliver every program effectively on our campus facilities and/or virtually. Our Strategic Plan contains five Strategic Plan Initiatives (See Section I) and twenty-three underlying strategic objectives. The following are examples of objectives relevant to the College's capital planning considerations:

Future-Focused Education

- To increase the College's proportion of online courses from 28% to 35% by 2024.
- Create six accelerated course pathways in multiple academic disciplines by 2024.

Student Engagement and Success

- To Increase the percentage of area high school graduates attending NMC by 3% by 2024.
- To increase enrollment by 10% in age categories 21+ by Spring 2024.
- Enhance student completion support to increase the 3-year completion success rates by 2025
- Increase the percentage of students using success coach services by 3% by 2025.

Institutional Distinction and Sustainability

- Aviation will execute its multi-phase expansion plan to increase program enrollment by 25% by 2026. The multi-phase expansion plan includes a vision for a large expansion of our hangar.
- Our Great Lakes Maritime Academy and Great Lakes Culinary Institute has collaborated to develop and offer a maritime culinary certificate by Fall 2023.
    - We intend to use the galley aboard our maritime vessel *T/S State of Michigan* as our primary learning lab. As this program grows to its potential, we plan to construct a simulation galley lab in our Great Lakes Building.

II-B. Identify the unique characteristics of each institution's academic mission.

Northwestern Michigan College is recognized by members of its service district and various accrediting agencies for unique characteristics and special programming that are a part of the fabric of the college.

These include:

● Aviation Division (Pilot Training Program)	● International Services
● Uncrewed Aerial Systems Training	● International Partnerships
● Audio Technology Program	● Joseph H. Rogers Observatory
● Center for Instructional Excellence	● Math Center
● Child Care Center	● Michigan Energy Demonstration Center
● Commitment Scholarship Program	● Military and Veteran Services
● Construction Technology Program	● Marine Center
● Dennos Museum Center (DMC)	● NMC Foundation
● Dental Assisting Program	● Online Nursing
● Early Colleges	● Outdoor Sculpture Collection
● Engineering Technology	● Phi Theta Kappa
● Entrepreneurial Studies	● Remote Operated Vehicle Training (Marine)
● Esports	● Service Learning
● Extended Educational Services	● Student Success Center
● Global Endorsement	● Surgical Technology Program
● Great Lakes Culinary Institute	● Tutoring Center
● Great Lakes Maritime Academy	● University Center
● Great Lakes Water Studies Institute	● Writing and Reading Center
● Health Education Institute	● WNMC-FM Radio Station
● International Affairs Forum	

Below are brief descriptions for some of these unique characteristics and special programs.

<u>Aviation Division</u>

Established in 1967, Northwestern Michigan College has a proven background in delivering safe and effective flight training to generations of pilots. Today, the Aviation Division operates an FAA approved Part 141 training facility, has established exclusive training agreements with (5) international universities to provide flight training in Traverse City, and offers extensive hands-on training on several different uncrewed Aerial Systems platforms.

The professional pilot program currently operates at maximum student capacity, training 125 full time students in a diverse fleet of 15 aircraft valued at more than $7 million. The Aviation Division has established numerous hiring partnerships with regional airlines, allowing graduates direct routes to employment opportunities.

In 2011, the Aviation Division launched Michigan's first uncrewed Aerial Systems (UAS) program, with focus on preparing UAS operators to meet the needs of a rapidly growing industry. In 2015, NMC was named one of the *15 Best Drone Training Colleges in America* and was the only community college listed in the top 10.

One of the 2015 recipients of the Community College Skilled Trades Equipment Fund (CCSTEF), the UAS Department now maintains a fleet of commercial-grade uncrewed aircraft designed to meet the training and experience demands of today's (and tomorrow's) employers.

Great Lakes Maritime Academy

Established in 1969, the Great Lakes Maritime Academy (GLMA) is one of only seven maritime academies in the United States that is federally regulated under 46 Code of Federal Regulations 310. These regulations allow for a holistic approach which allows GLMA to accept a cadet with no prior seagoing experience and within four years he or she can complete both a bachelor's degree and earn a merchant mariner's credential valid for service on large tonnage vessels which are in ocean or Great Lakes service.

All GLMA cadets must complete one course in Naval Science which is delivered by active duty Naval personnel. Those cadets that are accepted into the U.S. Navy's Strategic Sealift Officer's program complete an additional two classes in Naval Science, earn a commission as a Naval Officer, and are awarded $32,000, by the U.S. Navy, over the course of their four years at the academy.

In August 2002 the U. S. Maritime Administration (MARAD), at the request of Michigan's Governor, transferred operation of the *USNS Persistent (T-AGOS-6)* to GLMA where she was rechristened the *T/S State of Michigan*. Since that time the vessel has been an integral part of the Academy's training program. The following are just a few examples of the value-added by the *T/S State of Michigan* vessel:

- Having the use of the training ship ensures that GLMA cadets can accrue requisite sea service required for graduation and licensure.
- GLMA has been able to ensure the curriculum meets both the U.S. law as described in 46 CFR, and also be in full compliance with the complex international treaty Standards for Training, Certification and Watchkeeping for Seafarers (STCW Code).
- By having cadets complete their first sea project on the *T/S State of Michigan*, they are fully versed in shipboard culture prior to being assigned a berth on a commercial vessel as part of subsequent sea project (cadets must complete three sea projects). This has greatly improved retention.
- The T/S State of Michigan serves as a dockside laboratory for courses of instruction in diesel engines, shipboard auxiliary systems, air conditioning and refrigeration, firefighting and damage control, stability, and navigation, just to name a few.
- Interdisciplinary uses of the ship being studied include collaboration with the Great Lakes Culinary Institute (GLCI). These collaborations have resulted in several graduates from GLCI earning Merchant Marine Credentials in addition to their Associate's degree, thus greatly expanding employment opportunities. The vessel's galley will also be used to provide a training lab for the College's maritime culinary certificate program launching in Fall 2023.

The Michigan Legislature passed House Bill 4496 enabling Michigan community colleges to offer a select number of baccalaureate degrees, among them a Bachelor of Science degree in Maritime Technology on December 13, 2012. The Governor signed the bill into law on December 27, 2012.

In April 2013, the NMC Board of Trustees authorized the college to offer the Bachelor of Science degree in Maritime Technology program and supported the administration to seek approval of the Higher Learning Commission to authorize the college to offer the degree.

In February 2019, the United States Coast Guard reapproved the Academy's programs. It is now approved through November 2023, and certified as meeting the requirements of the international treaty STCW Code. This includes the most recent amendment to the STCW Code. In May 2023 the Academy submitted its application for re-approval to the Coast Guard. The application package was greater than 950 pages. Additional Information was requested in Aug 2023. This information will be submitted well in advance of the program expiration date.

Great Lakes Water Studies Institute

The Great Lakes Water Studies Institute (GLWSI), located on the Great Lakes campus, delivers programs and conducts research directly related to the area's most important natural resource. Students may focus on multiple areas of water technology and science including water quality, environmental remediation, or may focus in marine technology including applied technical work in support of the marine industries involving the calibration, deployment, operation, maintenance, and management of marine technology assets, including data collection, processing and mapping, for use in the marine environment both offshore and onshore.

In fall 2015, the GLWSI officially launched NMC's third Bachelors of Science in Maritime Technology major in the area of Marine Technology. This program is unique to the United States and one of the only in the world and builds directly on the AAS marine technology program. Specific training emphasis includes remotely operated vehicles (ROV) and marine platforms, marine acoustics and sonar, marine data processing and project management. Multiple industry collaborations allow graduates a broad range of career opportunities. To date, all graduates of this program have found direct employment in the Marine Industry immediately upon graduation. The Great Lakes Water Studies Institute also offers professional development opportunities in sonar training for industry and government partners including the United States Army Corps of Engineers, Office of Naval Intelligence, and the National Oceanographic & Atmospheric Administration. Since 2015, ROV training at NMC has been certified through the Association of Diving Contractors International (ADCI).

The Great Lakes Campus site includes a water analysis laboratory for student experiments/labs, qualified environmental research organizations and university partners. Students work aboard the 56-foot *R/V Northwestern* or the 21-foot *R/V Hawk Owl* in Grand Traverse Bay, Lake Michigan and the inland waters of Michigan. The Great Lakes campus harbor also serves as a year-round laboratory where training occurs from NMC's pier. The GLWSI is also home to two advanced Remotely Operated Vehicle systems, multiple sonar systems, advanced GPS and water quality sampling equipment. Additionally, there is a 60,000 gallon indoor training tank located at NMC's Aeropark campus for year-round, climate-controlled operations.

In 2014, collaboration with Western Michigan University (WMU) led to the joint development of a bachelor's degree completion program in Freshwater Science and Sustainability. In September 2015,

Northwestern Michigan College officially started delivery of the third Bachelor's Degree in Maritime Technology major in Marine Technology.

The GLWSI is involved in multiple Great Lakes research projects with university and government partners and also collaborates globally with multiple institutions in many areas of water and the marine environment. MOU's with institutions in China, Colombia, Costa Rica, Indonesia have generated additional water opportunities for students.

Great Lakes Culinary Institute

This program provides rigorous and concentrated study for those students who plan careers in the rapidly growing food service industry. The program's main emphasis is to prepare students for positions as entry-level chefs and kitchen managers. Consideration is given to the science and techniques associated with the selection, preparation and serving of foods to large and small groups. Students further develop their knowledge of food and guest service through internships at area restaurants, hotels and resorts. The program includes an Institute-run training restaurant, Lobdell's, which greatly enhances the level of restaurant experience of graduates. The facility provides five kitchen "laboratories" including Lobdell's, a training restaurant, which is a critical component of a top quality culinary program.

The GLCI is also pursuing collaboration with other learning opportunities. In an effort to enhance student retention, culinary certificate programs have been implemented. For years, the Culinary Institute has provided lifelong learning and professional development offerings in collaboration with other areas of the College. The expanded facilities, with its lakefront location, have been leveraged to create world-class food and wine events, open to the public. All events have served to showcase Michigan agricultural and value-added agricultural products.

The American Culinary Federation Education Foundation Accrediting Commission accredits Great Lakes Culinary Institute programs, one of only approximately 400 such schools to receive this program accreditation in the United States. In 2018, the Great Lakes Culinary Institute received a five-year program accreditation by the American Culinary Federation Education Foundation. Upon completion of the Great Lakes Culinary Institute program, students are eligible for certification through the American Culinary Federation.

The GLCI has also developed a maritime culinary certificate in partnership with our Great Lakes Maritime program. The certificate program became available in Fall 2023, and will provide high-earning opportunities for culinary professionals in the maritime industry.

Construction Technology

During the 2009-2010 academic year, NMC received authorization to offer four new level I certificates and one AAS degree in Construction Trades. These certificates include HVAC/R installation and service, Electrical, Plumbing and Carpentry. For students that complete any one of these four certificates, we have developed appropriate construction trades courses to customize their degree requirements for the remainder of the trades courses and infuse the required general education courses to achieve the sixty four credits required to complete an AAS degree. In January of 2022, an audit of the construction technology program by the NCCER established a third party credential available to students enrolled in the Electrical and HVAC programs. This credential is recognized nationally as both academic and

experiential progress in the applicable trade. Additional trade areas, like carpentry, are being slated to also be included in this accredited NCCER program. Students in this program have the option to include a specialization in renewable energy with options in residential and light commercial solar PV, solar thermal, wind installation, including both net-metered and independent installations. A certificate in Programmable Logic Controls (PLC) has been developed and available to students since Fall 2014.

Engineering Technology

In 2011, a new associate degree in Engineering Technology offered students a broad-based curriculum across all areas of technical education, preparing the graduates for emerging job markets and highly technical fields. The program is designed to allow students to focus on areas of interest or specialize in one of five technical specializations: Computers, Electronics, Marine, Robotics & Automation, and uncrewed Aerial Systems. In 2018, a new specialization was added to the degree pathway that is focused on Biomedical Equipment Technologies. Partnering with Leica Geosystems, an AAS degree in Surveying was added in 2019 to serve the growing demand for surveying technicians in the region.

Engineering technology education focuses primarily on the applied aspects of science and engineering aimed at preparing graduates for practice in that portion of the technological spectrum closest to product improvement, manufacturing, robotics, uncrewed systems, and engineering operational functions.

Parson-Stulen Building

In 2015 Northwestern Michigan College was awarded a $2.8MM grant from the State of Michigan in support of the Community College Skilled trades Program Fund (CCSTEP). $2.1 MM dollars from the grant was used to purchase equipment and renovate facilities in support of the Colleges Engineering Technology, Marine Technology and Computer Technology programs. This included an advanced electronics lab and marine technology, 60,000 gallon indoor test tank, a state of the art remote operated vehicles, three uncrewed aerial platforms, and flight simulators.

Aero-Park Laboratories

In 2011, NMC opened the Aero-Park Laboratories (APL) building at the Aero-Park Campus as a companion facility housing laboratories for construction technology, renewable energy, engineering technology and welding. APL is a 29,600 sq. ft. facility which allows a variety of configurations to accommodate large group lectures as well as individualized student space or small team project areas. The facility is LEED certified and equipped to support a high level of instructional technology requirements and welding facilities.

Audio Technology

An associate program in applied audio technology/technician was approved in July 2012 to meet the needs of students entering the recording, editing, and live music engineering specializations of the music industry. At the core of the degree program are training and certifications in Logic-Pro (Apple) and Pro Tools (Avid) - the industry standard software for recording and editing. Students also have practical real-world experience in studio and live recording, sound design, composing, mixing, mastering, and live sound. All of the Audio Tech instructors are certified on various software, and also bring to their instruction their vast experience as performers and professionals in the music industry. NMC's Audio

Tech program remains on the cutting-edge of technology as the first program in the U.S. to possess new mixing and routing hardware.

Commitment Scholarship Program

The NMC Commitment Scholarship Program was developed to encourage academically promising students with financial need to successfully complete high school and enter college. The program began in 1993, and has included more than 1,000 first-generation college students from 19 participating high schools. Each fall, 40-50 new students are inducted from the region to engage in activities that support successful educational attainment. The students, in partnership with the parents and high schools, commit to regular participation in the program activities, demonstration of good citizenship, and completion of high school with a minimum of a 2.5 grade point average.

On-Campus Residence Life Opportunities

The Residence Hall Living/Learning program at NMC is one of six residence hall programs offered at the community college level in Michigan. Student and professional staff provide peer social programs, educational seminars, and community service opportunities. The Residence Halls are alcohol/drug free zones except for designated suites in North Hall where all residents are over 21 and agree to special restrictions. Affordable housing is limited in the Traverse City area which is reflected in our growth in the number of students living in the halls and apartments in the past several years. Having reached capacity in three consecutive years, the college opened a new residence Hall in August of 2017 expanding overall capacity to 370. There are also 36 apartments on NMC's main campus which are consistently full with a waiting list.

Extended Educational Services

Extended Educational Services (EES) provides lifelong learning opportunities in Workforce & Professional Development, Life Enrichment and Youth Programming to our community and beyond. EES offers over 1000 enrichment, continuing education, and non-credit courses for all ages on an annual basis. Continuing Education Certificate programs available include: Northern Naturalist, Global, Business Development, Eldercare, Google, Personal Trainer, Virtual Assistant, Workplace Readiness, and expected in Winter/Spring 2023 will be the addition of the Certified Nurse Assistant program which is in high demand. Of note are two historically distinct and robust audiences; *College for Kids* (ages 3-17) and *Life Academy (ages 50+)*. Course offerings are in multiple formats; about 480 online, about 100 livestream, and about 460 face to face.

University Center

The mission of NMC's University Center is to facilitate the delivery of high quality programs and course offerings beyond the associate degree to northwest Michigan residents as deemed desirable by the citizens of the region. The University Center is a unique partnership between Northwestern Michigan College and five participating universities. NMC offers associate degrees in over 40 liberal arts, health, business, education, and technical programs. The partnering universities offer courses required for the completion of the final two years of selected bachelor degree programs, complete master's degree programs in selected areas, post-bachelor and graduate certificates, specialized endorsements, and one doctorate. University Center partners include: Central Michigan University, Davenport University, Ferris State University, Grand Valley State University, and Michigan State University.

Global Endorsement

Beginning in the fall of 2014, the college developed a cross-curricular endorsement for students who complete a variety of curricular and extra-curricular experiences that are recorded on an official college transcript. In part funded by the NMC Global Opportunity Fund, students take coursework, attend the college's Window on the World Week, Passport Student Lecture Series, and International Affairs Forum and even travel to international educational sites to receive credit towards this endorsement.

Dennos Museum Center

The Dennos Museum Center builds community, sparks conversation, and inspires change for audiences of all ages through its exhibitions, programs, and the collection and preservation of art. The museum serves as the region's premier cultural center for NMC students and faculty, K-12 school groups, and the general public through a diverse exhibition and program schedule.

The Museum cares for and curates a selection of semi-permanent exhibitions drawn from more than 3,000 works of art, with strong holdings in Canadian Inuit sculpture and prints, Midwestern regionalism, and Chinese and Korean contemporary artwork. Museum staff also oversee over one dozen outdoor sculptures installed throughout the NMC campuses.

Traveling exhibitions and loans from museums across the nation provide additional opportunities to connect faculty and students with object-based teaching and learning opportunities. Museum staff work with an advisory committee to curate exhibitions that directly support college initiatives connected to diversity and inclusion, interdisciplinary teaching and learning, global perspectives, contemporary socio-political issues of our time, and more. The museum—in the truest sense—is an opportunity for visitors to engage with artworks and artifacts that help us think about our role as globally minded citizens in the 21st century.

Additional facilities include the 367 seat Milliken Auditorium, which hosts a diverse series of lectures and performances throughout the year. The auditorium serves as a home base for the NMC Music Department, the International Affairs Forum, New Student Orientation, and College-wide programs and training opportunities.

Joseph H. Rogers Observatory

The primary function of the Northwestern Michigan College's Joseph H. Rogers Observatory is to serve as the laboratory facility for NMC astronomy students. It also provides educational opportunities for the community. The 1,500 square foot building, with two observing domes, stands as an example of this area's commitment to education. Constructed completely with donated funds, the Observatory houses astronomical equipment utilized for both education and research. The Observatory hosts Open Houses for the general public throughout the year with over 5,000 visitors annually. The Joseph H. Rogers Observatory is one of fifteen sites in the National Network of Project ASTRO™, a K-12 science education outreach program, and one of three sites chosen to host Family ASTRO™.

Marine Center – Professional Development

The Marine Center at Northwestern Michigan College provides comprehensive training solutions for the surveying and remote sensing industries. The focus of the programs is on the technical areas directly related to geospatial academic programs at the College: marine technology, surveying, engineering technology, and uncrewed aerial systems (UAS) programs. The Marine Center's focus is to meet workforce development needs within the targeted industry sectors (i.e. micro-credentialing, industry certifications, and competency-based training) using existing core technical capabilities and connections to the technical academic programs. Professional development and technical services associated with the NMC Marine Center programs continue to be an opportunity to raise awareness on key existing technical and academic programs at NMC, as well as provide a strong future revenue source.

The Hagerty Conference Center

The Great Lakes Campus is also home to the Hagerty Conference Center. The Center provides a flexible, technology-equipped space to accommodate seminars, classes, and specialized training in support of all NMC programs. The site also serves as a venue for professional development seminars for regional, national, and international businesses in addition to weddings and other private events. This enables NMC to increase its role in bringing new learning opportunities and new visitors to the region, thus providing economic growth and quality of life improvements. It also promotes further integration of programs within NMC, and enables NMC programs to draw on resources from outside the area to augment its own program offerings.

Child Care Center

In the summer of 2014, NMC partnered with Munson Healthcare to open a childcare center at the Oleson Center on NMC's main campus. NMC is a member of the 5toOne Initiative of the Great Start Traverse Bay Collaborative which has been working to create a comprehensive regional system for early childhood development programs. Munson Healthcare and Traverse Bay Area Intermediate School District (TBAISD) have also been included in these discussions and have been aware of our on-going concerns for NMC students as it relates to children's educational services. By partnering with Head Start and GSRP students who qualify are able to access free quality preschool services.

Key factors in this arrangement are two grant opportunities that provide a source of funding to pay for daycare services. The two grants awarded by the State of Michigan and available through TBAISD are the Great Start Readiness Program and Headstart. Munson allows families to call one week in advance to schedule time.

II-C. Identify other initiatives which may impact facilities usage.

The College has a unique opportunity to renovate its Osterlin Building into an innovative student services hub and welcome center. The College's library was recently relocated from the Osterlin Building to its new home on the 2nd floor of the Timothy J. Nelson Innovation Center. The vacancy of the library in Osterlin creates space to move the College's admissions, financial aid, health services, experiential learning, and other student activities into a centralized space. Consolidating those services into the Osterlin Building would create a "Student Services Hub", allowing students to access all academic and financial support services in one building. We believe this strategy would have a positive impact on student retention and completion.

The College's Strategic Plan also specifically calls for the expansion of our Aviation Division. This distinctive program, one of two major flight schools in the State, is currently at capacity with a waiting list of over 100 students. The only key barrier to its growth is lack of hangar space and training planes. A 10,000 square foot expansion of the hangar space could accommodate 8 additional training planes; each new training plane can accommodate 7-10 students. The College recognizes this unique opportunity to help immediately address a looming workforce shortage in the air travel industry.

In the next five-year period, the College expects to significantly expand programming for nursing and other health occupations. Continued growth in this area will require investment in additional simulation and teaching facilities. As the College continues AQIP projects designed to increase persistence and credential completion, it is adding instructional support activities that have an impact on experiential and supplemental instructional space. Finally, the College is embedding within the curriculum a multi-disciplinary approach to learning desired by employers. These initiatives require large interactive space that can be reconfigured for multiple uses. The College's current buildings do not accommodate this demand; renovation and additions to existing college buildings are necessary to stay agile as an institution.

The current priorities for facilities planning are focused on the following:

- Addressing deferred maintenance on existing buildings
- Increasing flexible and accessible classroom space
- Increasing flexible and accessible office spaces
- Reducing energy usage and creating sustainable infrastructure
- Creating housing opportunities to attract students

II-D. Demonstrate economic development impact of current/future programs.

According to an October 2017 study by the economic modeling firm EMSI, NMC creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups – students, taxpayers, and society.

- 287.4 million in added income, approximately equal to 3.6% of the GRP of the NMC Service Area, which is nearly as large as the entire Wholesale Trade Industry in the region
- NMC impacts 5,766 jobs or one out of every 22 jobs in the NMC Service Area
- Average annual rate of return for NMC students is 9.6% compared to the 10-year average of 6.9% return to the U.S. stock market
- 2.9 benefit-cost ratio. Every $1 in costs returns $2.09 in benefits-an average annual return on investments for taxpayers is 10.5%

NMC serves more than 50,000 learners each year. Those with an associate's degree in Northern Michigan benefit in important ways.

- Average earnings for those with an Associate Degree earn $31,800 per year versus $23,300 per year for those with a High School Diploma

- Lower unemployment. Associate degree holders experienced less than 6% unemployment compared to over 12% for those with less than a high school diploma

See **Appendix A** for an executive summary of our 2017 Economic Impact Study. Some specific examples of NMC initiatives directed at regional economic improvement are highlighted below.

Technical Workforce and Career Development

NMC's Parson-Stulen Building houses a range of credit and non-credit programs that directly support training for key skills of high value to the region. Each major program area facilitates employer and community feedback through program Advisory Boards. In addition, faculty and staff participate in state, regional, and national organizations, and are directly engaged in research to help with development of appropriate programs and courses.

In collaboration with other workforce agencies and organizations, NMC has been able to respond to the need for incumbent worker training directly in the workplace, and in areas customized to employer needs. In addition, the technical workforce areas have prepared programs that can be quickly delivered to area communities where there is an identified need to prepare individuals for a specific labor pool. Recognized by the Governor's office in 2012, NMC is host to the Regional Entrepreneurial Collaborative – a partnership among NW Michigan Council of Governments, Small Business Technology Development Center, Score, Michigan Works, PTAK, Grand Traverse County Economic Development, Traverse Area Chamber of Commerce that supports collaboration between organizations to facilitate service for business development and expansion.

Michigan Manufacturing Technology Center

NMC is home to the Northwest regional office of the Michigan Manufacturing Technology Center. The purpose of the MMTC is to strengthen the competitiveness of small to mid-sized manufacturers through training and consulting services primarily through Lean Manufacturing and strategy assistance. The MMTC is part of a national network through the Department of Commerce's Manufacturing Extension Partnership and part of a statewide network of five offices.

Michigan New Jobs Training Program

Since authorization in 2009, NMC has been an active participant in the use of this economic development tool for community colleges. To date, NMC has developed contracts representing close to $9,742,940 in associated training, with over 1043 jobs in sectors including advanced manufacturing, value-added agriculture (food processors, distribution and retail), healthcare, insurance and construction.

Great Lakes Maritime Academy

The Great Lakes Maritime Academy (GLMA) cadets continue to experience 100% employment. This is partially due to the age of the maritime workforce on the Great Lakes which has resulted in numerous vacancies due to retirements. During the fall semester, recruiters from vessel operators and maritime unions visit the Academy weekly. Additionally, each cadet will complete three internships, two of which will be on commercial vessels. These internships expose the cadets to different options, and allow the operators to see the quality of the cadets first hand.

Great Lakes Water Studies Institute

GLWSI officially launched NMC's third Bachelors of Science in Maritime Technology major in the area of Marine Technology. This program is unique to the United States and one of the only in the world. Specific training emphasis includes remotely operated vehicles and marine platforms, marine acoustics and sonar, marine data processing and project management. Multiple industry collaborations allow graduates a broad range of career opportunities. The GLWSI also offers professional development opportunities in sonar training for industry and government partners who travel from around the world to participate in these training programs. ROV training at NMC is certified through the Association of Diving Contractors International (ADCI) which will draw additional personnel to our programs.

The Great Lakes Campus site includes a water analysis laboratory for student experiments/labs, qualified environmental research organizations and university partners. The GLWSI is involved in multiple Great Lakes research projects with university and government partners and also collaborates globally with multiple institutions in areas of water and the marine environment.

Tourism and Hospitality Industries

Tourism and the hospitality industry are among the largest economic sectors in NMC's five county service area. The Great Lakes Culinary Institute directly supports that sector. There is a significant shortage of skilled professionals in this area. The Culinary Institute's ability to expand the programs that it offers is important to the area's economy.

Agribusiness

Agriculture and viticulture are significant parts of the region's economy, eco-structure and quality of life. NMC has developed a successful and long-standing partnership with Michigan State University's Institute of Agricultural Technology to provide a series of technical specialties within NMC's associate of applied plant science. Students may select areas in applied horticulture, turf management, nursery management, and viticulture. In 2013, NMC and MSU's Institute of Agricultural Technology established a shared position, in collaboration with MSU's Department of Horticulture, as an innovative approach toward collaboration in employer outreach, student recruitment, and internship development. In 2014, this shared approach expanded NMC's capacity to provide specialized programming related to precision agriculture.

Healthcare

The health industry is of critical importance to the citizens of the region and hosts the largest regional employer, Munson Healthcare. NMC's Health Occupation programs are critical suppliers to this industry, especially in the preparation of associate degree nurses and potential pathways to partnering with universities for a BSN program. Most recently, NMC has partnered with Munson Medical Center to offer Associate of Applied Science Degrees in Surgical Technology.

A successful strategy has been the development of the Health Education Institute, a partnership between Munson HealthCare and NMC that supports the coordination of community learning resources, delivers continuing professional development to staff, and identifies areas for future collaboration in the preparation of health care professionals.

HEI has completed an extensive internal assessment of program impact with the recommendation to continue and expand the relationship as a shared approach to improving efficiency in professional development for staff, career program planning in the nursing program and related allied health areas.

III. Staffing and Enrollment

The following section responds to questions related to staffing and enrollment trends for NMC.

III-A. Describe current full and part-time student enrollment levels and define how the programs are accessed by the student.

Enrollment by program for the five previous fall semesters is provided in **Appendix B.**

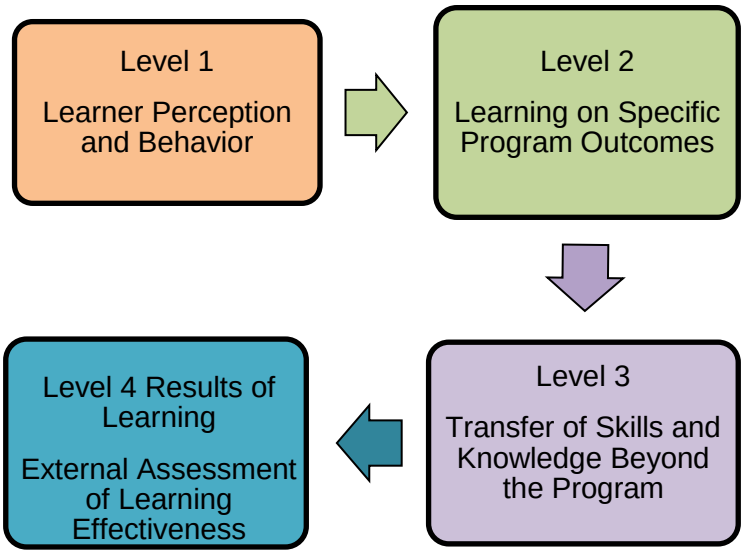
NMC uses multiple measures for student assessment of programs. NMC's annual program review process is the way in which we ensure that our programs and courses are up to date and effective. The premise of the program review is an annual evaluation of quantitative metrics and qualitative reflection on the prior year's activities. From this, goals for the program are set and action plans identified for the coming year. The program review documents and institutional metrics are made available to the college community on the College's internal website.

The metrics tracked in program review are categorized in four phases of evaluation: Learner Perception and Behavior, Learning of Program Outcomes, Skill Transfer, and Results (Figure 1.1).

- For Level One, Learner Perception and Behavior, the college measures learner assessment of the quality of the course instruction and of the course itself, and learner satisfaction with the program as a whole. Enrollment tracking and participation of non-traditional students in the program are measured.
- For Level Two, Learning and Program Outcomes, the program areas track course completion rates, enrollee success rates, graduation rates, student retention or transfer rates, and non-traditional student completion rates.
- For Level Three, Skill Transfer, NMC assesses student success on industry tests, such as licensure, and student placement in employment.
- Finally for Level Four, Results of Learning, program managers query their industry advisory groups for feedback on the curriculum, equipment, graduates, and program administration. NMC has targets or state baselines to measure progress for improvement. When any of these measures fall short of the college targets or state baselines, the program establishes goals and activities designed to improve its performance in these areas. Program areas create action plans to address deficiencies as part of the institutional annual planning and budgeting process.

Figure 1.1. Outcome Framework for Academic Program Review

(see next page)



(Source: **Kirkpatrick, D.L. 1994. Evaluating Training Programs: The Four Levels. San Francisco, CA: Berrett-Koehler.**

III-B. Evaluate enrollment patterns over the last five years

NMC's enrollment peaked in the 2010-2011 academic year due to economic factors in the state and region related to unemployment at that time. Conversely, enrollment began decreasing as the unemployment rate in the State and region recovered from the Great Recession. The College has seen a 32% decline in enrollment from academic year 2012-2013 to 2021-2022. This was fueled by a strong economy and a steadily declining high school population in our area.

The College's enrollment has been in steady decline since 2011, other than academic year 2021-2022 which experienced a slight (4%) rebound after an 11% decline in 2020-2021 spurred by the COVID-19 pandemic. The lingering pandemic has had a negative impact on College enrollments across the country and we have seen mostly flat enrollment since Fall 2020. NMC is addressing this negative trend by seeking to increase flexible learning options, increase marketing efforts focused on our distinctive programs, and adapt our programs to the needs of our communities.

See **Appendix B** for enrollment by program over the last five years.

III-C. Project enrollment patterns over the next five years (including distance learning initiatives).

Census data indicates that the traditional age student population (18-20) will continue to decline through 2030. With rising inflation and interest rates, the possibility of a recession looms. Community colleges *may* see an increase in enrollment if we experience a recession, and students return to higher education to learn new skills or trades. However, we are uncertain as to whether this historical trend will hold true this time around due to a variety of factors including the lingering pandemic.

We continue to promote the strong academic foundation that Northwestern Michigan College provides students as they complete select bachelor's degrees offered by NMC and their associate degrees for transfer to 4-year colleges and universities, while also highlighting the cost benefit and value students

and families realize by attending a community college. Enrollment remains very strong in a number of key programs (i.e. aviation, maritime). In addition, we are promoting two additional Bachelor of Science degrees in Maritime Technology; Marine Technology and Power Systems. As the State focuses on economic growth, new and enhanced job skills and transfer education will remain as key objectives.

We believe one of the largest potential for increases in enrollment growth is through dual enrollment and adult students seeking to enhance their job prospects. NMC is well positioned to offer courses and programs which will capture these audiences. **NMC currently has early college partnerships with Traverse City Area Public Schools and Northwest Educational Services in addition to dual enrollment agreements with a variety of high schools in the area.** High school student enrollment has steadily declined since Fall 2017, but remains relatively flat a % of total enrollment:

High School Student Enrollment Comparison

Academic Year	High School Students Enrolled	% of Total Enrollment	% change from PY
Fall 2017	510	12.9	+0.4
Fall 2018	483	13.0	+0.1
Fall 2019	447	12.5	-0.5
Fall 2020	426	13.1	+0.6
Fall 2021	412	12.5	-0.6
Fall 2022	387	12.5	0.0
Fall 2023	465	14.7	+2.2

To strategically support these efforts NMC has participated in the Michigan College Access Network (MCAN), Local College Access Network (LCAN) and with individual schools (ICAN). We collaborate with these organizations providing presentations and face to face support for students and their parents or guardians in order to assist them as they complete college applications, the Free Application for Federal Student Aid (FAFSA) and college scholarship applications.

NMC also continues to expand existing and new relationships with colleges and universities in other countries such as China, Costa Rica, South Africa and the UK for the purpose of program expansion and student exchange opportunities.

Research shows that enrollment at community colleges during an economic downturn follows the rate of unemployment. If the unemployment rate increases, enrollment increases as the population returns to college to seek education for new career opportunities or access training to increase skills to raise their potential for subsequent employment.

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

NMC has a standing practice of evaluating all position vacancies for opportunities to distribute work differently, assess the relevance of a service level, and to identify areas in which partnerships may provide options for joint appointments or other creative approaches to management of personnel costs.

As an example, NMC and Michigan State University's Institute of Agricultural Technology (IAT) developed an MOU to share equally in a replacement position serving NMC's Applied Plant Science degree program, which uses IAT's specialty agriculture certificates. This has allowed funding for a full-time position.

Based on fall student, faculty and staff headcounts, ratios were as follows:

Semester	Headcount	Full-Time Faculty & Adjunct Headcount	Ratio of Student to Faculty
Fall 2018	3,726	254	15:1
Fall 2019	3,581	226	16:1
Fall 2020	3,278	226	16:1
Fall 2021	3,285	221	14:1
Fall 2022	3,100	201	15:1
Fall 2023	3,148	170	18:1

Semester	Headcount	Admin. & Professional Headcount	Ratio of Student to Staff
Fall 2018	3,726	118	32:1
Fall 2019	3,581	111	32:1
Fall 2020	3,278	109	28:1
Fall 2021	3,285	108	28:1
Fall 2022	3,100	106	29:1
Fall 2023	3,148	115	27:1

Based on the structure at NMC some administrative positions include teaching as part of their responsibilities. **Appendix C** provides faculty and staff headcounts for the previous five years.

III-E. Projected staffing needs based on five-year enrollment estimates and future programming changes.

NMC has approached a number of staffing questions through the development of a multi-year project-based approach toward talent recruitment, development, retention, and succession. The project has produced new employee orientation programs, the NMC Leadership Institute, and multiple professional development modules ranging from compliance training, supervisor training, wellness initiatives, and self-directed learning opportunities related to workplace improvement.

The College is committed to aligning its workforce to support its strategic direction and establish a values-based framework to provide sustainable and competitive compensation. Further, the College continues to offer and maintain flexible working options allowing employees to work from home and design their schedule within parameters of operational needs. Due to declining enrollments, during fiscal year 2018 we offered an early separation incentive to faculty and staff at the top of their pay scale.

This gave us an opportunity to restructure the institution. The College was able to reduce 12 positions with this incentive program to help control labor costs.

III-F. Identify current average class size and projected class size needs

NMC manages its section sizes based on an efficiency model with a college goal of 90% efficiency. **Appendix D** contains course efficiency data by academic division for the previous six academic years. Class sizes are driven primarily by pedagogical factors related to the subject matter being taught.

IV. Facilities Assessment

NMC completed its most recent campus master plan in 2012 and will commence a new planning process in calendar 2023 to reshape the College's vision for its physical spaces over the next twenty years. The 2012 plan assessed building and plant requirements to meet future needs and were prioritized within the executive summary of the campus master plan. The College contracts with Sodexo for facilities management services. Sodexo prepares a comprehensive facilities assessment every 3 years to help the College prioritize deferred maintenance. The most recent assessment can be found at **Appendix E**.

IV-A. Summary description of each facility.

A summary of buildings, their ages, and square footage is included as **Appendix F.**

IV-B. Building and classroom utilization rates.

Virtually all College events and classes are scheduled through the College's R25 scheduling system. **Appendix G** is produced from R25 and provides information on the utilization, functionality and allocation of organizational facilities.

IV-C. Mandated facility standards for specific programs, where applicable.

NMC's facilities fully comply with all applicable laws and safety standards for specific programs. The College continues to monitor all applicable Federal, State, and local laws impacting our property.

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

Existing buildings and facilities are often repurposed to meet the evolving needs of the College. One of the biggest opportunities for the College to improve functionality across the campus is the implementation of a "one-stop shop" hub for student services in our Osterlin Building. The consolidation of our student services into one building would improve operational efficiency of the College, but more importantly would improve the student experience and related retention efforts.

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

The replacement value of our buildings is assessed at $272,138,200 as of November 1, 2022. The Fall 2023 appraisal was not available at the time of this submission. We've included the Fall 2022 appraisal report in **Appendix H**.

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

Each item identified in the Facilities Condition Assessment (**Appendix E**) is listed by category (i.e. electrical, mechanical, plumbing, etc.) Of the College's estimated $22.1 million in deferred maintenance over the next five years, 22% is categorized as HVAC, 18% as Electrical, and 31% as Interior Construction and Finishes. Utility needs are adequately considered as part of the annual budgeting process. The following table summarizes the College's utility providers and needs:

Campus Utilities

Utility	**Notes**
Electric	Traverse City Light and Power (Traverse City Campuses). Sufficient city capacity appears to be available to meet projected college needs.
Water	Traverse City and Garfield Township provide water.
Sewage	City of Traverse City and Garfield Township.
Storm Sewers	Limited access to Traverse City storm sewers is available. The Front Street campus is equipped with numerous dry wells into which storm water drains. Main campus includes a large stormwater retention system.
Natural Gas	Campus heating systems are natural gas. Adequate capacities currently exist.

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

The majority of lots, roads and walks on and off Main Campus are in good shape. An annual schedule for the repair and replacement of sidewalks and the repair/seal/replacement of parking lots and campus roads has been allocated and incorporated in the College's capital and operating budgets as applicable.

The University Center currently has one driveway. A secondary means of egress for vehicles was recommended in the 2012 campus master plan. A second means of egress would be able to be used in a case of emergency or downed trees and/or power lines.

Appendix I shows a map of the Front Street (Main) campus.

IV-H. Adequacy of existing utilities and infrastructure systems to current and 4-year projected programmatic needs.

Based on our current and five year projections NMC utilities and infrastructure systems are sufficient. As a means to reduce utility costs NMC continues to investigate ways to provide alternative energy solutions to our campus. The college board authorized a geothermal energy system for the West Hall Innovation Center project (recently renamed the Timothy J. Nelson Innovation Center). The intention is to use the data from this building as a starting point for an overall campus alternative energy project.

Further studies are underway to assess the cost and viability of implementing a larger geothermal system on the main campus to power six central buildings.

In our 2012 Campus Master Plan, we noted parking was at capacity at the time. However, based on current and projected enrollment trends, the College appears to have sufficient systems to meet parking needs for the next five years. We work closely with our area public transportation agency (Bay Area Transportation Authority, or "BATA") in an effort to both encourage and promote public transportation.

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

See section above regarding our exploration of sustainable energy systems on campus. We engaged an engineering firm to complete an energy study in October 2021 covering six key buildings on campus: Health & Science Building, Biederman Building, Tanis Building, Osterlin Building, Scholars Hall, the Powerhouse Building. The key recommendation from this study was to replace our current aging boiler system with a distributed geothermal energy system including HVAC upgrades on the six buildings listed.

In 2021, the College finished implementing a campus-wide LED lighting upgrade as recommended in our 2015 and 2010 energy audits. The estimated annual savings from this campus wide project is over $50,000 per year. Other projects considered were related to water conservation, low flow aerators, and variable frequency drivers in some of our buildings. The College also takes full advantage of an energy rebate program through our local provider, Traverse City Light and Power. This program has enabled us to complete several lighting upgrades on campus and explore the use of solar energy.

All projects are evaluated for energy savings. As roofs are replaced, additional insulation measures are included in those projects. Other areas of savings include insulated glass overhead doors in our power house, replacement of old boilers with more efficient ones, and new cooling towers to improve the energy efficiency of our HVAC systems.

IV-J. Land owned by the institution, including 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.

Under current assumptions for future growth, there is existing capacity for future development on land owned by the college. The College will explore our greatest needs and consider development opportunities in connection with our ongoing Campus Master Planning engagement.

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

The table below outlines the statistics on the three NMC buildings that are obligated to the State Building Authority.

Building Description	Primary Use	Date of Retirement
Health & Science Building (Integrated Science & Tech Learning Center)	Classrooms and labs	2042

Great Lakes Campus (West Bay)	Specialized classrooms and conferencing facility	2043
Oleson Center	Childcare	2042
Timothy J. Nelson Innovation Center (West Hall Innovation Center)	Classrooms, study spaces, cafeteria, flexible meeting spaces	2055

V. Implementation Plan

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

Northwestern Michigan College continues evaluating its academic programming and related facilities needs, including how current buildings can be improved and leveraged to increase quality, efficiency, and effectiveness of course delivery. During fiscal year 2023, the College will embark on a process to shape a new 20-year vision for the physical environment on our campus that meets the evolving campus needs of the College and its students, faculty, staff, and community members.

The College's Administration identified our top capital projects based on the prioritization criteria listed in the table below. We also considered the following questions:

1. Is the project aligned with our Strategic Plan?
2. Is there data to demonstrate an immediate or future need?
3. Is there a business model that demonstrates financial sustainability?

Project	Supports Strategic Plan	Meets Current Capacity Need	Growth Opportunity	Safety Issue	Cosmetic Appeal	Learner Expectation	Time Sensitive
Osterlin Building	X	X	X	X	X	X	X
Aviation Hangar	X	X	X	X	X	X	X
Energy Infrastructure		X		X	X	X	X
Student Housing	X	X	X		X	X	X
Founder's Hall		X	X		X	X	
Physical Ed		X			X	X	
Outdoor Classroom		X	X		X	X	

Project	Total Cost
Osterlin Building (Student Services Hub)	$ 7.0 million
Aviation Hangar (hangar expansion and modernization)	$ 8.5 million
Energy Infrastructure Upgrade (geothermal for 6 buildings)	$ 16.0 million
Student Housing (new facility)	$ 10.0 million
Founder's Hall (renovation)	$ 5.0 million
Physical Education / Recreational Building	$ 12.0 million
Outdoor Classroom (and event space)	$ 0.5 million

We continue assessing the capital priorities of the College and related financing options. In addition to these facility building projects, we see an escalated need for investment in technology to support evolving learning environments. During recent years, the college invested over a million dollars to upgrade its firewall and expand wireless infrastructure to improve web accessibility, reliability, and internet safety across campus. The College also installed secure remote key access for all buildings. This investment allows NMC security to lock down buildings remotely if required during an emergency. The College continues to invest in security cameras and qualified security professionals to provide the safest possible environment on our campuses

As noted in the table above, NMC continues to identify the renovation of the Osterlin Building as our top priority capital project. This 60-year old building would be renovated and remodeled to provide our students a one-stop shop / student service hub. The updated space would provide a holistic approach to student services. The estimated cost of this project is $7.0 million.

V-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.

See Facilities Condition Assessment at **Appendix E**. Northwestern Michigan College recognizes the importance of addressing deferred maintenance in its operating budget. Beginning in 2009 the College began providing funding through the General Fund to address deferred maintenance backlog.

The facilities assessment identified approximately $22.1 million in deferred maintenance required over the next five years. Funding for certain identified items has been included in the College's plant fund budget. Addressing deferred maintenance is critical for the college to carry out its mission of providing a state of the art quality program to its students. However, given limited financial resources the College must prioritize the most critical projects within the scope of its budget.

V-C. Include the **status of on-going projects financed with State Building Authority resources and explain how completion coincides with the overall Five-Year Capit**al Outlay Plan.

As of October 2023, there are no current or on-going projects at NMC that are financed with State Building Authority resources. Northwestern Michigan College hosted a groundbreaking ceremony on September 24, 2018 for the West Hall Innovation Center (#332/16282), officially renamed the Timothy J. Nelson Innovation Center. This building was completed in July 2021 with support from SBA.

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

The College evaluates each major building project to determine a rate of return. This is accomplished by a reduction in operating costs such as utility savings along with any staffing reductions that could be attributed to the redesign of a facility.

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

The College continues to assess the future of learning and future of work in its capital planning process. Although distance and flexible learning options will continue to drive changes in higher education, there is still a role for innovative and functional learning facilities. Our proposed building projects enhance current learning by engaging students and faculty in an interactive learning environment.

V-F. Identify maintenance schedule for major maintenance items in excess of $1 million for fiscal year 2024-2028.

Currently, there are no single identified maintenance items over $1 million.

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

Northwestern Michigan College completes a comprehensive Facility Condition Assessment every three years to determine the key maintenance needs of every building on campus. Every budgeting year, we review and compile this data to prioritize our top facility needs. The College's twenty-six (26) active buildings represent approximately 850,000 square feet of space. The College's General Fund provides over $1.2 million in annual funding for critical deferred maintenance.

See **Appendix E** for our facilities condition assessment. NMC strives to maintain an overall facilities rating of "Good". The cumulative FCI percentage for our campus as of November 2021 is 6%, which falls into the category of "Good" per this report.

Appendix A
NMC Economic Impact

Northwestern Michigan College

Analysis of the Economic Impact and Return on Investment of Education

THE ECONOMIC VALUE OF
NORTHWESTERN MICHIGAN COLLEGE

October 2017

Executive summary

Northwestern Michigan College (NMC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. It provides students with the skills they need to have fulfilling and prosperous careers. Further, it supplies an environment for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

The value of NMC influences both the lives of students and the regional economy. The college serves a range of industries in the NMC Service Area, supports local businesses, and benefits society as a whole in Michigan from an expanded economy and improved quality of life. The benefits created by NMC even extend to the state and local government through increased tax revenues and public sector savings.

This study investigates the economic impacts created by NMC on the business community and the benefits that the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The region the college serves is defined as the NMC Service Area and consists of Antrim, Benzie, Kalkaska, Leelanau, Grand Traverse, and Wexford Counties in Michigan. The following two analyses are presented:

- **Economic impact analysis**
- **Investment analysis**

All results reflect student and financial data for fiscal year (FY) 2015-16. Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of added income. The returns on investment to students, taxpayers, and society are reported under the investment analysis. Both analyses are described more fully in the following sections.

Economic impact analysis

NMC promotes economic growth in the NMC Service Area in a variety of ways. The college is an employer and buyer of goods and services, and the living expenses of students benefit local businesses. In addition, NMC is a primary source of education to the NMC Service Area residents and a supplier of trained workers to regional industries.

OPERATIONS SPENDING IMPACT

NMC is an important employer in the NMC Service Area. In FY 2015-16, the college employed 709 full-time and part-time faculty and staff. Of these, 100% lived in the NMC Service Area. Total payroll at NMC was $34.9 million, much of which was spent in the region for groceries, rent, dining out, clothing, and other household expenses.

NMC is itself a large-scale buyer of goods and services. In FY 2015-16, the college spent $26.1 million to cover its expenses for facilities, professional services, and supplies.

NMC added $42.3 million in income to the region during the analysis year as a result of its day-to-day operations. This figure represents the college's payroll, the multiplier effects generated by the spending of the college and its employees, and a downward adjustment to account for funding that the college received from state and local sources. The $42.3 million in added income is equivalent to supporting 832 jobs.

STUDENT SPENDING IMPACT

Around 48% of students attending NMC originated from outside the region in FY 2015-16, and some of these students relocated to the NMC Service Area to attend NMC. These students would not have come to the region if the college did not exist. In addition, a number of in-region students would have left the area for other educational opportunities if not for the existence of NMC. While attending the college, these relocated and retained students spent $32.3 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the region, generating $18.1 million in added income in the regional economy during the analysis year, which is equivalent to supporting 416 jobs.

TABLE 1: Impacts created by NMC in FY 2015-16

ADDED INCOME	JOBS
$42.3 million	**832**
Operations spending impact	
$18.1 million	**416**
Student spending impact	
$227 million	**4,518**
Alumni impact	
$287.4 million	**5,766**
Total impact	

ALUMNI IMPACT

The education and training NMC provides for regional residents results in the greatest impact. As shown in Figure 1, since the college was established, students have studied at NMC and entered the regional workforce with new skills. Today, thousands of former students are employed in the NMC Service Area.

During the analysis year, past and present students of NMC generated $227 million in added income for the region. This figure represents the higher earnings that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses. This $227 million in added income is equivalent to supporting 4,518 jobs.

TOTAL IMPACT

The overall impact of NMC on the local business community during the analysis year amounted to $287.4 million in added income, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. The $287.4 million in added income was equal to approximately 3.6% of the GRP of the NMC Service Area. By comparison, this contribution that the college provides on its own is nearly as large as the entire Wholesale Trade industry in the region.

The total impact is also expressed in terms of the jobs supported by the added income; they are calculated by jobs-to-sales ratios specific to each industry. Overall, the $287.4 million impact supports 5,766 jobs. For perspective, this means that one out of every 22 jobs in the NMC Service Area is supported by the activities of NMC and its students.

A portion of the total $287.4 million is broken out into an industry-by-industry impact ordered by added income. Table 2 outlines the top industries impacted by NMC. Because industries have different jobs-to-sales ratios, the associated jobs supported by NMC differ by impact. Nonetheless, these are impacts that would not have been generated without the college's presence.

FIGURE 1: NMC Alumni working in-region today

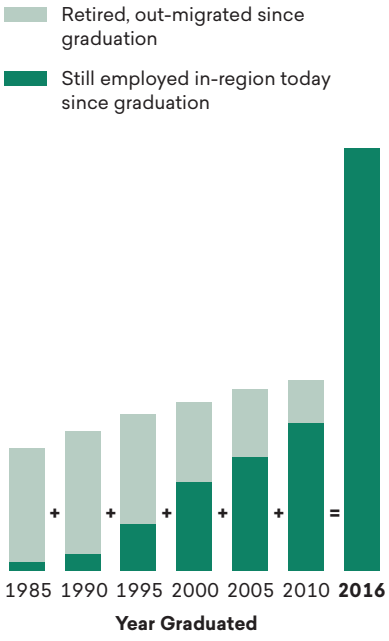


TABLE 2: Top industries impacted by NMC

TOTAL INCOME (MILLIONS)	JOBS
$30.7	564
Health Care & Social Assistance	
$26.6	705
Accommodation & Food Services	
$17.6	254
Government, Non-Education	
$15.9	205
Manufacturing	
$12.9	264
Construction	
$183.6	3,774
All other industries	
$287.4	5,766
Total impact	

* Numbers may not sum due to rounding.

Investment analysis

Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is considered unprofitable. This study considers NMC as an investment from the perspectives of students, taxpayers, and society. The backdrop for the analysis is the entire Michigan economy.

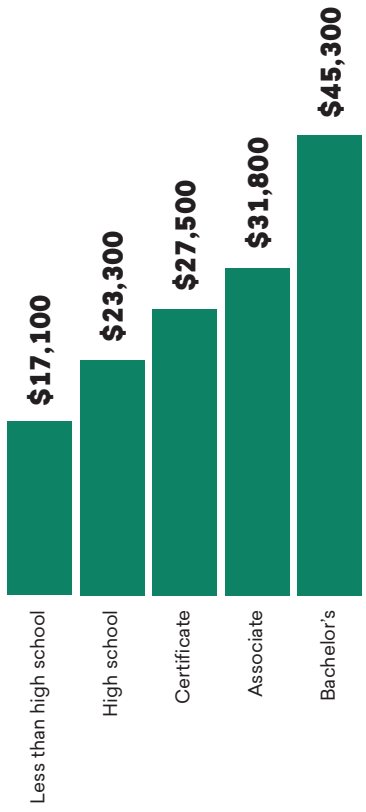
STUDENT PERSPECTIVE

In FY 2015-16, NMC served 4,713 credit students and 5,060 non-credit students. In order to attend college, students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money that they would have otherwise earned had they been working instead of attending college. The total investment made by NMC's students for FY 2015-16 amounted to a present value of $82.7 million, equal to $25 million in out-of-pocket expenses (including future principal and interest paid on student loans) plus $57.7 million in forgone time and money.

In return for their investment, NMC's students will receive a stream of higher future earnings that will continue to grow through their working lives. As shown in Figure 2, mean earnings levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average associate degree completer from NMC will see an increase in earnings of $8,500 each year compared to someone with a high school diploma or equivalent working in Michigan. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately $272,000 in higher earnings.

The present value of the higher future earnings that NMC's students will receive over their working careers is $165.9 million. Dividing this value by the $82.7 million in present value student costs yields a benefit-cost ratio of 2.0. In other words, for every $1 students invest in NMC in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of $2.00 in higher future earnings. The average annual rate of return for students is 9.6%. This is an impressive return, especially when compared to the 10-year average 6.9% return to the U.S. stock market (Figure 3).

FIGURE 2: Average earnings by education level at career midpoint in Michigan



Source: Emsi complete employment data.

TAXPAYER PERSPECTIVE

NMC generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As NMC students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2015-16 students' working careers, the state and local government will have collected a present value of $61.1 million in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). Students are also more employable, so the demand for welfare and unemployment benefits, such as earnings assistance and welfare benefits, is reduced. For a list of study references to these statistical benefits, please contact the college for a copy of the main report. All of these benefits will generate a present value of $8.9 million in savings to state and local taxpayers.

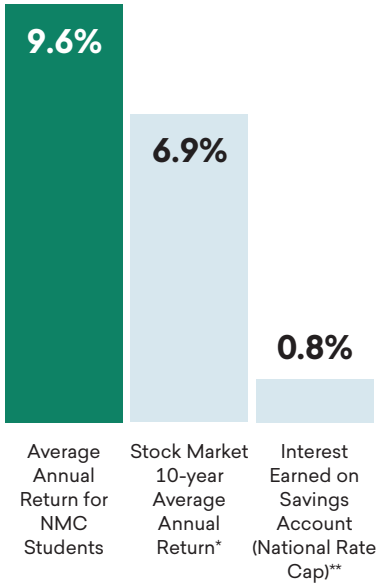
Total benefits to taxpayers equal $70 million, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of $23.8 million—equal to the funding that NMC received from the state and local government during the analysis year—yields a benefit-cost ratio of 2.9. This means that for every $1 of public money invested in NMC, taxpayers receive a cumulative value of $2.90 over the course of the students' working lives. The average annual rate of return is 10.5%, a solid investment that compares favorably with other long-term investments in both the private and public sectors.

SOCIAL PERSPECTIVE

Society as a whole within Michigan benefits from the presence of NMC in two major ways. The first and largest benefit that society receives is an increased state economic base. As discussed in the previous section, the higher student earnings and increased business output occurs across the state. This raises prosperity in Michigan and expands the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Similar to the taxpayer section above, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers, and are distinct from the costs avoided by taxpayers outlined above. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditures and insurance administration, lower victim

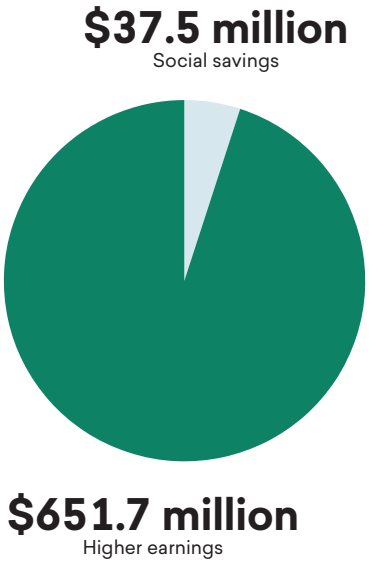
FIGURE 3: Student rate of return



* Forbes' S&P 500, 1987–2016.

** FDIC.gov, 7-2017.

FIGURE 4: Present value of higher earnings and social savings in Michigan



costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a list of study references to these statistical benefits, please contact the college for a copy of the main report.

Figure 4 shows the present value of the higher earnings and social savings that will occur in Michigan over the working lifetime of the FY 2015-16 student population at NMC. Higher earnings amount to a present value of $651.7 million due to the increased lifetime earnings of students and associated increases in business output. Social savings amount to $37.5 million, the sum of health, crime, and unemployment savings in Michigan. Altogether, total benefits to society equal $689.3 million (in present value terms).

Society invested a present value of $127.2 million for FY 2015-16 NMC educations. This includes all expenditures by NMC, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Michigan will receive a cumulative value of $5.40 in benefits, equal to the $689.3 million in benefits divided by the $127.2 million in costs. These benefits will occur for as long as NMC's FY 2015-16 students remain employed in the state workforce.

SUMMARY OF INVESTMENT ANALYSIS RESULTS

Table 3 presents the results of the investment analysis for all three of NMC's major stakeholder groups—students, taxpayers, and society. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers to the college creates a wide range of benefits to society and returns more to government budgets than it costs.

TABLE 3: Summary of investment analysis results

	STUDENT PERSPECTIVE	TAXPAYER PERSPECTIVE	SOCIAL PERSPECTIVE
Present value benefits (thousands)	**$165,925**	**$69,341**	**$688,607**
Costs (thousands)	**$82,694**	**$23,782**	**$127,159**
Net present value (thousands)	**$83,231**	**$45,560**	**$561,448**
Benefit-cost ratio	**2.0**	**2.9**	**5.4**
Rate of return	**9.6%**	**10.5%**	**N/A***

* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that NMC creates value from multiple perspectives. The college benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, it benefits society as a whole in Michigan by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the FY 2015-16 academic and financial reports from NMC, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact the college for a copy of the main report.

Emsi

Emsi, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, Emsi has completed over 1,700 economic impact studies for educational institutions in four countries. Visit www.economicmodeling.com for more information about Emsi's products and services.

Appendix B
Enrollment by Program

Northwestern Michigan College

Records Office

Contact Hours Generated
All Campuses

		Fall 2019 04-SEP-19	Fall 2020 02-SEP-20	Fall 2021 08-SEP-21	Fall 2022 07-SEP-22	Fall 2023 06-SEP-23	Pct Change
Aviation							
AVF	Aviation Flight	421	383	347	435	368	-15.4%
AVG	Aviation Ground	515	411	478	602	617	2.5%
UAS	Uncrewed Aerial Systems	0	0	186	229	163	-28.8%
Academic Area Totals:		**936**	**794**	**1,011**	**1,266**	**1,148**	**-9.3%**
Business							
ACC	Accounting	610	671	621	601	538	-10.5%
BUS	Business Administration	819	711	723	690	696	0.9%
CIT	Computer Info Technology	1,565	1,389	1,476	1,367	1,404	2.7%
CUL	Culinary Arts	1,192	1,166	1,311	1,041	1,320	26.8%
MGT	Management	348	360	249	237	282	19.0%
MKT	Marketing	228	232	241	210	244	16.2%
Academic Area Totals:		**4,762**	**4,529**	**4,621**	**4,146**	**4,484**	**8.2%**
Communications							
ASL	American Sign Language	120	208	264	212	272	28.3%
COM	Communications	272	292	244	108	180	66.7%
ENG	English	5,192	4,377	4,779	4,211	4,052	-3.8%
FRN	French	44	0	0	0	0	0.0%
GRM	German	52	0	0	0	0	0.0%
SPN	Spanish	152	128	240	196	216	10.2%
THR	Theater	0	0	0	40	0	-100.0%
Academic Area Totals:		**5,832**	**5,005**	**5,527**	**4,767**	**4,720**	**-1.0%**
Construction Technology							
CAR	Carpentry	195	254	373	199	363	82.4%
CMT	Construction Management	0	15	24	0	0	0.0%
EGY	Renewable Energy	36	12	36	30	45	50.0%
ELE	Electrician	376	401	394	423	418	-1.2%
HVA	Heating and Ventilation	106	111	112	136	62	-54.4%
PLU	Plumbing	0	20	24	0	0	0.0%
Academic Area Totals:		**713**	**813**	**963**	**788**	**888**	**12.7%**
Health Occupations							
HAH	Allied Health	235	235	218	225	216	-4.0%
HDA	Dental Assistant	214	274	260	216	135	-37.5%
HNR	Nursing	2,636	3,032	2,805	2,948	2,836	-3.8%
HPD	Professional Development	9	11	10	9	7	-21.3%
SRG	Surgical Technology	261	308	205	201	135	-32.8%
Academic Area Totals:		**3,354**	**3,860**	**3,498**	**3,599**	**3,329**	**-7.5%**
Humanities							
ART	Art	1,074	867	1,063	1,240	1,211	-2.3%
AUD	Audio Technology	264	182	200	281	336	19.6%

DNC	Dance	24	0	8	24	32	33.3%
HST	History	864	869	844	830	707	-14.8%
HUM	Humanities	204	171	198	96	206	114.6%
MUS	Music	510	290	402	419	514	22.7%
PHL	Philosophy	946	884	825	839	758	-9.7%
VCA	Visual Communication Arts	416	388	300	320	500	56.3%
Academic Area Totals:		**4,302**	**3,651**	**3,840**	**4,049**	**4,264**	**5.3%**
Maritime							
MDK	Maritime-Deck	913	1,037	873	969	868	-10.4%
MNG	Maritime-Engine	721	563	545	581	528	-9.1%
MNS	Naval Science	94	112	82	98	96	-2.0%
Academic Area Totals:		**1,728**	**1,712**	**1,500**	**1,648**	**1,492**	**-9.5%**
Science & Math							
AST	Astronomy	350	245	220	0	245	100.0%
BIO	Biology	2,705	2,577	2,363	2,142	1,994	-6.9%
CHM	Chemistry	878	843	469	714	549	-23.1%
EGR	Engineering	160	186	154	131	211	61.1%
ENV	Environmental Sciences	760	670	635	705	475	-32.6%
MTH	Mathematics	4,141	3,680	3,410	2,917	2,831	-2.9%
PHY	Physics	737	613	542	520	553	6.3%
Academic Area Totals:		**9,731**	**8,814**	**7,793**	**7,129**	**6,858**	**-3.8%**
Social Science							
ANT	Anthropology	141	102	162	126	123	-2.4%
CJ	Criminal Justice	346	239	234	131	180	37.4%
ECE	Early Childhood Education	388	317	469	342	347	1.5%
ECO	Economics	516	531	486	513	516	0.6%
EDU	Education	200	141	223	212	198	-6.6%
GEO	Geography	302	324	245	337	290	-13.9%
HAH	Allied Health	56	40	48	0	0	0.0%
LWE	Law Enforcement	338	220	272	135	495	266.7%
PLS	Political Science	369	363	357	360	231	-35.8%
PSY	Psychology	1,589	1,320	1,212	1,114	1,176	5.6%
SOC	Sociology	768	627	579	690	630	-8.7%
SWK	Social Work	155	109	93	70	93	32.9%
Academic Area Totals:		**5,168**	**4,333**	**4,380**	**4,030**	**4,279**	**6.2%**
Technical							
AT	Automotive Technology	555	531	636	657	611	-7.0%
DD	Drafting and Design	248	135	250	168	229	36.3%
EET	Electrical/Electronics Tech	430	270	340	246	240	-2.4%
MFG	Manufacturing Technologies	144	168	210	182	118	-35.2%
RAM	Robotics and Automation	152	132	180	132	136	3.0%
SVR	Surveying	135	76	141	24	157	554.2%
WPT	Welding Process Technology	253	175	293	326	390	19.6%
Academic Area Totals:		**1,917**	**1,487**	**2,050**	**1,735**	**1,881**	**8.4%**
Water Studies Institute							
WSI	Water Studies Institute	138	192	165	157	249	58.6%
Academic Area Totals:		**138**	**192**	**165**	**157**	**249**	**58.6%**
Report Totals:		**38,581**	**35,190**	**35,348**	**33,314**	**33,592**	**0.8%**

Note: This report does not include enrollment from EES sections that are cross-listed with academic sections

Digital Dashboard - Registration

Appendix C

Faculty and Staff Headcounts

ADP Report **Annual report November 1**	**2022**	**2021**	**2020**	**2019**	**2018**
Category					
Faculty	82	**82**	**82**	**81**	**86**
Full Time	78	80	80	79	84
Part Time	4	2	2	2	2
NMC Administrator	35	**37**	**37**	**36**	**36**
Full Time	35	37	37	36	35
Part Time	0	0	0	0	1
Staff	150	**142**	**145**	**146**	**75**
Full Time	146	139	139	142	72
Part Time	4	3	6	4	3
Maintenance/Custodial Staff	27	**28**	**29**	**31**	**40**
Full Time	27	28	29	31	40
Part Time	0	0	0	0	0
Total Regular Employees	294	**289**	**293**	**294**	**237**
Full Time	286	284	285	288	231
Part Time	8	5	8	6	6

Appendix D

Course Efficiency Reports

Northwestern Michigan College – Course Efficiency Report 2017-2023

(Note: Highlighted cells exceed 90% goal)

Fall 2017	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	262	23.82	147	11	13.36	56.11
Business	1,797	23.96	1498	75	19.97	83.36
Communications	1,944	18.87	1873	103	18.18	96.35
Construction Tech	264	14.67	165	18	9.17	62.50
Health Occupations	1022	13.81	843	74	11.39	82.49
Humanities	1,626	20.85	1372	78	17.59	84.38
Maritime	846	20.14	669	42	15.93	79.08
Physical Education	378	25.20	77	15	5.13	20.37
Science/Math	3,666	25.11	3350	146	22.95	91.38
Social Science	1,997	29.37	1657	68	24.37	82.97
Technical	680	16.19	498	42	11.86	73.24
Water Studies	82	20.50	53	4	13.25	64.63
TOTALS	14,564	21.54	12,202	676	18.05	83.78

Spring 2018	Available Seats	Avg. Max	End of Sem Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	191	23.88	148	8	18.50	77.49
Business	1692	21.97	1353	77	17.57	79.96
Communications	1502	20.30	1321	74	17.85	87.95
Construction Tech	179	14.92	125	12	10.42	69.83
Health Occupations	938	16.46	730	57	12.81	77.83
Humanities	1599	20.50	1278	78	16.38	79.92
Maritime	849	21.23	735	40	18.38	86.57
Physical Education	176	22.00	64	8	8.00	36.36
Science/Math	3091	24.93	2661	124	21.46	86.09
Social Science	2028	28.56	1594	71	22.45	78.60
Technical	587	16.31	406	36	11.28	69.17
Water Studies	86	21.50	48	4	12.00	55.81
TOTALS	12918	21.93	10463	589	17.76	81.00

Fall 2018	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	211	23.44	145	9	16.11	68.72
Business	1,680	24.00	1288	70	18.40	76.67
Communications	1,904	19.04	1788	100	17.88	93.91
Construction Tech	209	14.93	149	14	10.64	71.29
Health Occupations	1029	14.29	897	72	12.46	87.17
Humanities	1,664	20.80	1353	80	16.91	81.31
Maritime	892	20.74	725	43	16.86	81.28
Physical Education	No Courses Offered					
Science/Math	3,496	24.62	3092	142	21.77	88.44
Social Science	1,874	28.83	1619	65	24.91	86.39
Technical	520	15.29	397	34	11.68	76.35
Water Studies	78	19.50	55	4	13.75	70.51
TOTALS	13,557	21.42	11,508	633	18.18	84.89

Spring 2019	Available Seats	Avg. Max	End of Sem Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	250	25.00	144	10	14.40	57.60
Business	1586	23.67	1251	67	18.67	78.88
Communications	1541	19.76	1313	78	16.83	85.20
Construction Tech	229	14.31	161	16	10.06	70.31
Health Occupations	947	15.78	757	60	12.62	79.94
Humanities	1565	20.59	1305	76	17.17	83.39
Maritime	822	20.55	710	40	17.75	86.37
Science/Math	3068	24.54	2521	125	20.17	82.17
Social Science	1955	27.54	1590	71	22.39	81.33
Technical	488	16.27	374	30	12.47	76.64
Water Studies	90	22.50	38	4	9.50	42.22
TOTALS	12541	21.73	10164	577	17.62	81.05

Fall 2019	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	316	26.33	137	12	11.42	43.35
Business	1,589	23.72	1235	67	18.43	77.72
Communications	1,851	19.48	1631	95	17.17	88.11
Construction Tech	314	14.27	217	22	9.86	69.11
Health Occupations	1069	15.27	862	70	12.31	80.64
Humanities	1,602	20.03	1290	80	16.13	80.52
Maritime	886	20.60	690	43	16.05	77.88
Science/Math	3,562	24.07	3105	148	20.98	87.17
Social Science	2,011	28.32	1647	71	23.20	81.90
Technical	457	16.93	354	27	13.11	77.46
Water Studies	78	19.50	39	4	9.75	50.00
TOTALS	13,735	21.49	11,207	639	17.54	81.59

Spring 2020	Available Seats	Avg. Max	End of Sem Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	222	22.20	135	10	13.50	60.81
Business	1643	23.14	1181	71	16.63	71.88
Communications	1468	19.84	1209	74	16.34	82.36
Construction Tech	249	13.83	163	18	9.06	65.46
Health Occupations	1015	17.50	753	58	12.98	74.19
Humanities	1462	20.89	1177	70	16.81	80.51
Maritime	827	20.68	679	40	16.98	82.10
Science/Math	3147	24.02	2548	131	19.45	80.97
Social Science	1894	27.06	1491	70	21.30	78.72
Technical	543	16.45	380	33	11.52	69.98
Water Studies	86	21.50	34	4	8.50	39.53
TOTALS	12556	21.69	9750	579	16.84	77.65

Fall 2020	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	269	26.90	126	10	12.60	46.84
Business	1,691	22.55	1158	75	15.44	68.48
Communications	1,532	17.02	1399	90	15.54	91.32
Construction Tech	449	24.94	214	18	11.89	47.66
Health Occupations	1177	16.81	936	70	13.37	79.52
Humanities	1,515	20.20	1121	75	14.95	73.99
Maritime	847	20.17	688	42	16.38	81.23
Science/Math	3,439	24.56	2881	140	20.58	83.77
Social Science	1,751	25.75	1438	68	21.15	82.12
Technical	507	12.68	303	40	7.58	59.76
Water Studies	78	19.50	54	4	13.50	69.23
TOTALS	13,255	20.97	10,318	632	16.33	77.84

Spring 2021	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	222	27.75	135	8	16.88	60.81
Business	1467	20.10	1010	73	13.84	68.85
Communications	1174	14.68	1001	80	12.51	85.26
Construction Tech	234	15.60	148	15	9.87	63.25
Health Occupations	1076	17.93	825	60	13.75	76.67
Humanities	1556	21.61	1057	72	14.68	67.93
Maritime	884	21.56	681	41	16.61	77.04
Science/Math	2787	22.30	2193	125	17.54	78.69
Social Science	1575	23.16	1253	68	18.43	79.56
Technical	465	12.92	270	36	7.50	58.06
Water Studies	70	17.50	35	4	8.75	50.00
TOTALS	11510	19.78	8608	582	14.79	74.79

Fall 2021	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation	225	22.50	142	10	14.20	63.11
Business	1,550	21.23	1171	73	16.04	75.55
Communications	1,725	19.83	1543	87	17.74	89.45
Construction Tech	383	22.53	268	17	15.76	69.97
Health Occupations	1099	15.70	859	70	12.27	78.16
Humanities	1,781	23.75	1281	75	17.08	71.93
Maritime	889	21.17	634	42	15.10	71.32
Science/Math	3,088	22.06	2523	140	18.02	81.70
Social Science	1,646	24.21	1403	68	20.63	85.24
Technical	533	13.33	404	40	10.10	75.80
Water Studies	107	26.75	43	4	10.75	40.19
TOTALS	13,026	20.81	10,271	626	16.41	78.85

Spring 2022	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation (Adj 2022)	177	22.13	139	8	17.38	78.53
Business	1675	22.64	1116	74	15.08	66.63
Communications	1333	16.87	1151	79	14.57	86.35
Construction Tech	579	41.36	464	14	33.14	80.14
Health Occupations	1010	16.83	735	60	12.25	72.77
Humanities	1559	21.36	1051	73	14.40	67.42
Maritime	914	22.29	721	41	17.59	78.88
Science/Math	2895	22.98	2271	126	18.02	78.45
Social Science	1580	22.57	1204	70	17.20	76.20
Technical	552	15.33	327	36	9.08	59.24
Water Studies	306	76.50	256	4	64.00	83.66
TOTALS	12580	21.50	9435	585	16.13	75.00

Fall 2022	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation (AVG only)	213	21.30	175	10	17.50	82.16
Business	1574	24.22	1116	65	17.17	70.90
Communications	1480	18.50	1329	80	16.61	89.80
Construction Tech	264	16.50	216	16	13.50	81.82
Health Occupations	1125	16.54	859	68	12.63	76.36
Humanities	1674	22.62	1201	74	16.23	71.74
Maritime	795	18.93	635	42	15.12	79.87
Science/Math	3103	22.99	2477	135	18.35	79.83
Social Science	1705	26.23	1340	65	20.62	78.59
Technical	506	12.65	343	40	8.58	67.79
Water Studies	79	19.75	41	4	10.25	51.90
TOTALS	12518	20.90	9732	599	16.25	77.74

Spring 2023	Available Seats	Avg. Max	Count Day Enrollment	# of Sections	Avg. Students per Section	% Full
Aviation (AVG only)	260	32.50	137	8	17.13	52.69
Business	1560	22.29	1083	70	15.47	69.42
Communications	1189	15.85	1014	75	13.52	85.28
Construction Tech	259	18.50	181	14	12.93	69.88
Health Occupations	994	17.14	699	58	12.05	70.32
Humanities	1393	19.62	1072	71	15.10	76.96
Maritime	912	22.80	611	40	15.28	67.00
Science/Math	2699	22.68	2179	119	18.31	80.73
Social Science	1623	24.97	1188	65	18.28	73.20
Technical	406	11.94	286	34	8.41	70.44
Water Studies	102	25.50	29	4	7.25	28.43
TOTALS	11397	20.42	8479	558	15.20	74.40

Appendix E
Facilities Condition Assessment

Northwestern
Michigan
College

Northwestern Michigan College
Facilities Condition Assessment
Report of Findings
November 29th, 2021

sodexo
QUALITY OF LIFE SERVICES

STOP HUNGER

Table of Contents

Disclaimer

Acknowledgements:

We would like to thank the many members of the Northwestern Michigan College community and Sodexo team members who participated in this project. Without that assistance the Facility Condition Assessment (FCA) would not have been possible. We are deeply grateful to them for their efforts. Their willingness to share both their time and expertise served to ensure the quality, utility, and extent of the data collected, information that was instrumental to the development of a tool that will assist Northwestern Michigan College in identifying its immediate needs and guide it to achieving future goals.

Report Disclaimer:

This report only describes the conditions present at the time of our inspection. It is not intended to fully delineate or document every defect or deficiency throughout the subject property. The assessor's opinion and recommendations are based on the information available and observations obtained at the time of the inspection and preparation of the report. These opinions and recommendations are made to a reasonable degree of engineering certainty. Sodexo reserves the right to amend or supplement this report if additional information becomes available. Investigation for the presence of asbestos containing materials (ACM), PCB's, CFC's, radon, and other environmentally hazardous materials is not part of this Agreement. In addition, a review and certification that the buildings have been designed to meet current seismic requirements is not part of this review.

Overview and Objectives

Overview and Background:

"Northwestern Michigan College (NMC) is a public community college in Traverse City, Michigan. Founded in 1951, it enrolls nearly 4,000 students. NMC offers associate degrees and professional certificates, bachelor's degrees through the Great Lakes Maritime Academy and Great Lakes Water Studies Institute, and bachelor's and master's degrees granted by partner universities through NMC's University Center.

NMC has a branch campus on Grand Traverse Bay that houses the Great Lakes Culinary Institute, Great Lakes Maritime Academy, Great Lakes Water Studies Institute and Hagerty Conference Center. Another branch campus near Cherry Capital Airport is home to NMC's aviation and automotive service technology programs, and offers training in manufacturing, construction, renewable energy and information technology. NMC also has an observatory (the Rogers Observatory), and a nursing program in conjunction with Munson Medical Center located at their NMC University Center Campus. " (Northwestern Michigan College)

Northwestern Michigan College partnered with Sodexo in 2006 to operate the campus' maintenance, grounds, custodial and facilities operations. As part of the Sodexo commitment to the College, we conducted a facilities assessment including 30 structures and grounds totaling approximately 850,000 square feet. The Current Replacement Value (CRV), of the buildings assessed is $204,487,000 and was supplied by the school from its insurance documents.

Objectives:

This effort was a comprehensive assessment that includes a detailed physical survey of current deficiencies and an estimate of the associated capital renewal costs. The primary objectives of this assessment were to determine the condition of the facilities, and to quantify the costs associated with continuing to maintain, repair, or replace them.

The Facilities Condition Assessment (FCA) performed for Northwestern Michigan College included an in-depth visual condition assessment survey of the college's buildings and grounds. This survey was conducted by a member of Sodexo's Asset Management and Engineering Team. The result of the field survey is a catalog of current deficiencies with direct project estimates using RS Means pricing. The RS Means pricing database is

updated annually and regionally adjusted to Traverse City, MI. Each building's current replacement value (CRV) is manually input and should be updated annually. Forecasts projecting renewal costs from component life cycles are included in the life cycle model. Together, this information resource becomes a strategic tool that allows the facility managers to quickly identify and capture deferred maintenance priorities.

Developing and maintaining a capital plan, informed, and guided by the Sodexo Facility Capital Assessment Program, will provide school leadership with the information they need to proactively address their capital project needs. The plan will help break down the overall facility needs into small and well-defined buckets that can be prioritized in a way that is consistent with the funding ability and strategic focus of the College. Establishing annual funds to address the capital, modernization, and infrastructure needs of the College are solid methodologies for strategic planning, and the result will be reduced deferred maintenance, and higher satisfaction, leading to a more competitive residential and academic program.

The key objectives of a facilities capital plan include building conditions, school priorities, and budget and priority strategies. A successful capital plan is not a static document, but rather a perpetual effort to assess and maintain the physical assets of the College to complement and enable the priorities of the institution. It is essentially a storehouse of deficiencies coupled with clear prioritization tools that form an effective and executable plan.

The strategic value of an FCA is to:

- ✓ Assess the college's buildings, identifying current and future projected deficiencies
- ✓ Reduce/mitigate risk associated with system failures
- ✓ Improve service quality and customer satisfaction (*students, faculty, and staff*)
- ✓ Lower utility, maintenance, and replacement costs
- ✓ Satisfy regulatory and compliance requirements
- ✓ Positively impact recruitment and retention

Project Scope

Methodology:

The Facilities Condition Assessment (FCA) performed for Northwestern Michigan College included a visual survey of the various facilities, a review of as-built structural drawings (when available), and historical engineering assessments and maintenance records as required with a focus on life cycle Findings in this report or the electronic data base are based on replacement in-kind and may not reflect local interpretation of federal, state and local regulations and codes. The scope of data collected, both system data and requirements (priority capital renewal/deferred maintenance projects) were based on the following criteria:

- Systems that currently exceed their BOMA expected industry life span.
- Systems that are within 5 years of their BOMA expected industry life span; and
- Systems that, regardless of age, their physical condition and/or their reported operating/maintenance history infers that they will likely need replacement within the next 5 years.

The result of the field survey is a catalog of current deficiencies tied to direct project costs in a robust database. The overall tool also catalogues the deficiencies and will forecast prioritization scenarios. This information resource becomes a strategic tool allowing facility managers to quickly identify, capture, and plan the retirement of deferred maintenance items. Further, the FCA Includes both high-level and granular levels of detail, appropriate to the need. It also gives a snapshot of the College's buildings including age, condition, predicted remaining useful life, and estimated replacement value for every component (which becomes a project).

System Analysis

All materials and equipment have a useful life, or a life cycle. This life cycle assumes that it will be installed, wear out over time, and eventually either fail or become obsolete. These costs assume the complete replacement of the system which may not be necessary. It shows the potential risk but with proper management this risk can be mitigated. As the component ages and enters the end of its useful life period, the likelihood of failures increases, and may become repetitive. A loss of efficiency and reliability will also occur.

The following tables show the building system uniformat categories. This is an important way to begin considering what types of systems are to become the priority for upcoming years and to get a better understanding of the general condition of the various types of building systems. Because NMC has four distinct campus' the reports were run to show values specific to each campus and then as a combined value for the College as a whole.

Deficiencies by System Categorized by Uniformat Code (5 Years with inflation)

Campus: Aero Park						
Uniformat and Fiscal Year	**2022**	**2023**	**2024**	**2025**	**2026**	**Summary**
B20 - Exterior Enclosure	14,216	0	0	0	0	**14,216**
B30 - Roofing	0	0	248,813	0	0	**248,813**
C10 - Interior Construction	26,034	87,749	0	0	30,181	**143,964**
C30 - Interior Finishes	8,011	0	0	0	328,669	**336,680**
D30 - HVAC System	102,224	76,107	0	611,045	205,752	**995,129**
D50 - Electrical System	36,934	2,337	14,735	0	322,603	**376,609**
G20 - Site Improvements	89,893	0	0	0	133,859	**223,753**
G40 - Site Electrical Utilities	0	0	0	0	56,740	**56,740**
Summary	**277,314**	**166,193**	**263,548**	**611,045**	**1,077,803**	**2,395,904**

Campus: Great Lakes						
Uniformat and Fiscal Year	2022	2023	2024	2025	2026	Summary
B20 - Exterior Enclosure	0	0	0	0	0	0
B30 - Roofing	0	0	0	0	0	0
C30 - Interior Finishes	71,978	0	0	0	87,989	159,966
D30 - HVAC System	0	41,350	40,109	15,528	240,595	337,582
D50 - Electrical System	24,069	0	103,072	4,959	8,015	140,116
G20 - Site Improvements	0	0	0	0	0	0
G40 - Site Electrical Utilities	28,402	0	0	0	0	28,402
Summary	124,449	41,350	143,181	20,487	336,599	666,066

Campus: Main Campus						
Uniformat and Fiscal Year	2022	2023	2024	2025	2026	Summary
B10 - Super Structure	3,376	0	107,266	0	0	110,642
B20 - Exterior Enclosure	591,880	0	449,708	44,475	30,657	1,116,720
B30 - Roofing	997,446	120,419	154,718	36,044	696,133	2,004,760
C10 - Interior Construction	481,892	1,821,207	90,381	3,786	800,761	3,198,027
C30 - Interior Finishes	1,075,768	503,704	57,967	84,892	411,784	2,134,115
D10 - Conveying	74,032	0	0	83,324	171,647	329,003
D20 - Plumbing System	29,448	6,324	0	5,849	31,555	73,176
D30 - HVAC System	1,167,574	301,459	103,276	459,505	1,327,929	3,359,744
D50 - Electrical System	2,021,998	384,616	0	271,370	678,334	3,356,317
E - Equipment and Furnishing	260,000	0	0	0	215,573	475,573
G20 - Site Improvements	102,021	5,914	6,091	327,566	90,548	532,139
G30 - Site Mechanical Utilities	4,664	4,814	0	0	1,980	11,457
G40 - Site Electrical Utilities	139,790	35,971	45,202	19,087	363,481	603,531
Summary	6,949,888	3,184,426	1,014,610	1,335,897	4,820,383	17,305,204

Building: University Center						
Uniformat and Fiscal Year	2021	2023	2024	2025	2026	Summary
B20 - Exterior Enclosure	0	0	0	0	0	0
B30 - Roofing	0	260,477	0	0	31,067	291,544
C10 - Interior Construction	0	0	0	0	587,868	587,868
C30 - Interior Finishes	237,188	103,191	0	0	56,006	396,385
D10 - Conveying	85,420	0	0	0	0	85,420
D30 - HVAC System	24,439	36,057	0	32,712	106,230	199,438
D50 - Electrical System	108,544	41,663	0	9,942	129,623	289,773
G20 - Site Improvements	4,515	0	0	0	7,586	12,101
G40 - Site Electrical Utilities	0	0	0	0	0	0
Summary	460,105	415,090	0	42,653	918,381	1,862,528

Campus: All Combined						
Uniformat and Fiscal Year	2022	2023	2024	2025	2026	Summary
B10 - Super Structure	3,376	0	107,266	0	0	110,642
B20 - Exterior Enclosure	606,096	0	449,708	44,475	30,657	1,130,936
B30 - Roofing	997,446	380,896	403,531	36,044	727,200	2,545,117
C10 - Interior Construction	507,926	1,908,956	90,381	3,786	1,418,811	3,929,859
C30 - Interior Finishes	1,392,944	606,895	57,967	84,892	884,448	3,027,146
D10 - Conveying	159,452	0	0	83,324	171,647	414,424
D20 - Plumbing System	29,448	6,324	0	5,849	31,555	73,176
D30 - HVAC System	1,299,247	425,241	143,385	1,091,927	1,805,831	4,765,630
D50 - Electrical System	2,191,546	428,616	117,806	286,270	1,138,575	4,162,814
E - Equipment and Furnishings	260,000	0	0	0	215,573	475,573
G20 - Site Improvements	196,429	5,914	6,091	327,566	231,993	767,992
G30 - Site Mechanical Utilities	4,664	4,814	0	0	1,980	11,457
G40 - Site Electrical Utilities	168,192	35,971	45,202	19,087	420,221	688,673
Summary	7,816,766	3,803,626	1,421,338	1,983,220	7,078,490	22,103,440

For each of these various summaries all future year expenditures were calculated with a 3% inflation factor.

The value of these charts is to highlight, at a high level, the types of building system capital investments that are currently due or going to become due that Northwestern Michigan College leadership should consider in creating a positive and healthy learning environment. Infrastructure investment to ensure that buildings have proper utility support is just as important as the high curb appeal that the Northwestern Michigan College grounds must demonstrate. HVAC System needs are critical for Northwestern Michigan College leadership to consider in creating a positive and healthy learning environment. Infrastructure investments to ensure that buildings have proper utility support is just as important as the high curb appeal that the school's interior construction and site improvements must demonstrate. If the planners are not careful, "invisible" systems like the roofs, boilers, chillers, and security/life safety assets will be competing with aesthetic and classroom upgrades for limited capital funds. The aesthetic priorities often win, leaving leaky roofs and inefficient or undependable heating and cooling systems or infrastructure within the buildings. These ignored projects quickly become deferred maintenance items, and their costs quickly snowball over time. Experts say that the cost of deferred maintenance if delayed can grow quickly to over four (4X) times the original repair cost. The inevitable impact on the school community, created by excessive deferred maintenance, is solid justification for strategic updating critical building components, or the failure to do so, affects the quality of life of the occupants, and therefore can impact recruitment, satisfaction, and retention.

Distribution of Requirement Categories

Each requirement or deficiency is assigned a category that indicates the general issue or the reason for the deficiency. These requirement categories were identified during the assessment and will assist in prioritizing the renewal and planning process. Additional categories are available as required. As shown below systems identified as Integrity (effecting the overall integrity of the building) represent the single biggest challenge (20% of the total) and opportunity for improvement.

Priority Criteria:

In addition to system age, the assessment's visual survey sought to identify major repairs, upgrades, and renewals anticipated within the next five years. Each requirement was assigned a priority based on when it was judged that corrective action should be performed, taken from the list in the database. A Requirement Category is the type of issue that must be addressed for a requirement. Each Requirement is assigned a category so that the issues affecting a facility can be categorized. The tables below are for the first five years as categories and priorities.

Deficiencies by Category and Priority By Campus:

Campus: Aero Park							
Category and Priority	1- Due within 1 Year of Inspection	2- Due within 2 Years of Inspection	3- Due within 3 Years of Inspection	4- Due within 4 Years of Inspection	5- Due within 5 Years of Inspection	Total	% of Total
Abandoned	0	2,203	0	0	0	2,203	0.1%
Accessibility	0	0	0	6,818	0	6,818	0.3%
Appearance	0	0	0	8,011	179,563	187,574	8.6%
Energy	54,339	56,127	0	0	13,484	123,950	5.7%
Functionality	22,934	6,776	0	166,696	36,599	233,005	10.7%
Integrity	0	0	227,699	0	0	227,699	10.5%
Lifecycle	0	4,385	0	0	160,665	165,050	7.6%
Maintenance (Optimization)	89,894	30,606	0	18,832	115,468	254,800	11.7%
Mission	0	0	0	3,485	0	3,485	0.2%
Modernization	26,034	82,712	0	0	110,203	218,949	10.1%
Regulatory / Code Compliance	65,798	0	0	0	54,035	119,833	5.5%
Reliability	0	4,450	0	357,378	273,189	635,017	29.2%
Total	258,999	187,259	227,699	561,220	943,206	2,178,383	

Campus: Great Lakes Campus							
Category and Priority	1- Due within 1 Year of Inspection	2- Due within 2 Years of Inspection	3- Due within 3 Years of Inspection	4- Due within 4 Years of Inspection	5- Due within 5 Years of Inspection	Total	% of Total
Appearance	71,976	0	0	0	75,900	**147,876**	22.4%
Energy	0	38,977	94,325	0	0	**133,302**	20.2%
Functionality	0	0	0	0	135,427	**135,427**	20.5%
Integrity	0	55,620	0	0	0	**55,620**	8.4%
Life Safety	351	0	0	0	0	**351**	0.1%
Lifecycle	28,402	0	36,705	13,796	1,973	**80,876**	12.2%
Maintenance (Optimization)	1,280	0	0	0	0	**1,280**	0.2%
Mission	0	0	0	0	70,139	**70,139**	10.6%
Regulatory / Code Compliance	14,452	0	0	0	0	**14,452**	2.2%
Reliability	9,617	0	0	4,406	6,914	**20,937**	3.2%
Total	**126,078**	**94,597**	**131,030**	**18,202**	**290,353**	**660,260**	

Campus: Main Campus							
Category and Priority	1- Due within 1 Year of Inspection	2- Due within 2 Years of Inspection	3- Due within 3 Years of Inspection	4- Due within 4 Years of Inspection	5- Due within 5 Years of Inspection	Total	% of Total
Accessibility	200,121	0	26,445	124,462	184,736	**535,764**	3.3%
Appearance	823,348	476,011	24,500	202,697	481,303	**2,007,859**	12.3%
Energy	479,718	214,688	49,695	0	30,309	**774,410**	4.8%
Functionality	542,045	129,555	20,072	426,241	680,660	**1,798,573**	11.0%
HazMat	10,291	0	0	0	0	**10,291**	0.1%
Integrity	1,437,655	203,293	0	0	1,189,915	**2,830,863**	17.4%
Life Safety	81,404	5,574	0	0	0	**86,978**	0.5%
Lifecycle	386,601	276,256	72,720	474,338	868,938	**2,078,853**	12.8%
Maintenance	0	0	0	0	43,390	**43,390**	0.3%
Maintenance (Optimization)	28,311	0	0	7,106	51,041	**86,458**	0.5%
Mission	0	0	0	0	30,479	**30,479**	0.2%
Modernization	341,130	1,519,942	0	3,364	1,080,597	**2,945,033**	18.1%
Regulatory / Code Compliance	496,517	113,829	0	88,049	11,722	**710,117**	4.4%
Reliability	936,058	100,558	51,142	213,867	799,063	**2,100,688**	12.9%
Technological Improvements	0	0	0	0	247,919	**247,919**	1.5%
Total	**5,763,199**	**3,039,706**	**244,574**	**1,540,124**	**5,700,072**	**16,287,675**	

Campus: NMC University Center						
Category and Priority	1- Due within 1 Year of Inspection	2- Due within 2 Years of Inspection	4- Due within 4 Years of Inspection	5- Due within 5 Years of Inspection	Total	% of Total
Accessibility	0	0	0	11,059	**11,059**	0.6%
Appearance	0	334,456	0	48,311	**382,767**	22.4%
Functionality	0	0	29,064	91,635	**120,699**	7.0%
Integrity	8,475	245,525	0	37,628	**291,628**	17.0%
Lifecycle	18,427	9,198	0	0	**27,625**	1.6%
Modernization	85,420	0	0	496,270	**581,690**	34.0%
Regulatory / Code Compliance	131,042	0	0	0	**131,042**	7.7%
Reliability	3,035	39,272	8,833	114,820	**165,960**	9.7%
Total	**246,399**	**628,451**	**37,897**	**799,723**	**1,712,470**	

Deficiencies by Category by Year: (ALL Campus' Combined)

Campus: All Campus' Merged							
Category and Priority	1- Due within 1 Year of Inspection	2- Due within 2 Years of Inspection	3- Due within 3 Years of Inspection	4- Due within 4 Years of Inspection	5- Due within 5 Years of Inspection	Total	% of Total
Abandoned	0	2,203	0	0	0	**2,203**	0.0%
Accessibility	200,121	0	26,445	131,280	195,795	**553,641**	2.7%
Appearance	895,324	810,467	24,500	210,708	785,077	**2,726,076**	13.1%
Energy	534,057	309,792	144,020	0	43,793	**1,031,662**	5.0%
Functionality	564,979	136,331	20,072	622,001	944,321	**2,287,704**	11.0%
HazMat	10,291	0	0	0	0	**10,291**	0.0%
Integrity	1,446,130	504,438	227,699	0	1,227,543	**3,405,810**	16.3%
Life Safety	81,755	5,574	0	0	0	**87,329**	0.4%
Lifecycle	433,430	289,839	109,425	488,134	1,031,576	**2,352,404**	11.3%
Maintenance	0	0	0	0	43,390	**43,390**	0.2%
Maintenance (Optimization)	119,485	30,606	0	25,938	166,509	**342,538**	1.6%
Mission	0	0	0	3,485	100,618	**104,103**	0.5%
Modernization	452,584	1,602,654	0	3,364	1,687,070	**3,745,672**	18.0%
Regulatory / Code Compliance	707,809	113,829	0	88,049	65,757	**975,444**	4.7%
Reliability	948,710	144,280	51,142	584,484	1,193,986	**2,922,602**	14.0%
Technological Improvements	0	0	0	0	247,919	**247,919**	1.2%
Total	**6,394,675**	**3,950,013**	**603,303**	**2,157,443**	**7,733,354**	**20,838,788**	

Percentage by Category:

Facilities Condition Index

For a facility to benchmark and measure its condition, there must be a metric for comparison. The Facility Condition Index (FCI) is a nationally and industry recognized facility management benchmark that is used to objectively assess the current condition of a building. FCI was developed by a research group working on a project sponsored by NACUBO. NACUBO asked for a written description of the facility condition assessment process, and related data analysis. The FCI is a ratio that compares the amount of deferred maintenance and capital renewal expressed in dollars, to the Current Replacement Value (CRV) of all the equipment; the higher the FCI – the poorer the condition of the assets. Not all requirement categories are included in the FCI calculation as not all systems are considered deferred maintenance items such as abandoned equipment or sustainability improvements.

Facilities Condition Index (FCI) =	$\frac{\text{Deferred Maintenance + Capital Renewal Needs}}{\text{Assets Current Replacement Value (CRV)}}$

Facility Operating Standards	FCI Range
Good	< .10
Fair	.10 to .20
Poor	.20 to .30
Critical	>.30

Requirement Categories Included in FCI		
Parent	**Category**	**Included in FCI**
Integrity	Appearance	
	Integrity	X
	Lifecycle	X
	Maintainability	X
	Reliability	X
Regulatory	Accessibility	X
	Building Code	X
	HazMat	X
	Life Safety	X
Optimization	Abandoned	
	Capacity	
	Energy	
	Maintenance	X
	Mission	X
	Sustainability	
	Technological Improvements	
Functionality	Functionality	X
	Modernization	

The primary value of the FCI metric is to provide a standard benchmark of the current condition of existing physical assets. It is very helpful in comparing facilities and prioritizing expenditures within the portfolio. The FCI is only one component for strategic planning and should not be used exclusively when determining project priority. Other factors to consider are facility profile, usage, and mission critical application. There is, however, a direct correlation between the physical appearance of the facilities and academic success.

Most facilities with FCI's above 10% and below 30% are manageable with an active strategic plan. FCI's above 30% require a very focused plan to identify the best use of resources. The goal should be to improve the FCI of all real-estate assets, which accordingly will enhance Northwestern Michigan College's competitive advantage within the industry by improving the "quality of life" for students and faculty and thereby facilitating the delivery of the Schools primary mission: *"Northwestern Michigan College provides lifelong learning opportunities to our communities."*

FCI Building Summary:

This first chart looks at FCI in a traditional alphabetical listing of assets.

Campus Name: Aero Park Campus								
Building	**Year Constructed**	**Year Last Renovated**	**Age**	**Use**	**Size**	**Replacement Value**	**FCI Cost**	**FCI**
Aero Park Campus Grounds	1960		61	SUPPORTING FACILITIES	1	12,000,000	0	0.00
Aero Park Laboratories	1980	2011	41	ACADEMIC FACILITIES	29,600	4,121,500	304,650	0.07
Automotive Technology	1990	2001	31	ACADEMIC FACILITIES	18,309	3,268,400	180,968	0.06
Aviation Building	1977		44	ACADEMIC FACILITIES	20,912	2,386,100	69,624	0.03
Parsons-Stulen/Michigan Tech Ed	1999		22	ACADEMIC FACILITIES	65,000	15,297,900	835,667	0.05
				Subtotal for Building	**133,821**	**25,073,900**	**1,390,909**	**0.06**

Campus Name: Great Lakes Campus								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Great Lakes Campus	2004		17	ACADEMIC FACILITIES	75,364	21,990,100	377,803	0.02
				Subtotal for Building	**75,364**	**21,990,100**	**349,401**	**0.02**
Campus Name: Main Campus								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Apartment A 1880	1973		48	RESIDENTIAL FACILITIES	12,399	2,057,266	502,886	0.24
Apartment B 1882	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	562,005	0.32
Apartment C 1884	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	530,000	0.30
Appel Property	1954		67	SUPPORTING FACILITIES	1,160	153,200	5,610	0.04
Athletic Fields	1976		45	SUPPORTING FACILITIES	1	55,000	31,250	0.57
Biederman Building	1976	2002	45	ACADEMIC FACILITIES	28,441	8,818,956	1,039,650	0.12
Campus General	1961		60	SUPPORTING FACILITIES	1	7,000,000	755,165	0.11
Dennos Museum Center	1991	2019	30	SUPPORTING FACILITIES	53,545	17,332,700	341,944	0.02
East Hall	1965	1999	56	RESIDENTIAL FACILITIES	52,288	11,990,600	271,801	0.02
Facilities Maintenance Building	2001		20	SUPPORTING FACILITIES	11,900	1,052,100	24,292	0.02
Fine Arts	1971	2000	50	ACADEMIC FACILITIES	18,800	4,843,500	390,997	0.08
Founders Hall	1976	2003	45	OFFICE FACILITIES	4,950	1,170,200	174,688	0.15
Health and Science Building	2002		19	ACADEMIC FACILITIES	57,477	17,463,812	486,309	0.03
James J. Beckett	1996		25	ACADEMIC FACILITIES	34,269	8,164,100	372,337	0.05
North Hall	2017		4	RESIDENTIAL FACILITIES	46,730	6,818,200	0	0.00
Oleson Center	1978	2006	43	SUPPORTING FACILITIES	9,925	2,506,400	122,539	0.05
Osterlin Building	1960	2002	61	ACADEMIC FACILITIES	46,734	12,068,600	2,106,875	0.17
Power House	1962		59	SUPPORTING FACILITIES	3,625	2,128,300	574,542	0.27
Rajkovich Physical Education	1969		52	ATHLETIC FACILITIES	25,674	5,053,068	1,013,391	0.20
Rogers Observatory	1981		40	ACADEMIC FACILITIES	1,624	398,600	0	0.00
Scholars Hall	1962	2003	59	ACADEMIC FACILITIES	62,812	15,495,300	389,322	0.03
Tanis Building	1957	2003	64	OFFICE FACILITIES	14,300	4,344,912	456,368	0.11
Utility Tunnels	1970		51	SUPPORTING FACILITIES	6,925	1,924,000	0	0.00
West Hall	1965	2020	56	SUPPORTING FACILITIES	63,254	9,596,500	74,032	0.01
				Subtotal for Building	**581,632**	**143,915,714**	**10,226,002**	**0.07**
Campus Name: NMC University Center								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
University Center	1986	1994	35	ACADEMIC FACILITIES	59,460	13,507,600	748,013	0.06
				Subtotal for Building	**59,460**	**13,507,600**	**748,013**	**0.06**
				Grand Totals	**850,277**	**204,487,314**	**12,714,326**	**0.06**

The FCI values highlighted are those over 20% which would typically require a very focused plan to identify that asset's best plan of action**, however regarding the Power House the value of the equipment within the building vs the value of the builidng itself is disproportionate. And similarly, the "Athletic Fields" the value of the fields themselves is so low most any improvements makes the ratio disproportionately high**. These values did not skew the campus' overall FCI value by much as the fields only comprise .4% of the gross value of campus. Additionally, the FCI value for the TEC is currently at almost 100% as the canvas material that is the primary building component is nearing its lifecycle and tears have started appearing at the West end.

The next chart shows the buildings listed from highest to lowest FCI Cost. This ranks the buildings/assets that need the most attention or long-term capital planning.

Building FCI Listed by FCI (Highest to Lowest)

Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Campus Name: Aero Park Campus								
Aero Park Laboratories	1980	2011	41	ACADEMIC FACILITIES	29,600	4,121,500	304,650	0.07
Automotive Technology	1990	2001	31	ACADEMIC FACILITIES	18,309	3,268,400	180,968	0.06
Parsons-Stulen/Michigan Tech Ed	1999		22	ACADEMIC FACILITIES	65,000	15,297,900	835,667	0.05
Aviation Building	1977		44	ACADEMIC FACILITIES	20,912	2,386,100	69,624	0.03
Aero Park Campus Grounds	1960		61	SUPPORTING FACILITIES	1	12,000,000	0	0.00
				Subtotal for Building	**104,222**	**32,952,400**	**1,086,259**	**0.03**
Campus Name: Great Lakes Campus								
Great Lakes Campus	2004		17	ACADEMIC FACILITIES	75,364	21,990,100	377,803	0.02
				Subtotal for Building	**75,364**	**21,990,100**	**349,401**	**0.02**
Campus Name: Main Campus								
Athletic Fields	1976		45	SUPPORTING FACILITIES	1	55,000	31,250	0.57
Apartment B 1882	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	562,005	0.32
Apartment C 1884	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	530,000	0.30
Power House	1962		59	SUPPORTING FACILITIES	3,625	2,128,300	574,542	0.27
Apartment A 1880	1973		48	RESIDENTIAL FACILITIES	12,399	2,057,266	502,886	0.24
Rajkovich Physical Education	1969		52	ATHLETIC FACILITIES	25,674	5,053,068	1,013,391	0.20
Osterlin Building	1960	2002	61	ACADEMIC FACILITIES	46,734	12,068,600	2,106,875	0.17
Founders Hall	1976	2003	45	OFFICE FACILITIES	4,950	1,170,200	174,688	0.15
Biederman Building	1976	2002	45	ACADEMIC FACILITIES	28,441	8,818,956	1,039,650	0.12
Campus General	1961		60	SUPPORTING FACILITIES	1	7,000,000	755,165	0.11
Tanis Building	1957	2003	64	OFFICE FACILITIES	14,300	4,344,912	456,368	0.11
Fine Arts	1971	2000	50	ACADEMIC FACILITIES	18,800	4,843,500	390,997	0.08
Oleson Center	1978	2006	43	SUPPORTING FACILITIES	9,925	2,506,400	122,539	0.05
James J. Beckett	1996		25	ACADEMIC FACILITIES	34,269	8,164,100	372,337	0.05
Appel Property	1954		67	SUPPORTING FACILITIES	1,160	153,200	5,610	0.04
Health and Science Building	2002		19	ACADEMIC FACILITIES	57,477	17,463,812	486,309	0.03
Scholars Hall	1962	2003	59	ACADEMIC FACILITIES	62,812	15,495,300	389,322	0.03
Facilities Maintenance Building	2001		20	SUPPORTING FACILITIES	11,900	1,052,100	24,292	0.02
East Hall	1965	1999	56	RESIDENTIAL FACILITIES	52,288	11,990,600	271,801	0.02
Dennos Museum Center	1991	2019	30	SUPPORTING FACILITIES	53,545	17,332,700	341,944	0.02
West Hall	1965	2020	56	SUPPORTING FACILITIES	63,254	9,596,500	74,032	0.01
North Hall	2017		4	RESIDENTIAL FACILITIES	46,730	6,818,200	0	0.00
Rogers Observatory	1981		40	ACADEMIC FACILITIES	1,624	398,600	0	0.00
Utility Tunnels	1970		51	SUPPORTING FACILITIES	6,925	1,924,000	0	0.00
				Subtotal for Building	**581,632**	**143,915,714**	**10,226,002**	**0.07**
Campus Name: NMC University Center								
University Center	1986	1994	35	ACADEMIC FACILITIES	59,460	13,507,600	748,013	0.06
				Subtotal for Building	**59,460**	**13,507,600**	**748,013**	**0.06**
				Grand Totals	**820,678**	**212,365,814**	**12,409,676**	**0.06**

The third chart shows the asset listed sorted by building usage type.

ACADEMIC BUILDINGS								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Osterlin Building	1960	2002	61	ACADEMIC FACILITIES	46,734	12,068,600	2,106,875	0.17
Biederman Building	1976	2002	45	ACADEMIC FACILITIES	28,441	8,818,956	1,039,650	0.12
Fine Arts	1971	2000	50	ACADEMIC FACILITIES	18,800	4,843,500	390,997	0.08
Aero Park Laboratories	1980	2011	41	ACADEMIC FACILITIES	29,600	4,121,500	304,650	0.07
University Center	1986	1994	35	ACADEMIC FACILITIES	59,460	13,507,600	748,013	0.06
Automotive Technology	1990	2001	31	ACADEMIC FACILITIES	18,309	3,268,400	180,968	0.06
Parsons-Stulen/Michigan Tech Ed	1999		22	ACADEMIC FACILITIES	65,000	15,297,900	835,667	0.05
James J. Beckett	1996		25	ACADEMIC FACILITIES	34,269	8,164,100	372,337	0.05
Aviation Building	1977		44	ACADEMIC FACILITIES	20,912	2,386,100	69,624	0.03
Health and Science Building	2002		19	ACADEMIC FACILITIES	57,477	17,463,812	486,309	0.03
Scholars Hall	1962	2003	59	ACADEMIC FACILITIES	62,812	15,495,300	389,322	0.03
Great Lakes Campus	2004		17	ACADEMIC FACILITIES	75,364	21,990,100	377,803	0.02
Rogers Observatory	1981		40	ACADEMIC FACILITIES	1,624	398,600	0	0.00
				Subtotal	518,802	127,824,468	7,302,216	0.06
RESIDENTIAL BUILDINGS								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Apartment B 1882	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	562,005	0.32
Apartment C 1884	1973		48	RESIDENTIAL FACILITIES	12,399	1,740,200	530,000	0.30
Apartment A 1880	1973		48	RESIDENTIAL FACILITIES	12,399	2,057,266	502,886	0.24
East Hall	1965	1999	56	RESIDENTIAL FACILITIES	52,288	11,990,600	271,801	0.02
North Hall	2017		4	RESIDENTIAL FACILITIES	46,730	6,818,200	0	0.00
				Subtotal	136,215	24,346,466	1,866,692	0.08
SUPPORTING BUILDINGS								
Building	Year Constructed	Year Last Renovated	Age	Use	Size	Replacement Value	FCI Cost	FCI
Athletic Fields	1976		45	SUPPORTING FACILITIES	1	55,000	31,250	0.57
Power House	1962		59	SUPPORTING FACILITIES	3,625	2,128,300	574,542	0.27
Rajkovich Physical Education	1969		52	SUPPORTING FACILITIES	25,674	5,053,068	1,013,391	0.20
Founders Hall	1976	2003	45	SUPPORTING FACILITIES	4,950	1,170,200	174,688	0.15
Campus General	1961		60	SUPPORTING FACILITIES	1	7,000,000	755,165	0.11
Tanis Building	1957	2003	64	SUPPORTING FACILITIES	14,300	4,344,912	456,368	0.11
Oleson Center	1978	2006	43	SUPPORTING FACILITIES	9,925	2,506,400	122,539	0.05
Appel Property	1954		67	SUPPORTING FACILITIES	1,160	153,200	5,610	0.04
Facilities Maintenance Building	2001		20	SUPPORTING FACILITIES	11,900	1,052,100	24,292	0.02
Dennos Museum Center	1991	2019	30	SUPPORTING FACILITIES	53,545	17,332,700	341,944	0.02
West Hall	1965	2020	56	SUPPORTING FACILITIES	63,254	9,596,500	74,032	0.01
Aero Park Campus Grounds	1960		61	SUPPORTING FACILITIES	1	12,000,000	0	0.00
Utility Tunnels	1970		51	SUPPORTING FACILITIES	6,925	1,924,000	0	0.00
				Subtotal	195,261	64,316,380	3,573,821	0.06

Using the above data for Northwestern Michigan College the cumulative FCI percentage for the campus is 6% which is in the “Good” category. Going forward it is recommended that building envelopes continue to be prioritized in order to maintain building integrity from degrading. From looking at the average FCI’s by building usage type the Residential buildings look like they are in most need of focus at a cumulative 8% but also the Apartments standing out the most.

It is generally best to use the FCI’s as an internal comparison of relative condition and a guide for the best approach for corrective action. However, for external comparisons we see facilities like Northwestern Michigan College having FCI’s ranging between 10% and 20%. NMC has been doing a great job of keeping their building conditions in good shape and staying below the average FCI range.

Most facilities with FCI’s above 10% and below 30% are manageable with an active strategic plan. FCI’s above 30% require a very focused plan to identify the best use of resources. The goal should be to improve the FCI of all real-estate assets, which accordingly will enhance Northwestern Michigan College’s competitive advantage within the industry by improving the “quality of life” for students, faculty and staff.

Requirement Investment by Year

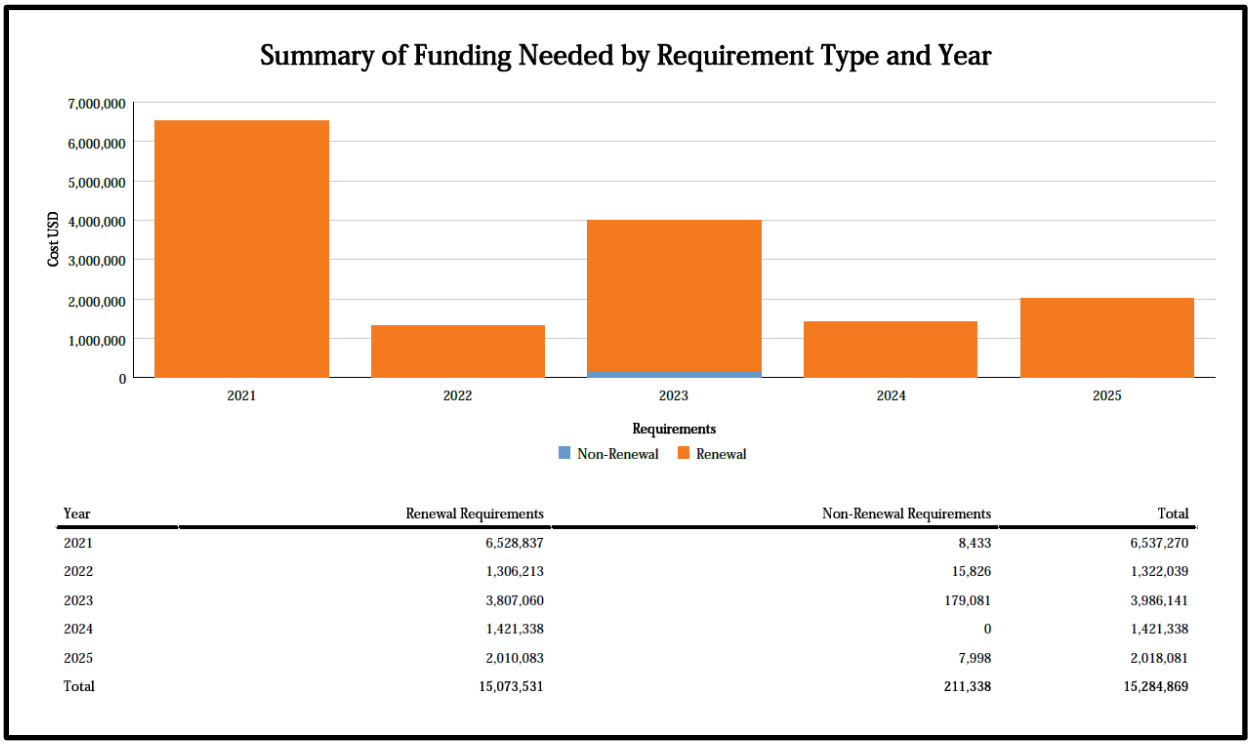
The five-year action plan reflects an investment horizon that identifies critical infrastructural and facility investments. Given the current economic state of many institutions today this plan can be extended to accommodate funding availability. No Institution is operating without a deferred maintenance backlog. The goal of what is being shown here is NOT to get to zero. The goal is to plan out specific improvements.

Developing a clear, concise, and comprehensive capital action plan is not a simple task. Each component of diverse school infrastructure has distinctive maintenance necessities. That is why Sodexo takes the time to understand those necessities and provide the critical information to create the perfect strategic approach for integrating the unique composite of systems and structures.

Our knowledge and expertise allow our partners more control of their fiscal future. By providing a living instrument to track and maintain existing assets, we offer the stakeholders the ability to target their efforts and optimize the results through the evaluation of existing conditions, a five-year management plan to reduce existing and future deferred maintenance conditions.

The annual totals reflected below are estimates based on like replacement costs and can easily be adjusted to actively manage the data base and create a historical register of completed projects. The priority years may also be adjusted to best align with Northwestern Michigan College's budget, mission, and strategic plan. The data is with the use of the software tools should be evaluated annually to maintain an active budgeting tool.

Summary of Funding Needs:



Year	Renewal Requirements	Non-Renewal Requirements	Total
2021	6,528,837	8,433	6,537,270
2022	1,306,213	15,826	1,322,039
2023	3,807,060	179,081	3,986,141
2024	1,421,338	0	1,421,338
2025	2,010,083	7,998	2,018,081
Total	15,073,531	211,338	15,284,869

Capital Renewal Funding Options

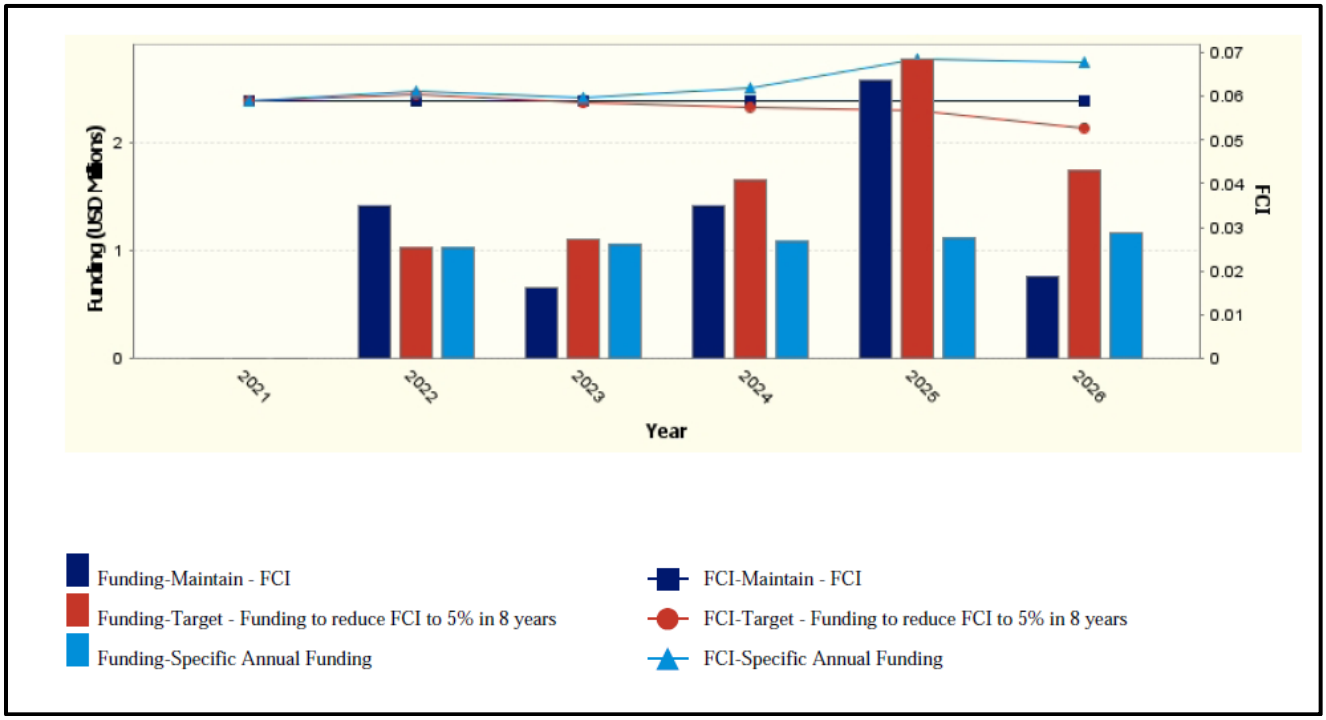
Systems that have exceeded their life cycle are likely compromised. When replacing compromised critical infrastructure components quite often the corresponding equipment must also be replaced which increases the overall cost of the project.

Using the Northwestern Michigan College asset data and the funding module within VFA Facility we can examine various funding strategies, analyze their fiscal implications over various time periods, and project the impact of deferred maintenance, either for individual assets, or across the entire assessed portfolio. Values, either assumed or measured, and different time ranges, can be modeled with the funding module for analysis purposes, to see their cost implications and to project their impact on facility conditions.

To show the analysis potential of VFA Facility, note the three examples summarized below, illustrating the varying costs and condition impacts those different strategies can produce. For these examples, the costs for annual system renewals reflect an annual inflation rate of 3% (today's dollars) over the time examined with a 2% deterioration backlog. The scenarios shown below are samples of funding options. With the VFA Facility software we can produce additional options to match Northwestern Michigan College's mission, values, and available budget.

These are samples of three 5-year Funding scenarios:

Funding/FCI Graph:



Maintain - FCI

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2021	216,487,314	12,586,810	0	12,742,729	12,742,729	203,744,585	0	0	0.0589
2022	222,981,928	1,157,833	262,500	1,420,333	13,125,011	209,856,917	1,420,333	0	0.0589
2023	229,671,379	382,479	270,375	652,854	13,518,761	216,152,619	652,854	0	0.0589
2024	236,561,514	1,141,698	278,486	1,420,185	13,924,323	222,637,191	1,420,185	0	0.0589
2025	243,658,353	2,293,541	286,841	2,580,382	14,342,052	229,316,300	2,580,382	0	0.0589
2026	250,968,096	471,858	295,446	767,305	14,772,314	236,195,783	767,305	0	0.0589

Target - Funding to reduce FCI to 4.5% in 8 years

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2021	216,487,314	12,586,810	0	12,742,729	12,742,729	203,744,585	0	0	0.0589
2022	222,981,928	1,157,833	262,500	1,420,333	13,063,421	209,918,506	1,481,922	0	0.0586
2023	229,671,379	382,479	269,106	651,585	12,990,315	216,681,064	1,116,593	0	0.0566
2024	236,561,514	1,141,698	267,600	1,409,299	13,003,107	223,558,407	1,786,216	0	0.0550
2025	243,658,353	2,293,541	267,864	2,561,405	13,183,362	230,474,990	2,771,243	0	0.0541
2026	250,968,096	471,858	271,577	743,436	12,546,285	238,421,811	1,776,013	0	0.0500

Specific Annual Funding

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2021	216,487,314	12,586,810	0	12,742,729	12,742,729	203,744,585	0	0	0.0589
2022	222,981,928	1,157,833	262,500	1,420,333	13,615,927	209,366,001	1,030,000	100,583	0.0611
2023	229,671,379	382,479	280,488	662,967	13,743,354	215,928,025	1,060,900	220,484	0.0598
2024	236,561,514	1,141,698	283,113	1,424,812	14,642,887	221,918,627	1,092,727	382,246	0.0619
2025	243,658,353	2,293,541	301,643	2,595,184	16,711,651	226,946,702	1,125,509	553,515	0.0686
2026	250,968,096	471,858	344,260	816,118	17,034,440	233,933,656	1,159,274	734,717	0.0679

To avoid adding additional deferred maintenance, capital renewal projects should be funded with increasing or decreasing overall campus backlog in mind. Based on standard system life cycle calculations the recommended **annual minimum** renewal budget for Northwestern Michigan College would be an average of $1,786,397. Funding below this level will cause the deferred maintenance backlog to continue to grow and could create operational and client satisfaction and retention issues going forward. More critical than the FCI reduction is this will allow Northwestern Michigan College to address deferred maintenance before it becomes more difficult to manage.

There are many options in looking at ways to address this challenge. Our team would welcome the opportunity to work with Northwestern Michigan College's leadership to explore possible scenarios. Unfortunately, several of these buildings are approaching an age where an increase in funding for deferred maintenance will be necessary. This is not unique to Northwestern Michigan College as we see it in aging asset portfolios across most markets. Without a specific plan most annual operating budgets do not adequately support the growing need to fund deferred maintenance.

As projects are planned additional focus should be placed on the exterior shell of the buildings (aged roofs, windows, masonry), indoor air quality and interior finishes of your facilities. More specific recommendations are included as an Appendix to this report.

The capital renewal allowance does not include funding for deferred maintenance backlogs and is usually applicable to facilities with a manageable backlog. Deferred maintenance backlog reduction involving a substantial amount of work may require a high level of funding in the initial years of a multi-year capital plan to reduce backlogs to a desired level.

This five-year action plan should be used as a proactive tool to manage Northwestern Michigan College's capital project needs. The report distributes projects in varying amounts for each year based on project priority and justification. The costs developed in the report are budgetary estimates and may fluctuate based on project scope, materials, and bidding process.

Common Facilities Maintenance Acronyms

AC – Air Conditioning
AHU – Air Handling Unit
BAS – Building Automation System
CRV – Current Replacement Value
DDC – Direct Digital Control
EMS - Energy Management System
FCI – Facility Condition Index
FCU – Fan Coil Unit
FM - Facilities Management
HID Lighting – High Intensity Discharge
HVAC – Heating, Ventilation and Air Conditioning
LED lighting – Light Emitting Diode
MEP - Mechanical, Electrical and Plumbing
PM - Preventive Maintenance

Appendix

Recommended Projects:

Based on the Assessors observations and not a specific budget or mission critical needs the following projects should have priority. Specific detailed reports are attached.

1. 5 Year Plan By Building By Year
2. Funding Scenarios Report
3. Roof Replacements
4. Sample Building Detail Report

Works Cited

Wikipedia contributors. "Northwestern Michigan College." *Wikipedia, The Free Encyclopedia*. Wikipedia, The Free Encyclopedia, 14 Dec. 2020. Web. 5 Nov. 2021.

Appendix F

Summary of Facilities and Square Footage

SCHEDULE OF BUILDINGS & CONTENTS

(Period: 7/1/2023 through 7/1/2024)

Northwestern Michigan College

Last Year Totals:	**Buidings**	$ 236,648,300	**Contents**	$ 21,204,936	**Building + Contents**	$ 257,853,236	
Current Year Totals:	**Buidings**	**$ 272,138,200**	**Contents**	**$ -**	**Building + Contents**	**$ 272,138,200**	

Location#	Location Description	Last Year Building Value	Last Year Contents	Last Year Total Value	Last Year Square Ft	New Building Value	New Contents Value	New Total Value	New Square Ft	Leased (Mark "X")	
	Main Campus (1701 E. Front St., Traverse City, MI 49686)										
1	Tanis/Beiderman/ISTLC	35,127,600	2,255,823	37,383,423	105,519	40,408,200	-	40,408,200	105,519		
2	Apartments A	2,056,600	24,403	2,081,003	12,399	2,365,000	-	2,365,000	12,399		
2B	Apartment B	2,056,600	24,402	2,081,002	12,399	2,365,000	-	2,365,000	12,399		
2C	Apartment C	2,056,600	24,402	2,081,002	12,399	2,365,000	-	2,365,000	12,399		
3	Appel Biology	175,700	-	175,700	1,160	202,000	-	202,000	1,160		
5	Aviation	2,763,400	822,747	3,586,147	20,912	3,178,000	-	3,178,000	20,912		
6	Founders Hall	1,350,700	56,288	1,406,988	4,950	1,553,500	-	1,553,500	4,950		
7	East Residence Hall	13,792,300	2,250,119	16,042,419	52,288	15,861,300	-	15,861,300	52,288		
8	Fine Arts Building	5,565,900	123,994	5,689,894	18,800	6,400,800	-	6,400,800	18,800		
10	Osterlin Library	13,890,100	3,446,082	17,336,182	46,734	15,973,600	-	15,973,600	46,734		
13	Museum - Auditorium	19,921,000	306,582	20,227,582	55,085	22,902,900	-	22,902,900	55,085		
15	Oleson Center	2,892,900	63,723	2,956,623	10,398	3,326,600	-	3,326,600	10,398		
16	Physical Education	6,471,400	79,874	6,551,274	25,674	7,442,100	-	7,442,100	25,674		
17	Powerhouse	2,441,600	15,149	2,456,749	3,580	2,807,800	-	2,807,800	3,580		
18	Scholars Hall	17,802,900	95,034	17,897,934	62,812	20,473,100	-	20,473,100	62,812		
19	Timothy J. Nelson Innovation Center	20,084,600	2,874,432	22,959,032	66,304	23,097,200	-	23,097,200	66,304		Formerly West Hall
22	Utility Tunnels	2,207,300	-	2,207,300	6,925	2,538,400	-	2,538,400	6,925		
23	Eastern Avenue Apartment Storage	66,300	-	66,300	1,344	76,000	-	76,000	1,344		
26	Beckett	9,401,800	433,544	9,835,344	34,269	10,812,000	-	10,812,000	34,269		
45	Parsen - Stullen M-TEC	17,627,500	2,198,313	19,825,813	65,000	20,271,700	-	20,271,700	65,000		
46	Maintenance	1,173,800	560,669	1,734,469	11,900	1,350,000	-	1,350,000	11,900		
47	Landscape Bin	35,300	-	35,300	675	40,600	-	40,600	675		
51	North Hall	7,874,300	76,670	7,950,970	46,730	9,055,800	-	9,055,800	46,730		
	Subtotal (Main Campus):	$ 186,836,200	$ 15,732,250	$ 202,568,450	678,256	**$ 214,866,600**	**$ -**	**$ 214,866,600**	**678,256**		
	Great Lakes Campus (715 E Front Street)										
49	Great Lakes Campus	25,272,400	3,190,626	28,463,026	75,364	29,063,200	-	29,063,200	75,364		
	Subtotal (Great Lakes Campus):	$ 25,272,400	$ 3,190,626	$ 28,463,026	75,364	**$ 29,063,200**	**$ -**	**$ 29,063,200**	**75,364**		
	NMC University Center (2200 Dendrinos Drive, Traverse City, MI 49686)										
20	University Center Campus	15,551,400	342,288	15,893,688	59,460	17,871,900	-	17,871,900	59,460		
	Subtotal (University Center Capus):	$ 15,551,400	$ 342,288	$ 15,893,688	59,460	**$ 17,871,900**	**$ -**	**$ 17,871,900**	**59,460**		
	Aero Park Campus (2600 Aero Park Drive, Traverse City, MI 49686)										
50	Aero Park Lab	4,754,800	1,629,735	6,384,535	29,600	5,468,100	-	5,468,100	29,600		
48	Automotive Service Tech	3,767,600	242,583	4,010,183	18,328	4,332,800	-	4,332,800	18,328		
	Subtotal (Aero Park Campus):	$ 8,522,400	$ 1,872,318	$ 10,394,718	47,928	**$ 9,800,900**	**$ -**	**$ 9,800,900**	**47,928**		
	Rogers Observatory (1753 Brimley Rd., Traverse City, MI 49686)										
14	Observatory	465,900	67,454	533,354	1,624	535,600	-	535,600	1,624		
	Subtotal (Observatory):	465,900	67,454	533,354	1,624	**535,600**	**-**	**535,600**	**1,624**		

Totals:	$ 236,648,300	$ 21,204,936	$ 257,853,236	862,632	$ 272,138,200	$ -	$ 272,138,200	862,632	

Informaton Purposes Only - VALUES INCLUDED in Contents ABOVE

Miscellaneous Items Throughout Campus	Last Year Value	This Year Value	
Monitoring Equipment (Mtec)	24,900	0	College Value
Cell Demo System (Mtec)	6,976	0	College Value
BioDiesel Project (Mtec)	5,397	0	College Value
Solar Thermal System (Mtec)	22,262	0	College Value
Solar PV (Mtec)	57,274	0	College Value
Wind Power Generator (U.C.)	68,568	0	College Value
Outdoor Equipment	5,592	0	College Value
Communications Equipment	90,000	0	College Value
Safety/CPR/First Aid Equipment	24,200	0	College Value
Books and Multi-media Material	18,571	0	College Value
Machinery & Tools	12,852	0	College Value
Totals:	$ 336,592	$ -	

Appendix G

Building and Classroom Utilization

Location Utilization Summary

Based on events from 12:00 A.M. to 11:45 P.M., between Aug 15 2022 and May 15 2023. There are 6,507.50 total hours in the report period, (K).

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
AL - ENTIRE SHOP (NO SPACES)	536			No events found						
AL 101	16		0.00	6,507.50	317.50	2,480.00	4.88%	48.75%	2.38%	0.12%
AL 102	24		0.00	6,507.50	614.00	9,553.50	9.44%	63.26%	6.12%	0.58%
AL 103	13			No events found						
AL 106	16			No events found						
AL 110A	16		0.00	6,507.50	387.50	2,922.50	5.95%	49.11%	2.81%	0.17%
AL 110B	20		0.00	6,507.50	420.00	3,120.00	6.45%	37.14%	2.4%	0.15%
AL 118	20		0.00	6,507.50	420.00	4,560.00	6.45%	53.75%	3.5%	0.23%
AL 122	20			No events found						
AL A	20		0.00	6,507.50	620.67	4,854.33	9.54%	40%	3.73%	0.36%
AL A/B	40			No events found						
AL A/B/C	60			No events found						
AL A/B/C/D	80			No events found						
AL B	20			No events found						
AL B/C	40			No events found						
AL B/C/D	60			No events found						
AL BLDG (NO SPACES)	0		0.00	6,507.50	10.00	0.00	0.15%	0%	0%	0%
AL C	20			No events found						
AL C/D	40			No events found						
AL D	20			No events found						
AL E	20			No events found						
AL E/F	40			No events found						
AL E/F/G	60			No events found						
AL E/F/G/H	80			No events found						
AL F	20			No events found						
AL F/G	40			No events found						
AL F/G/H	60			No events found						
AL G	20			No events found						
AL G/H	40			No events found						
AL H	20			No events found						
AL I	20			No events found						
AL I/J	40			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
AL J	20			No events found						
AL K	20			No events found						
AL L	24			No events found						
APPEL	45			No events found						
ARR ROOM	999		0.00	6,507.50	1,374.23	58,442.00	21.12%	0.93%	0.9%	0.19%
AT 100	18		0.00	6,507.50	349.00	5,551.00	5.36%	88.89%	4.74%	0.25%
AT 102	18			No events found						
AT 104	18			No events found						
AT 108	18		0.00	6,507.50	803.00	8,221.00	12.34%	54.86%	7.02%	0.87%
AT 111	18		0.00	6,507.50	420.00	6,285.00	6.45%	80.56%	5.37%	0.35%
AT BLDG (NO SPACES)	0			No events found						
BFC GYM	500			No events found						
BIK STUDIO	50			No events found						
CC POOL	500			No events found						
CITY OPERA HOUSE	0			No events found						
CTC BLDG	999		0.00	6,507.50	522.00	1,476.00	8.02%	0.27%	0.02%	0%
DMC 101	30		0.00	6,507.50	244.33	2,886.25	3.75%	31.11%	1.48%	0.06%
DMC BINSFELD GALLERY	50			No events found						
DMC CONFERENCE ROOM	12			No events found						
DMC DISCOVERY GALLERY	100			No events found						
DMC DUTMERS THEATER	34			No events found						
DMC GALLERIES	250			No events found						
DMC INUIT GALLERY	50			No events found						
DMC JANIS ROOM	75			No events found						
DMC MACFARLANE GALLERY	200			No events found						
DMC MILLIKEN	400		0.00	6,507.50	263.27	1,725.50	4.05%	1.29%	0.07%	0%
DMC MUSEUM CENTER	500			No events found						
DMC PARKING LOT	999			No events found						
DMC SCHMUCKAL GALLERY	150			No events found						
DMC SCULPTURE COURT	300			No events found						
ED SERVICES RECEPTION AREA T 55	0			No events found						
F - MUSIC WING	0			No events found						
F 102	49		0.00	6,507.50	393.75	1,767.83	6.05%	3.17%	0.55%	0.03%
F 103	10		0.00	6,507.50	222.83	1,278.75	3.42%	51.11%	1.97%	0.07%

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
F 104	4		0.00	6,507.50	1.00	0.00	0.02%	0%	0%	0%
F 105	30		0.00	6,507.50	442.17	1,080.75	6.79%	5.37%	0.55%	0.04%
F 107/108 - RECORDING STUDIO	3		0.00	6,507.50	18.00	0.00	0.28%	0%	0%	0%
F 109/110 - MUSIC PRACTICE ROOMS	2		0.00	6,507.50	18.00	0.00	0.28%	0%	0%	0%
F 115	84		0.00	6,507.50	629.50	5,733.00	9.67%	4.73%	1.05%	0.1%
F 115 STEINWAY PIANO	0		0.00	6,507.50	18.00	0.00	0.28%	0%	0%	0%
F 120	18		0.00	6,507.50	392.00	5,550.00	6.02%	67.36%	4.74%	0.29%
F 126	0			No events found						
F 130	20		0.00	6,507.50	485.83	8,774.00	7.47%	65.42%	6.74%	0.5%
F 132	50		0.00	6,507.50	122.00	2,668.00	1.87%	29.33%	0.82%	0.02%
F 135	18		0.00	6,507.50	304.00	3,332.00	4.67%	61.11%	2.84%	0.13%
F 137 - KILN ROOM	0			No events found						
F BLDG (NO SPACES)	0			No events found						
F CENTER LOBBY	0			No events found						
F NORTH LOBBY	0			No events found						
F SOUTH LOBBY	0			No events found						
FFY GYM	50			No events found						
FH	0		0.00	6,507.50	57.42	15.00	0.88%	0%	0%	0%
FH 109	10		0.00	6,507.50	18.00	0.00	0.28%	0%	0%	0%
FH 110	16		0.00	6,507.50	259.42	5,064.33	3.99%	81.82%	4.86%	0.19%
FH 113	12	0	0.00	6,507.50	55.00	440.00	0.85%	66.67%	0.56%	0%
GL 100	24			No events found						
GL 101	40		0.00	6,507.50	471.07	6,804.83	7.24%	34.37%	2.61%	0.19%
GL 102	10		0.00	6,507.50	180.00	1,020.00	2.77%	56.67%	1.57%	0.04%
GL 103	24		0.00	6,507.50	257.00	2,772.00	3.95%	45.31%	1.77%	0.07%
GL 108	24			No events found						
GL 110	24			No events found						
GL 111	32		0.00	6,507.50	603.48	9,754.10	9.27%	47.2%	4.68%	0.43%
GL 112	40		0.00	6,507.50	408.42	4,358.67	6.28%	24.06%	1.67%	0.11%
GL 114	12		35.25	6,472.25	167.00	750.00	2.58%	41.67%	0.97%	0.02%
GL 200-205 RADAR LABS	2			No events found						
GL 207	12		0.00	6,507.50	225.00	1,395.00	3.46%	51.67%	1.79%	0.06%
GL 210	24		118.75	6,388.75	134.00	1,333.50	2.1%	17.26%	0.87%	0.02%
GL 211	40		0.00	6,507.50	624.25	9,118.25	9.59%	34.9%	3.5%	0.34%

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
GL 214 - DO NOT BOOK	12			No events found						
GL 215 - STUDENT ENCLAVE & GALLEY SD 12	16			No events found						
GL 222	36		0.00	6,507.50	958.83	19,240.00	14.73%	54.69%	8.21%	1.21%
GL 231	12		0.00	6,507.50	2.00	0.00	0.03%	0%	0%	0%
GL 251	24		0.00	6,507.50	192.25	2,138.43	2.95%	41.67%	1.37%	0.04%
GL 252	21		0.00	6,507.50	567.00	4,593.00	8.71%	37.5%	3.36%	0.29%
GL 254	27		0.00	6,507.50	484.00	6,060.00	7.44%	47.41%	3.45%	0.26%
GL 256	25		0.00	6,507.50	423.00	6,281.00	6.5%	58.86%	3.86%	0.25%
GL 257	12		0.00	6,507.50	351.00	3,282.00	5.39%	80%	4.2%	0.23%
GL 258	0			No events found						
GL 269	106		0.00	6,507.50	500.00	7,460.00	7.68%	14.42%	1.08%	0.08%
GL 271	0			No events found						
GL BLDG (NO SPACES)	0			No events found						
GL CULINARY OFFICE	0			No events found						
GL HARBOR LAWN	0			No events found						
GL MARITIME OFFICE	0			No events found						
GL PIER	0			No events found						
GL RECEPTION DESK & WORKROOM	0			No events found						
GL T/S STATE OF MICHIGAN	0			No events found						
GL WEST LAWN	0			No events found						
GTA ROOM	32			No events found						
Greenspire School - UC 211-219	0	0		No events found						
HC A	156			No events found						
HC A & 1/2 B	264			No events found						
HC A & B	420			No events found						
HC B	192			No events found						
HC B & C	432			No events found						
HC BALLROOM	594			No events found						
HC C	224			No events found						
HC C & 1/2 B	314			No events found						
HC CATWALK	0			No events found						
HC COURTYARD	300			No events found						
HC D	76			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
HC OFF-SITE	999			No events found						
HC ROTARY HALL	64			No events found						
HOMESTEAD	0			No events found						
HS 110	12		0.00	6,507.50	409.00	2,200.00	6.29%	45.37%	2.82%	0.18%
HS 111	25		0.00	6,507.50	253.25	3,606.00	3.89%	59.5%	2.22%	0.09%
HS 111/113 VESTIBULE	0	0		No events found						
HS 111A	9			No events found						
HS 112	16		0.00	6,507.50	60.00	750.00	0.92%	78.12%	0.72%	0.01%
HS 113	25		0.00	6,507.50	318.50	5,733.00	4.89%	75.11%	3.52%	0.17%
HS 114	32		0.00	6,507.50	535.08	7,418.17	8.22%	24.73%	3.56%	0.29%
HS 115	25		0.00	6,507.50	90.00	990.00	1.38%	44%	0.61%	0.01%
HS 115/117 VESTIBULE	0	0		No events found						
HS 116	32		0.00	6,507.50	686.42	16,728.83	10.55%	50.54%	8.03%	0.85%
HS 117	25		0.00	6,507.50	312.17	4,871.00	4.8%	62.29%	2.99%	0.14%
HS 117A	14			No events found						
HS 119 GREENHOUSE	24			No events found						
HS 208	24		0.00	6,507.50	67.50	540.00	1.04%	33.33%	0.35%	0%
HS 208/210	20			No events found						
HS 210	24		0.00	6,507.50	746.00	24,888.00	11.46%	73.77%	15.94%	1.83%
HS 211	27		0.00	6,507.50	543.67	8,073.75	8.35%	43.56%	4.6%	0.38%
HS 212	8		0.00	6,507.50	7.50	42.00	0.12%	70%	0.08%	0%
HS 213	24		0.00	6,507.50	555.25	9,878.50	8.53%	70.42%	6.33%	0.54%
HS 214	11		0.00	6,507.50	15.00	54.00	0.23%	32.73%	0.08%	0%
HS 215	24		0.00	6,507.50	278.00	5,118.00	4.27%	70.42%	3.28%	0.14%
HS 216	30		0.00	6,507.50	637.33	19,284.33	9.79%	62.38%	9.88%	0.97%
HS 217	24		0.00	6,507.50	156.00	780.00	2.4%	18.75%	0.5%	0.01%
HS BLDG (NO SPACES)	0			No events found						
HS BOOKSTORE	32			No events found						
HS BOOKSTORE STORAGE	54			No events found						
HS LOBBY	0			No events found						
HS LOBBY - UPSTAIRS	0			No events found						
JB 127 (MEDIA SERVICES)	0			No events found						
JB 128	1			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
JB 136	48			No events found						
JB 140	48		0.00	6,507.50	148.00	2,452.00	2.27%	19.44%	0.78%	0.02%
JB 146	36			No events found						
JB 146/147	72		0.00	6,507.50	282.50	3,858.00	4.34%	24.72%	0.82%	0.04%
JB 147	36			No events found						
JB 148	35		0.00	6,507.50	184.50	3,445.50	2.84%	55%	1.51%	0.04%
JB 149	35		0.00	6,507.50	45.00	630.00	0.69%	40%	0.28%	0%
JB 202	17		285.00	6,222.50	68.00	960.00	1.09%	23.53%	0.91%	0.01%
JB 204	20		285.00	6,222.50	661.50	9,038.00	10.63%	58.57%	7.26%	0.77%
JB 214	24		118.75	6,388.75	124.00	1,380.00	1.94%	23.96%	0.9%	0.02%
JB 215	30		0.00	6,507.50	196.50	3,087.00	3.02%	64%	1.58%	0.05%
JB 216	35		0.00	6,507.50	225.00	4,245.00	3.46%	52%	1.86%	0.06%
JB 217	24		118.75	6,388.75	158.00	2,229.50	2.47%	42.71%	1.45%	0.04%
JB BLDG (NO SPACES)	0			No events found						
JB FIRST LEVEL LOBBY	0			No events found						
JB SECOND LEVEL LOBBY	0			No events found						
JB SIMPLY-TO-	0			No events found						
LB 105	40			No events found						
LB 106 - STUDENT HEALTH SERVICES	0			No events found						
LB 206	42		0.00	6,507.50	414.92	8,713.33	6.38%	18.04%	3.19%	0.2%
LB 207	40		0.00	6,507.50	544.17	12,631.83	8.36%	38.82%	4.85%	0.41%
LB 208	40		0.00	6,507.50	459.67	9,261.00	7.06%	21.15%	3.56%	0.25%
LB 32 (STUDY ROOM)	7			No events found						
LB 35/37	24		118.75	6,388.75	369.75	5,078.75	5.79%	38.43%	3.31%	0.19%
LB 38	70		285.00	6,222.50	168.00	14,883.00	2.7%	40.14%	3.42%	0.09%
LB BLDG	0			No events found						
LB LOBBY	0			No events found						
LOBDELL'S RESTAURANT - BOT	0			No events found						
LUCKY JACK'S	0			No events found						
MILL CREEK ELEMENTARY	30			No events found						
O 103	4	0		No events found						
O 113	23		118.75	6,388.75	9.25	109.00	0.14%	63.77%	0.07%	0%
O 152 TUTORING	0			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
O 202	24			No events found						
O 203	72		0.00	6,507.50	197.00	7,527.00	3.03%	22.22%	1.61%	0.05%
O 204	30		0.00	6,507.50	216.42	5,046.00	3.33%	52.96%	2.58%	0.09%
O 205	72		0.00	6,507.50	177.00	4,755.00	2.72%	29.03%	1.01%	0.03%
O 208 OFFICE	2			No events found						
O 209 OFFICE	2			No events found						
O 210 OFFICE	2			No events found						
O BLDG (NO SPACES)	0			No events found						
O LOBBY	0			No events found						
O SIMPLY-TO-GO CAFE	0			No events found						
O SSC	50			No events found						
OBSV BLDG	60		0.00	6,507.50	125.00	1,500.00	1.92%	16.67%	0.38%	0.01%
OBSV GATE	0			No events found						
OC 102	5			No events found						
OC 112	91			No events found						
OC 129	20		0.00	6,507.50	6.00	0.00	0.09%	0%	0%	0%
OC A	44			No events found						
OC A/B	88			No events found						
OC ABC	132			No events found						
OC B	44			No events found						
OC B/C	88			No events found						
OC BACK DOOR (NO SPACES)	0			No events found						
OC BLDG (NO SPACES)	0			No events found						
OC C	44			No events found						
OC LOBBY	86			No events found						
OFF CAMPUS	9999999			No events found						
ONLINE CLASS	9999999		0.00	6,507.50	961.52	53,918.17	14.78%	0%	0%	0%
OPEN TO PUBLIC	9999999			No events found						
OSTERLIN TESTING SITE A	25	0	0.00	6,507.50	15.33	0.00	0.24%	0%	0%	0%
OSTERLIN TESTING SITE B	25	0	0.00	6,507.50	15.33	0.00	0.24%	0%	0%	0%
Off Site Catering	0	0		No events found						
P 100	90		285.00	6,222.50	342.00	1,440.00	5.5%	1.82%	0.26%	0.01%
P 100N	50			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
P 107	5			No events found						
P 120	40		285.00	6,222.50	125.00	488.00	2.01%	5%	0.2%	0%
P 202	24			No events found						
P 206	30		0.00	6,507.50	127.00	2,520.00	1.95%	28%	1.29%	0.03%
P 207 (MEDIA SERVICES)	0			No events found						
P BUILDING	0			No events found						
P LOBBY	0			No events found						
P SHOWER ROOMS	0			No events found						
PHG GYM	500			No events found						
PRESIDENT'S CONFERENCE ROOM	5			No events found						
PRESIDENT'S OFFICE	0			No events found						
PS - HALL OF TECHNOLOGY	0			No events found						
PS 101/103	78		0.00	6,507.50	302.00	5,616.00	4.64%	14.42%	1.11%	0.05%
PS 104B	0			No events found						
PS 105 (NOT RENTABLE)	12			No events found						
PS 106	16			No events found						
PS 106K SIMPLY-TO-GO CAFE	0			No events found						
PS 107	16		118.75	6,388.75	535.67	8,299.00	8.38%	47.22%	8.12%	0.68%
PS 110	12			No events found						
PS 112	32		0.00	6,507.50	224.50	3,652.00	3.45%	47.5%	1.75%	0.06%
PS 114	24		0.00	6,507.50	45.00	405.00	0.69%	37.5%	0.26%	0%
PS 115 - MMTC-NL	24			No events found						
PS 151	22		118.75	6,388.75	478.50	4,158.50	7.49%	40.34%	2.96%	0.22%
PS 151C	20	0		No events found						
PS 151D	20	0		No events found						
PS 151E	20	0		No events found						
PS 153	12		0.00	6,507.50	120.00	1,020.00	1.84%	70.83%	1.31%	0.02%
PS 154 (RESOURCE ROOM)	6			No events found						
PS 155	24		0.00	6,507.50	585.50	4,825.50	9%	34.26%	3.09%	0.28%
PS 157	96			No events found						
PS 157A	16		118.75	6,388.75	418.00	1,978.00	6.54%	32.29%	1.94%	0.13%
PS 157B	16			No events found						
PS 157C	7			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
PS 1ST FLOOR COMMONS	0			No events found						
PS 201	24		0.00	6,507.50	29.83	312.50	0.46%	30.56%	0.2%	0%
PS 203	24		118.75	6,388.75	374.83	4,156.00	5.87%	32.41%	2.71%	0.16%
PS 204	19		118.75	6,388.75	165.00	2,880.00	2.58%	61.65%	2.37%	0.06%
PS 204 B - RESOURCE ROOM	0			No events found						
PS 205	24		0.00	6,507.50	144.00	1,924.00	2.21%	52.78%	1.23%	0.03%
PS 206	20			No events found						
PS 206A	0			No events found						
PS 216	0			No events found						
PS 217/219	20		118.75	6,388.75	398.00	4,367.00	6.23%	40%	3.42%	0.21%
PS 218	16		0.00	6,507.50	113.50	637.50	1.74%	25%	0.61%	0.01%
PS 220	30		0.00	6,507.50	352.00	4,174.50	5.41%	40.48%	2.14%	0.12%
PS 222	24		0.00	6,507.50	60.00	480.00	0.92%	33.33%	0.31%	0%
PS 222/224	56		0.00	6,507.50	358.25	4,384.50	5.51%	20.09%	1.2%	0.07%
PS 224	24		0.00	6,507.50	180.00	4,395.00	2.77%	106.94%	2.81%	0.08%
PS 225	24		0.00	6,507.50	90.00	660.00	1.38%	22.92%	0.42%	0.01%
PS 226	24		0.00	6,507.50	476.33	4,266.33	7.32%	35.65%	2.73%	0.2%
PS 227	14			No events found						
PS 2ND FLOOR COMMONS	0			No events found						
PS AIRPORT SIDE PATIO	0			No events found						
PS BLDG (NO SPACES)	0			No events found						
PS BUILDING	0			No events found						
PS EAST OFFICE WING	0			No events found						
PS NORTH OFFICE WING	0			No events found						
PS RECEPTION LOBBY	0			No events found						
PS SOLAR TRAILER	0			No events found						
SBHS SBHS	20			No events found						
SH FIRST LEVEL WEST LOBBY	0			No events found						
SH 09	24			No events found						
SH 101	40		0.00	6,507.50	223.83	3,644.00	3.44%	50.18%	1.4%	0.05%
SH 102	40		0.00	6,507.50	451.00	11,878.50	6.93%	65%	4.56%	0.32%
SH 103	24		0.00	6,507.50	150.33	2,264.67	2.31%	55.21%	1.45%	0.03%
SH 103/105	64		0.00	6,507.50	48.00	1,680.00	0.74%	54.69%	0.4%	0%

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
SH 104	32		0.00	6,507.50	294.50	5,760.50	4.53%	60.71%	2.77%	0.13%
SH 105	40		0.00	6,507.50	609.00	10,626.00	9.36%	36.93%	4.08%	0.38%
SH 106	32		0.00	6,507.50	115.00	2,000.00	1.77%	53.29%	0.96%	0.02%
SH 107 - FACULTY & STAFF BREAKROOM	10			No events found						
SH 109	120		0.00	6,507.50	17.50	3,850.00	0.27%	36.67%	0.49%	0%
SH 113	40		0.00	6,507.50	184.00	2,515.00	2.83%	31%	0.97%	0.03%
SH 15	24		0.00	6,507.50	90.00	1,080.00	1.38%	50%	0.69%	0.01%
SH 19	0			No events found						
SH 20	24		0.00	6,507.50	341.00	1,998.00	5.24%	24.48%	1.28%	0.07%
SH 20/22	60		0.00	6,507.50	75.00	270.00	1.15%	5%	0.07%	0%
SH 202	40		0.00	6,507.50	671.50	12,157.00	10.32%	44.23%	4.67%	0.48%
SH 204	28		0.00	6,507.50	446.50	7,641.50	6.86%	59.13%	4.19%	0.29%
SH 205	24		0.00	6,507.50	385.83	6,975.33	5.93%	73.96%	4.47%	0.26%
SH 206 ALICE 1	25		0.00	6,507.50	60.00	960.00	0.92%	64%	0.59%	0.01%
SH 207	32		0.00	6,507.50	492.00	8,344.00	7.56%	52.08%	4.01%	0.3%
SH 209	32		0.00	6,507.50	488.00	9,370.00	7.5%	58.75%	4.5%	0.34%
SH 215 - FACULTY & STAFF BREAK ROOM	10			No events found						
SH 217	77		0.00	6,507.50	272.50	4,080.00	4.19%	14.29%	0.81%	0.03%
SH 218 ALICE 2	23		0.00	6,507.50	2.50	37.50	0.04%	65.22%	0.03%	0%
SH 22	32		0.00	6,507.50	184.00	3,496.00	2.83%	59.38%	1.68%	0.05%
SH 221 - WRITING & READING CNTR SD 10	0			No events found						
SH 23 - WHITE PINE PRESS OFFICE	10			No events found						
SH 28 - NMC MAGAZINE	5			No events found						
SH 30	32			No events found						
SH 32	32			No events found						
SH BLDG (NO SPACES)	0			No events found						
SH FIRST LEVEL EAST LOBBY	0			No events found						
SH SECOND LEVEL LOBBY	0			No events found						
STUDENT SERVICES CONFERENCE ROOM	10			No events found						
T 51 - TECH HELP DESK	0			No events found						
T 53 - MATH LAB	7			No events found						
TANIS BUILDING (NO SPACES)	0			No events found						
TC GOLF AND COUNTRY CLUB	0			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
TC OPERA HOUSE	0			No events found						
TCAPS	0			No events found						
TCCHS ROOM	0			No events found						
TCWSH ROOM	30		0.00	6,507.50	44.25	1,062.00	0.68%	80%	0.54%	0%
TECHNOLOGY HELP DESK	0			No events found						
TJNIC 01	6	0		No events found						
TJNIC 02	6	0		No events found						
TJNIC 03	4	0		No events found						
TJNIC 04	4	0		No events found						
TJNIC 08	14	0		No events found						
TJNIC 09	3	0		No events found						
TJNIC 103	10	0		No events found						
TJNIC 104	24	0		No events found						
TJNIC 104/105	48	0		No events found						
TJNIC 105	24	0		No events found						
TJNIC 106	36	0		No events found						
TJNIC 106/107	76	0		No events found						
TJNIC 107	40	0		No events found						
TJNIC 116	4	0		No events found						
TJNIC 117	4	0		No events found						
TJNIC 118	4	0		No events found						
TJNIC 119	3	0		No events found						
TJNIC 123	24	0		No events found						
TJNIC 124	2	0		No events found						
TJNIC 125	2	0		No events found						
TJNIC 14	30	0		No events found						
TJNIC 15	30	0		No events found						
TJNIC 203	0	0		No events found						
TJNIC 207	4	0		No events found						
TJNIC 208	2	0		No events found						
TJNIC 209	4	0		No events found						
TJNIC 35	10	0		No events found						
TJNIC Building	0			No events found						
TJNIC Catering	0	0		No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
TJNIC Library	0	0		No events found						
TJNIC Lobby	0	0		No events found						
UC 01	24			No events found						
UC 05	42			No events found						
UC 06	22			No events found						
UC 07	44			No events found						
UC 08	13			No events found						
UC 09	24			No events found						
UC 103 (ZONTA)	8			No events found						
UC 105 (ZONTA)	8			No events found						
UC 106	16			No events found						
UC 11	14			No events found						
UC 12	24			No events found						
UC 14	28			No events found						
UC 14/16	48			No events found						
UC 16	28			No events found						
UC 17	0			No events found						
UC 18	0			No events found						
UC 202-F (GRAY)	15			No events found						
UC 204	36			No events found						
UC 205	24			No events found						
UC 206	9			No events found						
UC 207	40		23.50	6,484.00	11.50	0.00	0.18%	0%	0%	0%
UC 208	20			No events found						
UC 209	32		23.50	6,484.00	23.00	0.00	0.35%	0%	0%	0%
UC 211	12			No events found						
UC 212	32			No events found						
UC 213	24			No events found						
UC 214	24			No events found						
UC 215	24			No events found						
UC 215/217	48			No events found						
UC 216	24			No events found						
UC 217	24			No events found						
UC 218	24			No events found						

Location Utilization Summary

	(A) Max Capacity	(B) Fill Ratio	(C) Blackout Hours	(D) Possible Hours	(E) Hours Used	(F) Contact Hours	(G) Time Utilization	(H) Class Seat Utilization	(I) Station Utilization	(J) Net Utilization
UC 219	24			No events found						
UC BLDG (NO SPACES)	0			No events found						
UC Basement Common Area Kitchen	10	0		No events found						
UC CAFE	14			No events found						
UC FIRST LEVEL SOUTH LOBBY	6			No events found						
UC GVSU Lower Level	90	0		No events found						
UC LOWER LEVEL SOUTH LOBBY	19			No events found						
UC OFF CAMPUS	0			No events found						
UC PARTNER OFFICE	0			No events found						
UC PATIO	35			No events found						
VIRTUAL MEETING	999999			No events found						
West Hall Catering	0	0		No events found						
Z_P 151C	20	0		No events found						

Column A & B
Maximum Capacity and Fill Ratio are values that may be provided for a location. The location utilization computations cannot be made where Maximum Capacity has not been specified.

Column C
Blackout Hours is the total hours of all blackout dates defined for a location for this report time period.

Column D
Possible Hours is calculated by taking the total possible hours for the report period (K) defined by the user report parameters and subtracting the total blackout hours for the location during that same time period.

Column E
Hours Used is the total number of hours for all occurrences assigned to this location during the report period.

Column F
Contact Hours is the product of (column I), Total Hours Used, and the Selected Head Count for each reservation in the report period.

Column G
Time Utilization is the percentage of hours a location is used during the report period. This is the quotient of (column E), Hours Used, divided by (column D), Possible Hours. This value is expressed as a percentage.

Column H
Class Seat Utilization is the average percentage of seats used for each reservation compared to the Maximum Capacity of the location. Class Seat Utilization is calculated by taking the Selected Head Count, divided by (column A), Maximum Capacity, multiplied by 100. This value is expressed as a percentage.

Column I
Station Utilization is the percentage of total contact hours compared to the total possible contact hours for the location during the report period. The total possible contact hours is the (column A), Maximum Capacity, multiplied by (column D), Total Possible Hours. This value is expressed as a percentage.

Column J
Net Utilization is the product of (column G), Time Utilization, and (column I), Station Utilization. This value is expressed as a percentage.

Column K
The Total Hours per Report Period is computed from the date and time range entered when the report was printed.

Appendix H

Replacement Value — Insurance Appraisal for all Buildings

APPRAISAL OF

NORTHWESTERN MICHIGAN COLLEGE

1701 EAST FRONT STREET

TRAVERSE CITY, MICHIGAN 49686

R.A. Schettler, Inc.
Certified
Appraisal Service
24634 W. FIVE MILE RD.
SUITE/UNIT 30
REDFORD, MI. 48239
(248) 705-5801
Industrial - Commercial
RAS
Residential - Institutional

NOVEMBER 1, 2022

ASSOCIATED RISK MANAGEMENT, INC.
39111 W. SIX MILE ROAD
LIVONIA, MICHIGAN 48152

TO WHOM IT MAY CONCERN:

WE SUBMIT HEREWITH OUR CERTIFIED APPRAISAL OF ASSETS BELONGING TO NORTHWESTERN MICHIGAN COLLEGE, 1701 EAST FRONT, TRAVERSE CITY, MICHIGAN. THIS APPRAISAL INCLUDES BUILDINGS ONLY.

THIS APPRAISAL IS ARRANGED UNDER SEVERAL PROPERTY CLASSIFICATIONS AND FURNISHES AN UNBIASED STATEMENT OF VALUES.

THE "REPLACEMENT VALUE NEW" THE COST THAT WOULD BE INCURRED IN ACQUIRING AN EQUALLY DESIRABLE SUBSTITUTE FOR PROPERTY, WHICH IS DETERMINED IN ACCORDANCE WITH MARKET PRICES PREVAILING AT THE DATE OF THIS APPRAISAL AND REPRESENTS THE COST TO REPLACE NEW, THE PROPERTY IN LIKE KIND.

THE "SOUND OR INSURABLE VALUE" INDICATING PRESENT PHYSICAL SOUND VALUES OF THE PROPERTY OF AN OPERATING ENTERPRISE BASED UPON THE COST OF REPRODUCTION NEW, LESS AN ALLOWANCE FOR ACCRUED DEPRECIATION RESULTING FROM ITS AGE, CONDITION AND DEGREE OF OBSOLESCENCE.

A SUMMARY IMMEDIATELY FOLLOWING THIS LETTER SHOWS THE REPLACEMENT VALUE NEW AND SOUND INSURABLE VALUES SEGREGATED ACCORDING TO ACCOUNTS ESTABLISHED BY OUR COMPANY.

IN ORDER THAT YOU MAY FULLY UNDERSTAND THE SERVICES WE HAVE RENDERED, WE PRESENT THE IMPORTANT POINTS AS FOLLOWS:

FIRST: ALL PHYSICAL CHANGES OF THEIR PROPERTY (ADDITIONS, REMOVALS, REPLACEMENTS, ALTERATIONS AND CHANGES IN LOCATION) AS FURNISHED BY THEIR MANAGERIAL STAFF AND/OR RECORDS HAVE BEEN INCORPORATED IN THE APPRAISAL.

SECOND: WE HAVE CHECKED AND VERIFIED BY PERSONAL INVESTIGATION ALL CHANGES SUBMITTED BY THEIR STAFF.

THIRD: WITH THE INFORMATION OBTAINED FROM THEIR RECORDS, WE HAVE DEDUCTED IN DOLLARS ALL RETIREMENTS AND ABANDONMENTS THAT HAVE TRANSPIRED SINCE THE DATE OF THEIR LAST APPRAISAL.

ECONOMIC CONDITIONS AFFECTING THE CONSTRUCTION, EQUIPMENT AND LABOR MARKETS, VALUES SHOWN ARE SUBJECT TO ADJUSTMENT, AS REQUIRED, AFTER THE DATE SPECIFIED IN CERTIFICATES.

WE HAVE NOT EXAMINED THE LEGAL TITLES OF PROPERTY; THEREFORE WE DO NOT ASSUME RESPONSIBILITY REGARDING THE OWNERSHIP OF PROPERTY IN THIS APPRAISAL.

VERY TRULY YOURS,

R. A. SCHETTLER, INC.

RAS/mbj

R.A. Schettler, Inc.
Certified
Appraisal Service
24634 W. FIVE MILE RD.
SUITE/UNIT 30
REDFORD, MI. 48239
(248) 705-5801
Industrial - Commercial
RAS
Residential - Institutional

NOVEMBER 1, 2022

NORTHWESTERN MICHIGAN COLLEGE
1701 EAST FRONT STREET
TRAVERSE CITY, MICHIGAN 49686

TO WHOM IT MAY CONCERN:

WE SUBMIT HEREWITH OUR CERTIFIED APPRAISAL OF ASSETS BELONGING TO NORTHWESTERN MICHIGAN COLLEGE, 1701 EAST FRONT, TRAVERSE CITY, MICHIGAN. THIS APPRAISAL INCLUDES BUILDINGS ONLY.

THIS APPRAISAL IS ARRANGED UNDER SEVERAL PROPERTY CLASSIFICATIONS AND FURNISHES AN UNBIASED STATEMENT OF VALUES.

THE "REPLACEMENT VALUE NEW" THE COST THAT WOULD BE INCURRED IN ACQUIRING AN EQUALLY DESIRABLE SUBSTITUTE FOR PROPERTY, WHICH IS DETERMINED IN ACCORDANCE WITH MARKET PRICES PREVAILING AT THE DATE OF THIS APPRAISAL AND REPRESENTS THE COST TO REPLACE NEW, THE PROPERTY IN LIKE KIND.

THE "SOUND OR INSURABLE VALUE" INDICATING PRESENT PHYSICAL SOUND VALUES OF THE PROPERTY OF AN OPERATING ENTERPRISE BASED UPON THE COST OF REPRODUCTION NEW, LESS AN ALLOWANCE FOR ACCRUED DEPRECIATION RESULTING FROM ITS AGE, CONDITION AND DEGREE OF OBSOLESCENCE.

A SUMMARY IMMEDIATELY FOLLOWING THIS LETTER SHOWS THE REPLACEMENT VALUE NEW AND SOUND INSURABLE VALUES SEGREGATED ACCORDING TO ACCOUNTS ESTABLISHED BY OUR COMPANY.

IN ORDER THAT YOU MAY FULLY UNDERSTAND THE SERVICES WE HAVE RENDERED, WE PRESENT THE IMPORTANT POINTS AS FOLLOWS:

FIRST: ALL PHYSICAL CHANGES OF YOUR PROPERTY (ADDITIONS, REMOVALS, REPLACEMENTS, ALTERATIONS AND CHANGES IN LOCATION) AS FURNISHED BY YOUR MANAGERIAL STAFF AND/OR RECORDS HAVE BEEN INCORPORATED IN THE APPRAISAL.

SECOND: WE HAVE CHECKED AND VERIFIED BY PERSONAL INVESTIGATION ALL CHANGES SUBMITTED BY YOUR STAFF.

THIRD: WITH THE INFORMATION OBTAINED FROM YOUR RECORDS, WE HAVE DEDUCTED IN DOLLARS ALL RETIREMENTS AND ABANDONMENTS THAT HAVE TRANSPIRED SINCE THE DATE OF YOUR LAST APPRAISAL.

ECONOMIC CONDITIONS AFFECTING THE CONSTRUCTION, EQUIPMENT AND LABOR MARKETS, VALUES SHOWN ARE SUBJECT TO ADJUSTMENT, AS REQUIRED, AFTER THE DATE SPECIFIED IN CERTIFICATES.

WE HAVE NOT EXAMINED THE LEGAL TITLES OF PROPERTY; THEREFORE WE DO NOT ASSUME RESPONSIBILITY REGARDING THE OWNERSHIP OF PROPERTY IN THIS APPRAISAL.

VERY TRULY YOURS,

R. A. SCHETTLER, INC.

RAS/MBJ

R.A SCHETTLER, INC.

REGISTERED APPRAISERS

-CERTIFY-

THAT ON THE DATE GIVEN IN THIS CERTIFICATE, THE PROPERTY OF

NORTHWESTERN MICHIGAN COLLEGE

LOCATED AT: 1701 EAST FRONT STREET

TRAVERSE CITY, MICHIGAN 49686

WAS WELL AND REASONABLY WORTH:

TWO HUNDRED SEVENTY-TWO MILLION, ONE HUNDRED THIRTY-EIGHT THOUSAND, TWO HUNDRED DOLLARS.

ON THE BASIS OF ITS REPLACEMENT VALUE NEW

DISTRIBUTION OF VALUES ARE AS FOLLOWS:

REAL ESTATE - BUILDINGS. $272,138,200.00

DATE: NOVEMBER FIRST TWO THOUSAND TWENTY-TWO R.A. SCHETTLER, INC.

PROJECT NO: 2186 BY _____

R.A SCHETTLER, INC.

REGISTERED APPRAISERS

-CERTIFY-

THAT ON THE DATE GIVEN IN THIS CERTIFICATE, THE PROPERTY OF

NORTHWESTERN MICHIGAN COLLEGE

LOCATED AT: 1701 EAST FRONT STREET

TRAVERSE CITY, MICHIGAN 49686

WAS WELL AND REASONABLY WORTH:

TWO HUNDRED MILLION, SIX HUNDRED EIGHT THOUSAND, EIGHT HUNDRED DOLLARS

ON THE BASIS OF ITS SOUND VALUATION

DISTRIBUTION OF VALUES ARE AS FOLLOWS:

REAL ESTATE - BUILDINGS. $200,608,800.00

DATE: NOVEMBER FIRST TWO THOUSAND TWENTY-TWO R.A. SCHETTLER, INC.

PROJECT NO: 2186 BY _____

R.A. SCHETTLER, INC
SUMMATION

Asset Acct: NORTHWESTERN MICHIGAN COLLEGE As of 11/1/22
REAL ESTATE - BUILDING -

Summary by:	Replacement Value New	Sound or Depr. Value
TANIS/BIEDERMAN/HEALTH & SCIENCE	40,408,200.00	29,093,900.00
APARTMENT A	2,365,000.00	1,182,500.00
APARTMENT B	2,365,000.00	1,182,500.00
APARTMENT C	2,365,000.00	1,182,500.00
EASTERN AVENUE STORAGE BUILDING	76,000.00	54,700.00
APPEL BIOLOGY LABORATORY	202,000.00	72,700.00
AVIATION	3,178,000.00	1,716,100.00
BECKETT	10,812,000.00	8,217,100.00
FOUNDERS HALL	1,553,500.00	994,200.00
EAST HALL	15,861,300.00	8,882,300.00
FINE ARTS	6,400,800.00	3,840,500.00
OSTERLIN LIBRARY	15,973,600.00	8,785,500.00
MUSEUM/AUDITORIUM	22,902,900.00	17,635,200.00
OBSERVATORY	535,600.00	316,000.00
OLESON CENTER	3,326,600.00	2,395,200.00
PHYSICAL EDUCATION	7,442,100.00	3,423,400.00
POWERHOUSE	2,807,800.00	1,179,300.00
SCHOLARS HALL	20,473,100.00	11,669,700.00
WEST HALL INNOVATION CENTER	23,097,200.00	20,556,500.00
UNIVERSITY CENTER CAMPUS	17,871,900.00	11,974,200.00
UTILITY TUNNELS	2,538,400.00	1,142,300.00
PARSEN-STULLEN M-TEC	20,271,700.00	15,811,900.00
MAINTENANCE	1,350,000.00	1,066,500.00
LANDSCAPE BIN	40,600.00	32,100.00

CONTINUED.....

R.A. SCHETTLER, INC
SUMMATION

Asset Acct: NORTHWESTERN MICHIGAN COLLEGE As of 11/1/22
REAL ESTATE - BUILDING -

Summary by:	Replacement Value New	Sound or Depr. Value
AUTOMOTIVE SERVICE TECHNOLOGY	4,332,800.00	2,686,300.00
GREAT LAKES CAMPUS	29,063,200.00	23,541,200.00
AERO PARK LAB	5,468,100.00	3,280,900.00
NORTH HALL	9,055,800.00	8,693,600.00
GRAND TOTAL	272,138,200.00	200,608,800.00

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE
REAL ESTATE - BUILDING

Bldg.: TANIS/BIEDERMAN/
HEALTH AND SCIENCE

Description	11/1/22
BASEMENT:	
FLOOR	40,500.00
EXTERIOR WALLS	131,000.00
INTERIOR CONSTRUCTION	117,400.00
FOUNDATION:	1,229,600.00
SUPERSTRUCTURE:	
FRAME	1,715,600.00
FLOORS	1,545,900.00
FLOOR COVERINGS	1,202,400.00
CEILINGS	666,500.00
ROOF STRUCTURE	1,124,100.00
ROOF COVER	548,400.00
INTERIOR CONSTRUCTION	5,657,000.00
BUILT-IN FIXTURES	2,500,600.00
ELECTRICAL	3,732,200.00
PLUMBING	2,690,000.00
HEATING	4,182,500.00
MISCELLANEOUS CONSTRUCTION	1,523,600.00
EXTERIOR WALLS	9,157,400.00
TOTAL LABOR AND MATERIALS	37,764,700.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	40,408,200.00
Depreciation %	28%
Sound Valuation	29,093,900.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: TANIS/BIEDERMAN

KIND OF BUILDING: CLASS C

NO. OF STORIES: TWO AND THREE

OCCUPANCY - OFFICES AND CLASSROOMS

SIZE -	FIRST FLOOR	17,707 SQUARE FEET
	SECOND FLOOR	17,907 SQUARE FEET
	THIRD FLOOR	8,718 SQUARE FEET
	TOTAL SQUARE FEET	44,392

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND, PRECAST PRESTRESSED CONCRETE PLANKS, 3" CONCRETE TOPPING, CONCRETE JOISTS, CONCRETE SLAB

FLOOR COVER - CARPET, OFFICES, CLASSROOMS, CORRIDOR
BRICK, LOBBY
CERAMIC TILE, RESTROOMS
TERRAZZO, STAIRCASES

ROOF STRUCTURE - PRECAST CONCRETE PLANK, SKYLIGHT 20' X 20';
CONCRETE JOISTS PRECAST TEES, CONCRETE SLAB

ROOF COVER - BUILT-UP COMPOSITION, RIGID INSULATION

CEILINGS - SUSPENDED ACOUSTICAL LAY-IN OFFICES AND CLASSROOMS;

- GYPSUM BOARD, PAINTED RESTROOMS

INTERIOR CONSTRUCTION - METAL FRAME PARTITIONS;
- 6" CONCRETE BLOCK PARTITIONS;
- 8" CONCRETE BLOCK PARTITIONS

BUILT-IN FIXTURES -
- MONTGOMERY PASSENGER ELEVATOR, 3 STOP, 2,500 LB. CAPACITY
6 - LAMINATE TOP STUDY TABLES, 24' 10 SWIVEL SEATS EACH
6 - LAMINATE TOP TABLES, 24' WITH 5 SWIVEL SEATS
- RECEPTION DESK, LAMINATE
17 - WALL CABINETS, LAMINATE, 24" WIDE
3 - WALL CABINETS, LAMINATE, 12" WIDE
3 - BASE CABINETS, LAMINATE, SOLID SURFACE TOP, 24" WIDE
2 - BASE CABINETS, LAMINATE, LAMINATE TOP, 24"
2 - BASE CABINETS, LAMINATE, SOLID SURFACE TOP, 12" WIDE
2 - BASE CABINETS, LAMINATE, SOLID SURFACE TOP, 18" WIDE

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

TANIS/BIEDERMAN: continued

MECHANICAL EQUIPMENT:

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
- 14 - WATER CLOSETS
- 16 - LAVATORIES
- 6 - URINALS
- 2 - SANITARY SINKS
- 3 - DRINKING FOUNTAINS
- 1 - WATER HEATER, ELECTRIC, 200 GALLON
- 1 - HOSPITAL SINK, STAINLESS STEEL

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES; DISTRIBUTION PANEL, TRANSFORMERS
- 1 - 500 KVA TRANSFORMER

HEATING AND AIR CONDITIONING -
- STEAM FROM POWERHOUSE
- McQUAY MODEL MSL164BH AIR HANDLING UNIT
- McQUAY MODEL WHR080B2 PACKAGED WATER CHILLER, 70-TON
- HEATING PUMPS AND CHILLED WATER PUMPS AS REQUIRED
- LIEBERT COMPUTER ROOM CONDENSING UNIT
- KOLDWAVE AIR CONDITIONING UNIT
- MITSUBISHI PKG-30F WALL MOUNT AIR CONDITIONER
- MITSUBISHI CONDENSING UNIT
- BRYANT MODEL 580FEV151224AA PACKAGED GAS HEAT, 12 1/2 TON COOLING UNIT, #4907G30305
- CARRIER MODEL 48TME012-611 PACKAGED GAS HEAT, 12 TON COOLING UNIT, #1709G10902
- ABB VARIABLE FREQUENCY DRIVES

EXTERIOR WALLS - 14" CONCRETE
- FACE BRICK BLOCK BACK-UP, 12"
- DRYVIT, BLOCK BACK-UP, 8"
- 12" CONCRETE
- CURTAIN WALL

MISCELLANEOUS:
- SPRINKLERS THROUGHOUT
- COMPUTER ROOM FLOOR
- NOTIFIER
- FIRE ALARM SYSTEM
- 1 - AUTOMATIC DOOR OPENER
- ACCESS CONTROL SYSTEM
- 3 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD
BUILT: TANIS/ADMINISTRATION 1958; RENOVATED 1997
BIEDERMAN/HEALTH EDUCATION 1976; RENOVATED 2002

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: HEALTH AND SCIENCE

KIND OF BUILDING: CLASS C

NO. OF STORIES: TWO WITH PARTIAL BASEMENT, PENTHOUSE

OCCUPANCY: SCIENCE

SIZE: BASEMENT - 4,013 SQUARE FEET
1ST FLOOR - 28,195 SQUARE FEET
2ND FLOOR - 22,821 SQUARE FEET
PENTHOUSE - 6,098 SQUARE FEET

TOTAL SQUARE FEET = 61,127

FOUNDATION: CONCRETE

SUPERSTRUCTURE

FRAME - STEEL

FLOORS - CONCRETE ON GROUND; CONCRETE COMPOSITE ON METAL DECK

FLOOR COVERINGS - CARPET; LINOLEUM; PORCELAIN TILE
CERAMIC TILE

ROOF STRUCTURE - STEEL, CONCRETE ON METAL DECK

ROOF COVER - EPDM ROOF MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE
PERFORATED METAL TILE
GYPSUM BOARD

INTERIOR CONSTRUCTION - MASONRY AND FRAME PARTITIONS

BUILT-IN FIXTURES -
4 - DENTAL DESKS, DOUBLE FACE, WOOD, 74" WIDE
3 - TALL CABINETS, WOOD, 18" WIDE
3 - TALL CABINETS, WOOD, 42" WIDE
1 - TALL CABINET, WOOD, 30" WIDE
28 - WALL CABINETS, WOOD, 36" WIDE
3 - WALL CABINETS, WOOD, 24" WIDE
2 - WALL CABINETS, WOOD, 12" WIDE
5 - WALL CABINETS, WOOD, 30" WIDE
55 - BASE CABINETS, WITH EPOXY RESIN TOP, WOOD, 36" WIDE
5 - BASE CABINETS, WITH EPOXY RESIN TOP, WOOD, 24" WIDE
16 - BASE CABINETS, WITH EPOXY RESIN TOP, WOOD, 18" WIDE

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

HEALTH SCIENCE: continued

SUPERSTRUCTURE: continued

BUILT-IN FIXTURES - continued

2 - TALL CABINETS, WOOD, 48" WIDE
3 - TALL CABINETS, WOOD, 36" WIDE
7 - WALL CABINETS, WOOD, 24" WIDE
5 - WALL CABINETS, WOOD, 18" WIDE
5 - WALL CABINETS, WOOD, 48" WIDE
10 - WALL CABINETS, WOOD, 42" WIDE
23 - BASE CABINETS, WOOD WITH EPOXY RESIN TOP, 42" WIDE
19 - BASE CABINETS, WOOD, WITH EPOXY RESIN TOP, 21" WIDE
10 - BASE CABINETS, WOOD, EPOXY RESIN TOP, 48" WIDE
3 - BASE CABINETS, WOOD, EPOXY RESIN TOP, 15" WIDE
3 - BASE CABINETS, WOOD, EPOXY RESIN TOP, 12" WIDE
1 - BASE CABINET, WOOD, EPOXY RESIN TOP, 30" WIDE
6 - KNEE SPACE CABINET, WOOD, EPOXY RESIN TOP, 48" WIDE
1 - KNEE SPACE CABINET, WOOD, EPOXY RESIN TOP, 52" WIDE
12 - DESK, WOOD, EPOXY RESIN TOP, 45" WIDE
18 - LAMINATE BASE CABINETS, LAMINATE TOP, 36" WIDE
5 - LAMINATE BASE CABINETS, LAMINATE TOP, 18" WIDE
2 - LAMINATE BASE CABINETS, LAMINATE TOP, 30" WIDE
- BACKPACK HANGERS, WALL MOUNT
2 - ACCORDIAN PARTITIONS
2 - SENTINEL COIN OPERATED LOCKERS, 5-DOOR, 16 TIER
18 - FUME HOODS WITH CABINET BASE
10 - CORRIDOR BENCH SEATING UNITS, 20 LINEAR FEET EACH WITH 2 TABLES
- EMERGENCY EYE WASH

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
19 - WATER CLOSETS
17 - LAVATORY
6 - URINALS
2 - SANITARY SINKS
4 - DRINKING FOUNTAINS
1 - BATHTUB
1 - LOCHINVAR DOMESTIC HOT WATER TANK

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES,
- PITTWAY NOTIFIER FIRE ALARM SYSTEM
- CLOCK SYSTEM
3 - CONTROLLED POWER EMERGENCY LIGHTING CONTROLLER
- TELEPHONE, DATA, LAN AND FIBER OPTIC

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

HEALTH SCIENCE continued

SUPERSTRUCTURE: continued

HEATING AND AIR CONDITIONING -
- STEAM FROM POWER HOUSE
1 - HAAKON AIRPAK AIR HANDLING UNIT, #01-638101R
1 - TRANE EXHAUST FAN, 30 HORSEPOWER MOTOR
2 - TRANE EXHAUST FANS, 25 HORSEPOWER MOTOR
7 - TRANE UNIT HEATERS
- PUMPS AS REQUIRED
1 - TRANE RAUCD104BL0320 DOO10 ROOFTOP AIR CONDITIONING UNIT #CO1M67625
1 - TRANE RAUCD104BL0320 D0010 ROOFTOP AIR CONDITIONING UNIT #C01M67624
- TRANE PROGRAM CONTROL MODULE
- DRISTEAM VAPOR LOGIC 2 HUMIDIFIER
65 - VARIABLE AIR VOLUME TERMINAL UNITS (VAV)

EXTERIOR WALLS -
- FACE BRICK, BLOCK BACKUP, 12"
- COMPOSITE METAL PANEL SYSTEM AT FASCIA AND SOFFIT
- 1" INSULATED BUTT GLAZING IN ANOD ALUMINUM FRAME, SPLAYED MULLION AND LAP SEAL GLAZING
- 1" INSULATED GLAZING IN ANOD ALUMINUM CURTAIN WALL SYSTEM
- COMPOSITE METAL PANEL SYSTEM IN ANOD ALUMINUM CURTAIN WALL SYSTEM
- SPANDREL GLAZING IN ANOD ALUMINUM CURTAIN WALL SYSTEM

MISCELLANEOUS:
1 - OTIS PASSENGER ELEVATOR, 4 STOP, #38832
- PREFABRICATED GREENHOUSE
- LIFELINE MEDICAL AIR SYSTEM WITH 2 HITACHI 7.5 HORSEPOWER AIR COMPRESSORS
- SNOWMELT SYSTEM WITH 3 HEATWAY 1574 UNITS
- SPRINKLERS THROUGHOUT
- ACCESS CONTROL SYSTEM
5 - CAMERA SECURITY SYSTEM

BUILT: 2002

QUALITY OF CONSTRUCTION: GOOD

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: APARTMENT A
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	86,200.00
SUPERSTRUCTURE:	
FLOORS	184,300.00
FLOOR COVERINGS	167,900.00
CEILINGS	56,000.00
ROOF STRUCTURE	61,800.00
ROOF COVER	37,800.00
INTERIOR CONSTRUCTION	556,100.00
BUILT-IN FIXTURES	64,200.00
ELECTRICAL	192,600.00
PLUMBING	187,700.00
HEATING	186,500.00
MISCELLANEOUS CONSTRUCTION	50,000.00
EXTERIOR WALLS	376,900.00
TOTAL LABOR AND MATERIALS	2,210,300.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	2,365,000.00
Depreciation %	50%
Sound Valuation	1,182,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: APARTMENT A

KIND OF BUILDING: CLASS D

NO. OF STORIES: THREE

OCCUPANCY: APARTMENTS

SIZE
1ST FLOOR - 4,133 SQUARE FEET
2ND FLOOR - 4,133 SQUARE FEET
3RD FLOOR - 4,133 SQUARE FEET

TOTAL SQUARE FEET 12,399

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FLOORS - WOOD JOISTS, WOOD DECK; CONCRETE ON GROUND

FLOOR COVERINGS - CARPET IN APARTMENTS AND CORRIDORS
- VINYL TILE IN KITCHENS, BATHROOMS, LAUNDRY ROOM

ROOF STRUCTURE - WOOD TRUSS, WOOD DECK, HIP

ROOF COVER - SHINGLES, INSULATION

CEILINGS - GYPSUM BOARD

INTERIOR CONSTRUCTION - WOOD FRAME PARTITIONS

BUILT-IN FIXTURES - KITCHEN CABINETS WITH 2 COMPARTMENT SINK IN EACH
- 36 COMPARTMENT MAILBOX

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
12 - WATER CLOSETS
23 - LAVATORIES
12 - BATH TUBS
2 - WATER HEATERS, 75 GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

HEATING AND AIR CONDITIONING -
- PUMPS AS REQUIRED
- 40-GALLON EXPANSION TANK
- BASEBOARD THROUGHOUT
1 - LOCHINVAR MODEL F9XL, GAS FIRED BOILER

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

APARTMENT A: continued

SUPERSTRUCTURE: continued

EXTERIOR WALLS - WOOD FRAME, FACE BRICK

MISCELLANEOUS:

8 - BALCONIES, WOOD CONSTRUCTION WITH RAILING

- FIRE ALARM SYSTEM

2 - AWNINGS, WOOD CONSTRUCTION, 10 X 16'

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1972

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: APARTMENT B
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	86,200.00
SUPERSTRUCTURE:	
FLOORS	184,300.00
FLOOR COVERINGS	167,900.00
CEILINGS	56,000.00
ROOF STRUCTURE	61,800.00
ROOF COVER	37,800.00
INTERIOR CONSTRUCTION	556,100.00
BUILT-IN FIXTURES	64,200.00
ELECTRICAL	192,600.00
PLUMBING	187,700.00
HEATING	186,500.00
MISCELLANEOUS CONSTRUCTION	50,000.00
EXTERIOR WALLS	379,200.00
TOTAL LABOR AND MATERIALS	2,210,300.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	2,365,000.00
Depreciation %	50%
Sound Valuation	1,182,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: APARTMENT B

KIND OF BUILDING: CLASS D

NO. OF STORIES: THREE

OCCUPANCY: APARTMENTS

SIZE 1ST FLOOR - 4,133 SQUARE FEET
2ND FLOOR - 4,133 SQUARE FEET
3RD FLOOR - 4,133 SQUARE FEET

TOTAL SQUARE FEET 12,399

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FLOORS - WOOD JOISTS, WOOD DECK; CONCRETE ON GROUND

FLOOR COVERINGS - CARPET IN APARTMENTS AND CORRIDORS
- VINYL TILE IN KITCHENS, BATHROOMS, LAUNDRY ROOM

ROOF STRUCTURE - WOOD TRUSS, WOOD DECK, HIP

ROOF COVER - SHINGLES, INSULATION

CEILINGS - GYPSUM BOARD

INTERIOR CONSTRUCTION - WOOD FRAME PARTITIONS

BUILT-IN FIXTURES - KITCHEN CABINETS WITH 2 COMPARTMENT SINK IN EACH
- 36 COMPARTMENT MAILBOX

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
12 - WATER CLOSETS
23 - LAVATORIES
12 - BATH TUBS
2 - WATER HEATERS, 75 GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

HEATING AND AIR CONDITIONING -
- PUMPS AS REQUIRED
- 40-GALLON EXPANSION TANK
- BASEBOARD THROUGHOUT
1 - LOCHINVAR MODEL FTXL GAS FIRED BOILER

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

APARTMENT B: continued

SUPERSTRUCTURE: continued

EXTERIOR WALLS - WOOD FRAME, FACE BRICK

MISCELLANEOUS:

8 - BALCONIES, WOOD CONSTRUCTION WITH RAILING

- FIRE ALARM SYSTEM

2 - AWNINGS, WOOD CONSTRUCTION, 10 X 16'

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1972

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: APARTMENT C
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	86,200.00
SUPERSTRUCTURE:	
FLOORS	184,300.00
FLOOR COVERINGS	167,900.00
CEILINGS	56,000.00
ROOF STRUCTURE	61,800.00
ROOF COVER	37,800.00
INTERIOR CONSTRUCTION	556,100.00
BUILT-IN FIXTURES	64,200.00
ELECTRICAL	192,600.00
PLUMBING	187,700.00
HEATING	186,500.00
MISCELLANEOUS CONSTRUCTION	50,000.00
EXTERIOR WALLS	379,200.00
TOTAL LABOR AND MATERIALS	2,210,300.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	2,365,000.00
Depreciation %	50%
Sound Valuation	1,182,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: APARTMENT C

KIND OF BUILDING: CLASS D

NO. OF STORIES: THREE

OCCUPANCY: APARTMENTS

SIZE 1ST FLOOR - 4,133 SQUARE FEET
2ND FLOOR - 4,133 SQUARE FEET
3RD FLOOR - 4,133 SQUARE FEET

TOTAL SQUARE FEET 12,399

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FLOORS - WOOD JOISTS, WOOD DECK; CONCRETE ON GROUND

FLOOR COVERINGS - CARPET IN APARTMENTS AND CORRIDORS
- VINYL TILE IN KITCHENS, BATHROOMS, LAUNDRY ROOM

ROOF STRUCTURE - WOOD TRUSS, WOOD DECK, HIP

ROOF COVER - SHINGLES, INSULATION

CEILINGS - GYPSUM BOARD

INTERIOR CONSTRUCTION - WOOD FRAME PARTITIONS

BUILT-IN FIXTURES - KITCHEN CABINETS WITH 2 COMPARTMENT SINK IN EACH
- 36 COMPARTMENT MAILBOX

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
12 - WATER CLOSETS
23 - LAVATORIES
12 - BATH TUBS
2 - WATER HEATERS, 75 GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

HEATING AND AIR CONDITIONING -
- PUMPS AS REQUIRED
- 40-GALLON EXPANSION TANK
- BASEBOARD THROUGHOUT
1 - LOCHINVAR MODEL FTXL GAS FIRED BOILER

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

APARTMENT C: continued

SUPERSTRUCTURE: continued

EXTERIOR WALLS - WOOD FRAME, FACE BRICK

MISCELLANEOUS:

8 - BALCONIES, WOOD CONSTRUCTION WITH RAILING

- FIRE ALARM SYSTEM

2 - AWNINGS, WOOD CONSTRUCTION, 10 X 16'

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1972

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING
Bldg.: EASTERN AVENUE STORAGE BUILDING

Description	11/1/22
FOUNDATION:	5,300.00
SUPERSTRUCTURE:	
FRAME	5,900.00
FLOORS	11,000.00
CEILINGS	5,300.00
ROOF STRUCTURE	7,000.00
ROOF COVER	5,700.00
INTERIOR CONSTRUCTION	3,400.00
ELECTRICAL	5,700.00
HEATING	1,600.00
EXTERIOR WALLS	21,500.00
TOTAL LABOR AND MATERIALS	72,400.00
ARCHITECT'S PLANS AND SUPERVISION	5%

Replacement Value New	76,000.00
Depreciation %	28%
Sound Valuation	54,700.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: EASTERN AVENUE STORAGE BUILDING

QUALITY OF CONSTRUCTION: AVERAGE

SIZE WIDTH 24', LENGTH 56', HEIGHT 8'/13'

TOTAL SQUARE FEET = 1,344

KIND OF BUILDING: CLASS D

NO. OF STORIES: ONE

OCCUPANCY: STORAGE

FOUNDATION: WOOD

SUPERSTRUCTURE:

FRAME - WOOD

FLOORS - CONCRETE ON GROUND

CEILINGS - PARTICLE BOARD WITH INSULATION

ROOF STRUCTURE - WOOD JOISTS

ROOF COVER - METAL DECK

INTERIOR CONSTRUCTION - ONE WOOD FRAME PARTITION

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT

HEATING - 2 - ELECTROMODE SUSPENDED ELECTRIC UNIT HEATERS

EXTERIOR WALLS - WOOD FRAME, METAL SIDING, SINGLE WALL;
SLIDING METAL DOOR, 99 X 89",
- WOOD FRAME METAL SIDING WITH PARTICLE BOARD
INTERIOR, INSULATION

BUILT: 1992 - ADDITION 1994

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: APPEL BIOLOGY LAB
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	5,100.00
SUPERSTRUCTURE:	
FRAME	3,300.00
FLOORS	14,600.00
FLOOR COVERINGS	17,400.00
CEILINGS	6,400.00
ROOF STRUCTURE	13,800.00
ROOF COVER	6,400.00
INTERIOR CONSTRUCTION	28,500.00
BUILT-IN FIXTURES	12,300.00
ELECTRICAL	14,400.00
PLUMBING	18,400.00
HEATING	6,000.00
EXTERIOR WALLS	45,800.00
TOTAL LABOR AND MATERIALS	192,400.00
ARCHITECT'S PLANS AND SUPERVISION	5%

Replacement Value New	202,000.00
Depreciation %	64%
Sound Valuation	72,700.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: APPEL BIOLOGY LAB - 1891 SARNS RD.

TYPE OF BUILDING: RESIDENTIAL RANCH, CLASS D

NO. OF STORIES: ONE

OCCUPANCY: FIELD LABORATORY WITH CONFERENCE ROOM

TOTAL SQUARE FEET = 1,160, MORE OR LESS

FOUNDATION: CONCRETE BLOCK

SUPERSTRUCTURE:

FRAME - WOODEN FRAME

FLOORS - WOODEN DECK

FLOOR COVERINGS - ASPHALT TILE IN LABORATORY AND DINING AREA
HARDWOOD IN CONFERENCE ROOM, CARPET TILES

CEILINGS - WOOD TOUNGUE AND GROOVE GYPSUM BOARD

ROOF STRUCTURE - WOODEN GABLE

ROOF COVER - ASPHALT SHINGLES

INTERIOR CONSTRUCTION - WOOD FRAME DRYWALL PARTITIONS
- PINE SIDING IN CONFERENCE ROOM

BUILT-IN FIXTURES - 1 - FIREPLACE, BRICK MANTLE
- LAB COUNTER, 30 LINEAR FT. WITH STAINLESS STEEL SINK
1 - YOUNGSTOWN METAL KITCHEN SINK

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
1 - WATER CLOSET
1 - LAVATORY
1 - URINAL
1 - KITCHEN SINK
1 - WATER HEATER, 18 GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES, INCANDESCENT AND FLUORESCENT FIXTURES

HEATING - RUDD GAS FIRED FURNACE WITH DUCTWORK

EXTERIOR WALLS - VINYL SIDING, WINDOWS IN VINYL SASH

QUALITY OF CONSTRUCTION: AVERAGE
BUILT: 1950'S, RENOVATED IN 1983

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: AVIATION
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	138,600.00
SUPERSTRUCTURE:	
FRAME	336,100.00
FLOORS	259,900.00
FLOOR COVERINGS	49,200.00
CEILINGS	42,800.00
ROOF STRUCTURE	251,700.00
ROOF COVER	258,700.00
INTERIOR CONSTRUCTION	278,500.00
BUILT-IN FIXTURES	14,400.00
ELECTRICAL	380,000.00
PLUMBING	127,400.00
HEATING	113,300.00
MISCELLANEOUS CONSTRUCTION	233,000.00
EXTERIOR WALLS	514,400.00
TOTAL LABOR AND MATERIALS	2,998,000.00
ARCHITECT'S PLANS AND SUPERVISION	6%

Replacement Value New	3,178,000.00
Depreciation %	46%
Sound Valuation	1,716,100.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: AVIATION - 2550 AERO PARK DRIVE

KIND OF BUILDING: CLASS S/C

NO. OF STORIES: ONE

OCCUPANCY: AVIATION HANGAR WITH REPAIR AREA, OFFICES AND CLASSROOMS

TOTAL SQUARE FEET = 20,912 WITH 1,750 SQUARE FT. STORAGE MEZZANINE

FOUNDATION: POURED CONCRETE FOOTINGS, REINFORCED

SUPERSTRUCTURE:

FRAME - STEEL I BEAMS AND COLUMNS

FLOORS - 4" POURED CONCRETE ON SAND FILL
- CONCRETE DECK, MEZZANINE

FLOOR COVERINGS - VINYL ASBESTOS
- CARPETING IN OFFICES AND CLASSROOMS

ROOF STRUCTURE - 1/2" METAL DECK ON RIGID FRAME
- OPEN STEEL FOR METAL

ROOF COVER - SINGLE MEMBRANE WITH INSULATION
- METAL, PRE-ENGINEERED WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL IN OFFICES, CORRIDORS AND CLASSROOMS

INTERIOR CONSTRUCTION - MASONRY BLOCK PARTITIONS

BUILT-IN FIXTURES - 1 - FOLDING PARTITION WALL
- CHALKBOARDS AND TACKBOARDS IN CLASSROOMS
1 - LAMINATE KITCHENETTE COUNTER WITH STAINLESS STEEL SINK

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
4 - WATER CLOSETS
5 - LAVATORIES
2 - URINALS
2 - SANITARY SINKS
1 - RHEEM 50-GALLON WATER HEATER
1 - WATER COOLER

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

AVIATION: continued

SUPERSTRUCTURE: continued

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES, FLUORESCENT TUBE FIXTURES, LED LIGHT FIXTURES IN HANGAR
SQUARE D PANEL BOARD

HEATING AND AIR CONDITIONING -
2 - RUUD GAS FIRED FORCED AIR FURNACES W/AIR CONDITIONING
1 - APPLIED AIR MODEL GIF-100LH UNIT HEATER, 1,250,000 BTU
2 - ARCOAIRE ROOFTOP CONDENSING UNITS WITH INSULATION

EXTERIOR WALLS - PRE-ENGINEERED METAL SIDING; 8" FLUTED BLOCK AND MAIN ENTRANCE

MISCELLANEOUS:

1 - ALUMINUM FOLD-UP HANGAR DOOR, 80' X 20' WITH ELECTRIC OPENING SYSTEM

1 - ALUMINUM FOLD-UP DOOR, 50 X 20' WITH ELECTRIC OPENING SYSTEM

1 - METAL STAIRWAY TO MEZZANINE

1 - FIRE ALARM SYSTEM WITH CONTROL BOX

- ACCESS CONTROL SYSTEM

3 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: AVERAGE

BUILT: 1976

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: BECKETT
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	217,200.00
SUPERSTRUCTURE:	
FRAME	496,100.00
FLOORS	615,800.00
FLOOR COVERINGS	370,500.00
CEILINGS	480,600.00
ROOF STRUCTURE	486,600.00
ROOF COVER	262,500.00
INTERIOR CONSTRUCTION	2,294,900.00
BUILT-IN FIXTURES	15,100.00
ELECTRICAL	1,216,700.00
PLUMBING	719,000.00
HEATING	1,529,200.00
MISCELLANEOUS	60,900.00
EXTERIOR WALLS	994,600.00
FIRE PROTECTION	210,000.00
ELEVATORS	135,000.00
TOTAL LABOR AND MATERIALS	10,104,700.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	10,812,000.00
Depreciation %	24%
Sound Valuation	8,217,100.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: BECKETT

KIND OF BUILDING: CLASS C

NO. OF STORIES: PARTIAL TWO

OCCUPANCY: CLASSROOMS/OFFICES

SIZE: FIRST FLOOR 20,221
SECOND FLOOR 14,048

TOTAL SQUARE FEET = 34,269

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND
- 6-1/2" CONCRETE SLAB ON 3" GALVANIZED METAL DECK, STEEL JOIST

FLOOR COVERINGS - VINYL TILE
- CARPET
- CERAMIC TILE
2 - RECESSED MATS

ROOF STRUCTURE - STEEL JOISTS, METAL DECK, 6-1/2" CONCRETE SLAB

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - GYPSUM BOARD
- SUSPENDED ACOUSTIC PANEL
- SKYLIGHT
- E.I.F.S.

INTERIOR CONSTRUCTION - METAL FRAME PARTITIONS, SOME MASONARY

BUILT-IN FIXTURES -

- LAMINATE BASE CABINET, 11', WITH STAINLESS STEEL SINK

- LAMINATE WALL CABINET, 14'

- ISLAND BASE CABINET, LAMINATE, 12 X 3 X 3' HIGH

- COMPUTER ROOM WORK COUNTER, LAMINATE, 36 LINEAR FEET

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

BECKETT: continued

SUPERSTRUCTURE: continued

MECHANICAL EQUIPMENT

PLUMBING - AN MODERN SYSTEM OF SANITARY FIXTURES CONSISTING OF:
19 - WATER CLOSETS
17 - LAVATORIES
8 - URINAL
2 - SANITARY SINKS
5 - DRINKING FOUNTAINS
1 - WATER HEATER

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

- COMPUTER WIRING

HEATING AND AIR CONDITIONING -

2 - LOCHINVAR MODEL FTX850N GAS FIRED BOILER
25 - WATER FURNACE MODEL USV024TL004CVN HEAT PUMP
- PUMPS AS REQUIRED
- ABB VARIABLE FREQUENCY DRIVES
1 - NIMBUS VIRGAX3 ROOFTOP COOLING TOWER

EXTERIOR WALLS - CONCRETE BLOCK, FACE BRICK, 12"

MISCELLANEOUS:

- OTIS PASSENGER ELEVATOR, 2-STOP, 2500 LB. CAPACITY, #31455
- SPRINKLERS THRU-OUT
- BRIDGE WALKWAY, 12'5 X 20'
2 - AUTOMATIC DOOR OPENERS
- HONEYWELL NOTIFIER FIRE ALARM SYSTEM
- ACCESS CONTROL SYSTEM
4 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1996

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: FOUNDERS HALL
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	35,600.00
SUPERSTRUCTURE:	
FLOORS	61,100.00
FLOOR COVERINGS	54,700.00
CEILINGS	45,400.00
ROOF STRUCTURE	98,200.00
ROOF COVER	64,000.00
INTERIOR CONSTRUCTION	333,500.00
BUILT-IN FIXTURES	36,800.00
ELECTRICAL	174,600.00
PLUMBING	103,000.00
HEATING	141,000.00
MISCELLANEOUS CONSTRUCTION	24,600.00
EXTERIOR WALLS	279,400.00
TOTAL LABOR AND MATERIALS	1,451,900.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	1,553,500.00
Depreciation %	36%
Sound Valuation	994,200.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: FOUNDERS HALL

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE

OCCUPANCY: OFFICES/CONFERENCE ROOMS

TOTAL SQUARE FEET = 4,950

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FLOORS - CONCRETE ON GROUND

FLOOR COVERINGS - VINYL TILE
- CARPET
- CERAMIC TILE

ROOF STRUCTURE - STEEL JOISTS, STEEL DECK

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL PANELS
- GYPSUM BOARD, LOBBY

INTERIOR CONSTRUCTION - MASONRY PARTITIONS
- METAL FRAME PARTITIONS

BUILT-IN FIXTURES - CABINETS IN CONFERENCE ROOMS AND WORK ROOM
- RECEPTION DESK
- BASE CABINET, OAK, 3.5 X 3.5
- BASE CABINET, OAK, STAINLESS STEEL SINK, 7-1/2'
2 - CABINETS, 2 DOOR, LAMINATE, 84" HEIGHT
- WALL CABINETS, LAMINATE, 6 X 11 X 7 X 9'
- BASE CABINETS, LAMINATE, 11 X 7
- WALL CABINETS, OAK, 7-1/2'
- BASE CABINETS, OAK, STAINLESS STEEL SINK, 5'

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
2 - WATER CLOSETS
2 - LAVATORY
1 - URINALS
1 - SANITARY SINKS
1 - DRINKING FOUNTAIN
1 - WATER HEATER

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

FOUNDERS HALL:continued

SUPERSTRUCTURE: continued

HEATING AND AIR CONDITIONING -
2 - TRANE MODEL VCD060C1HOBA COMBINATION COOLING AND HEATING UNITS, GAS FIRED, ROOF TOP
1 - TRANE YSC060 ROOFTOP GAS FIRED HEATING AND AIR CONDITIONING UNIT

EXTERIOR WALLS - FACE BRICK, BLOCK BACK-UP, 12"

MISCELLANEOUS:

- FIRE ALARM SYSTEM
- ACCESS CONTROL SYSTEM
1 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1976

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: EAST HALL
REAL ESTATE - BUILDING

Description	11/1/22
BASEMENT:	
FRAME	153,200.00
FLOOR	47,800.00
CEILING	44,400.00
EXTERIOR WALLS	54,600.00
INTERIOR PARTITION	338,000.00
ELECTRICAL	188,300.00
FOUNDATION:	404,600.00
SUPERSTRUCTURE:	
FRAME	1,433,800.00
FLOORS	1,112,200.00
FLOOR COVERINGS	342,200.00
CEILINGS	416,400.00
ROOF STRUCTURE	421,600.00
ROOF COVER	200,200.00
INTERIOR CONSTRUCTION	3,485,200.00
BUILT-IN FIXTURES	278,300.00
ELECTRICAL	1,763,200.00
PLUMBING	1,343,800.00
HEATING	857,700.00
MISCELLANEOUS CONSTRUCTION	427,800.00
EXTERIOR WALLS	1,510,300.00
TOTAL LABOR AND MATERIALS	12,890,000.00
ARCHITECT'S PLANS AND SUPERVISION	7%
Replacement Value New	15,861,300.00
Depreciation %	44%
Sound Valuation	8,882,300.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: EAST HALL

KIND OF BUILDING: CLASS B

NO. OF STORIES: ONE WITH BASEMENT
THREE

OCCUPANCY - DORMITORY

SIZE:

BASEMENT	5,037 SQUARE FEET
FIRST FLOOR	19,951 SQUARE FEET
SECOND FLOOR	13,650 SQUARE FEET
THIRD FLOOR	13,650 SQUARE FEET
TOTAL SQUARE FEET	52,288

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - CONCRETE COLUMNS AND BEAMS
- STEEL

FLOORS - CONCRETE ON GROUND C, CONCRETE JOISTS AND CONCRETE SLAB

FLOOR COVER - CARPET, OFFICES, LOUNGE AREAS, AND CORRIDORS
- VINYL TILE IN RESIDENT ROOMS, CORRIDORS
- CERAMIC TILE IN RESIDENT BATHROOMS

ROOF STRUCTURE - PRECAST CONCRETE TEE SLAB
- STEEL JOISTS, METAL DECK

ROOF COVER - SINGLE PLY MEMBRANE, INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE IN OFFICES AND LOUNGE AREA BLDG C, RESIDENT ROOMS AND CORRIDOR IN BLDG. A AND B
- GYPSUM BOARD

INTERIOR CONSTRUCTION - 8" BLOCK PARTITIONS
- DOUBLE SOLID GYPSUM WALL

BUILT-IN FIXTURES -
2 - 5-DRAWER 2-DOOR WARDROBE CABINETS, WOOD, 48 X 27 X 86" HEIGHT PER RESIDENT ROOM
2 - WOOD BASE CABINETS, LAMINATE MAPLE TOP, 60 X 24" AND STAINLESS STEEL SINK
1 - LAVATORY BASE CABINET, LAMINATE, OAK EDGING IN EACH RESIDENT BATHROOM
1 - RECESSED MEDICINE CABINET AND MIRROR IN EACH RESIDENT BATHROOM
1 - CENTRAL ELEVATOR, PASSENGER ELEVATOR, 3-STOP WITH POWER OPERATED REAR DOOR, 750 LB. CAPACITY

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

EAST HALL: continued
BUILT-IN FIXTURES: continued
- MAIL BOXES, 144 DOORS
- RECEPTION DESK, LAMINATE, 15 LINEAR FT.
- INFORMATION DESK, LAMINATE, 13 LINEAR FT.
- 22 LINEAR FT. OF LAMINATE BASE CABINETS
- 22 LINEAR FT. OF LAMINATE WALL CABINETS
- LAMINATE KITCHEN CABINETS IN SUPERVISOR'S APARTMENT

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
64 - WATER CLOSETS
64 - LAVATORIES
1 - URINALS
2 - SANITARY SINKS
2 - ELECTRIC WATER COOLERS
2 - BATH TUBS
60 - PREFABRICATED FIBERGLASS SHOWERS
2 - LAUNDRY TUBS
1 - WATER HEATER, STEAM HEATED, 6' DIAMETER X 9' LONG

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

HEATING AND AIR CONDITIONING -
2 - LOCHIVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER
- EXHAUST FANS AS REQUIRED
- PUMPS AS REQUIRED
3 - LIEBERT AIR CONDITIONING UNIT WITH CONDENSING UNIT
2 - DUCANE MODEL AC10B24A CONDENSING UNIT
1 - DUCANE MODEL AC10B36B CONDENSING UNIT
1 - DUCANE MODEL AC10B42 CONDENSING UNIT
1 - DUCANE MODEL AC10B60 CONDENSING UNIT
1 - DUCANE MODEL AC10B24 CONDENSING UNIT
1 - DUCANE MODEL AC10B18 CONDENSING UNIT
1 - MITSUBISHI CONDENSING UNIT
- UNIT AND CABINET HEATERS

EXTERIOR WALLS - FACE BRICK, BLOCK BACK-UP, 12"
- EIFS CANOPY
- INSULATED GLASS IN ALUMINUM FRAME

MISCELLANEOUS - HONEYWELL NOTIFIER FIRE ALARM SYSTEM WITH SMOKE DETECTORS
- SPRINKLERS THROUGHOUT
- ACCESS CONTROL SYSTEM
4 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD
BUILT: 1967; RENOVATION OF LOBBY AND BASEMENT, ADDITION OF GENERATOR ROOM,
1999; RESIDENT ROOMS RENOVATED IN 2002

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: FINE ARTS
REAL ESTATE - BUILDING

Description	11/1/22
BASEMENT:	
FLOOR	21,500.00
EXTERIOR WALLS	88,800.00
INTERIOR PARTITION	8,600.00
FOUNDATION:	134,600.00
SUPERSTRUCTURE:	
FLOORS	237,900.00
FLOOR COVERINGS	119,000.00
CEILINGS	2,100.00
ROOF STRUCTURE	530,000.00
ROOF COVER	210,000.00
INTERIOR CONSTRUCTION	1,291,100.00
BUILT-IN FIXTURES	73,500.00
ELECTRICAL	745,900.00
PLUMBING	357,000.00
HEATING	941,200.00
MISCELLANEOUS CONSTRUCTION	276,300.00
EXTERIOR WALLS	889,200.00
TOTAL LABOR AND MATERIALS	5,926,700.00
ARCHITECT'S PLANS AND SUPERVISION	8%

Replacement Value New	6,400,800.00
Depreciation %	40%
Sound Valuation	3,840,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: FINE ARTS

KIND OF BUILDING: CLASS D

NO. OF STORIES: ONE WITH PARTIAL BASEMENT

OCCUPANCY - ART AND MUSIC CLASSROOMS AND OFFICES

SIZE:

BASEMENT	2,076 SQUARE FEET
FIRST FLOOR	18,800 SQUARE FEET
TOTAL SQUARE FEET	18,800

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - WOOD

FLOORS - CONCRETE ON GROUND

FLOOR COVER - CARPET, CORRIDORS, MUSIC, CLASSROOMS, OFFICES,AUDITORIUM
CERAMIC TILE RESTROOMS

ROOF STRUCTURE - WOOD TRUSS EXPOSED T & G WOOD DECK, 1-1/2" ROD AND TURN BUCKLES
- CONCRETE PLANK

ROOF COVER - ASPHALT SHINGLES, INSULATION
- SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - GYPSUM BOARD IN RESTROOMS;
- GLASS IN MUSIC PRACTICE ROOMS

INTERIOR CONSTRUCTION - MASONRY AND FRAME PARTITIONS

BUILT-IN FIXTURES -

- 175 LINEAR FEET OF CURVED OAK SEATING UNIT WITH FABRIC UPHOLSTERED CUSHIONS
- PROJECTION COUNTER CABINET, WOOD BASE, LAMINATE TOP
1 - ROLLING DOOR, METAL, 16 X 7',CERAMICS
4 - WOOD BASE CABINETS WITH STAINLESS STEEL SINK, 12'
1 - WOOD BASE CABINET WITH STAINLESS STEEL SINK, 4'
1 - WOOD BASE CABINET WITH STAINLESS STEEL SINK, 7'

FINE ARTS: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
- 8 - WATER CLOSETS
- 8 - LAVATORIES
- 3 - URINALS
- 2 - SANITARY SINKS
- 1 - DRINKING FOUNTAINS
- 1 - HOT WATER GENERATOR, 150 GALLON CAPACITY
- 1 - WATER HEATER, ELECTRIC
- 1 - WATER COOLER

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- LITETRACK SYSTEM
- LED LIGHT FIXTURES

HEATING AND AIR CONDITIONING -
- RADIANT PANELS
- 7 - CABINET UNIT HEATERS
- PUMPS AS REQUIRED
- 1 - TRANE MODEL CGAFC25EAHA1AOODE 25-TON CHILLER, #C04J07864
- 1 - TRANE MODEL RAUCC30EBX030BD00020 30-TON CONDENSING UNIT #CO4J07865
- 1 - TRANE MODEL MCCB014UAOAOUB AIR HANDLING UNIT, AHU-2
- 1 - TRANE MODEL MCCB010UAOAOUA AIR HANDLING UNIT, AHU-1
- 1 - TRANE MODEL MCCB025UADAOUA AIR HANDLING UNIT, AHU-3
- 1 - COOK RETURN AIR FAN, 2 HORSEPOWER
- 1 - TACO CHILLER, #T19843
- 1 - LOCHINVAR MODEL KBN800 GAS FIRED DIRECT VENT BOILER # G08H10057962
- 1 - LOCHINVAR MODEL KBN800 GAS FIRED DIRECT VENT BOILER # G08H10057984
- 1 - FUJITSU SPLIT SYSTEM HEATING/AIR CONDITIONING SYSTEM, RM 104
- 1 - FUJITSU MODEL A0U9RLS3H, CONDENSING UNIT, #QVN003966

EXTERIOR WALLS - WOOD STUD, RED CEDAR SIDING, PLYWOOD SHEATHING,
- INSULATION

MISCELLANEOUS - NOTIFIER FIRE ALARM SYSTEM
- 36" DIAMETER KILN STACK, 30' HEIGHT
- SPRINKLERS THUR-OUT
- 1 - MECHANICAL BUILDING WOOD CONSTRUCTION, CONCRETE SLAB, CEDAR SIDING, SINGLE PLY MEMBRANE ROOF COVER, WITH STANDING RIDGES,14' X 22' X 9/14'6", 308 SQ. FEET 308 SQ. FT.
- ACCESS CONTROL SYSTEM
- 1 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD
BUILT: 1970; MECHANICAL BUILDING 2004

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING Bldg.: OSTERLIN LIBRARY

Description	11/1/22
BASEMENT:	
FLOOR	87,300.00
CEILING	41,600.00
EXTERIOR WALLS	186,300.00
INTERIOR PARTITION	466,700.00
ELECTRICAL	258,200.00
FOUNDATION:	377,900.00
SUPERSTRUCTURE:	
FRAME	1,591,400.00
FLOORS	697,400.00
FLOOR COVERINGS	715,500.00
CEILINGS	395,800.00
ROOF STRUCTURE	711,500.00
ROOF COVER	414,000.00
INTERIOR CONSTRUCTION	2,686,300.00
BUILT-IN FIXTURES	271,600.00
ELECTRICAL	1,706,000.00
PLUMBING	876,100.00
HEATING	2,044,000.00
MISCELLANEOUS CONSTRUCTION	319,000.00
EXTERIOR WALLS	1,082,000.00
TOTAL LABOR AND MATERIALS	14,928,600.00
ARCHITECT'S PLANS AND SUPERVISION	7%
Replacement Value New	15,973,600.00
Depreciation %	45%
Sound Valuation	8,785,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: OSTERLIN LIBRARY

KIND OF BUILDING: CLASS B

NO. OF STORIES: PARTIAL TWO WITH BASEMENT

OCCUPANCY - MEDIA CENTER, OFFICES AND CLASSROOMS

SIZE:

BASEMENT	7,048 SQUARE FEET
FIRST FLOOR	30,760 SQUARE FEET
SECOND FLOOR	8,926 SQUARE FEET
TOTAL SQUARE FEET	46,734 MORE OR LESS

FOUNDATION: POURED REINFORCED CONCRETE FOOTINGS

SUPERSTRUCTURE:

FRAME - CONCRETE, REINFORCED I BEAMS AND COLUMNS

FLOORS - CONCRETE PRECAST TEES, SLAB ON GRADE

FLOOR COVER - CARPET, LIBRARY, OFFICES AND CLASSROOMS
CERAMIC TILE RESTROOMS
VINYL ASBESTOS TILE IN CORRIDORS
TERRAZZO IN CIRCULATION AREA (UNDER CARPET)

ROOF STRUCTURE - PRECAST CONCRETE TEES, SKYLIGHTS IN ALUMINUM FRAME

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - PARTIAL ACOUSTIC AND SUSPENDED ACOUSTICAL

INTERIOR CONSTRUCTION - MASONRY BLOCK PARTITIONS; SOME PAINTED DRYWALL

BUILT-IN FIXTURES -
1 - ELEVATOR, 2,500 LB. CAPACITY WITH 3 STOPS, 2 DOORS
2 - LAMINATE A.V. REPAIR COUNTERS
1 - KREONITE PLASTIC DARKROOM SINK WITH LAMINATE WORK COUNTERS
1 - REVOLVING DARKROOM DOOR
1 - WOODEN SHOWCASE, 19'6" X 4' X 90" HEIGHT, SLIDING GLASS DOORS
- ALUMINUM FRAME MARKING BOARDS IN CLASSROOMS
1 - SERVICE DESK, LAMINATE 'L' SHAPE, 18 L.F.
1 - SERVICE DESK, LAMINATE, 20 L.F.
1 - CIRCULATION DESK, LAMINATE 'D' SHAPE, 50 L.F.
1 - ISLAND CIRCULATION COUNTER, LAMINATE, 10 L.F.
- LOCKERS

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

OSTERLIN LIBRARY: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
13 - WATER CLOSETS
18 - LAVATORIES
5 - URINALS
2 - SANITARY SINKS
4 - DRINKING FOUNTAINS
1 - HOT WATER HEATER, RHEEM, 82-GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT TUBE FIXTURES;
- WIRING FOR T.V. PRODUCTION STUDIO WITH STAGE LIGHTING GRID
1 - 750 KVA TRANSFORMER

HEATING AND AIR CONDITIONING -
1 - TRANE MODEL MCCB025UAOCOUB AIR HANDLING UNIT, AHU-4
1 - TRANE MODEL RAUCD124BNC320D0010 125 TON CONDENSING UNIT, #CO4B01452
- CABINET AND UNIT HEATERS AS REQUIRED
1 - BOHN MODEL HCS144LF AIR HANDLER
1 - BOHN MODEL HCSZ1AMF AIR HANDLER
1 - BOHN MODEL HMZ26ALF AIR HANDLER
1 - TACO CHILLER
- STEAM FROM POWERHOUSE
- ABB VARIABLE FREQUENCY DRIVES

EXTERIOR WALLS - FACE BRICK ON CONCRETE BLOCK
- WINDOWS IN ALUMINUM SASH
- DRYVIT ON BRICK - SOUTH ELEVATION

MISCELLANEOUS - FIRE ALARM SYSTEM WITH NOTIFIER AFP-200 CONTROL BOX
2 - AUTOMATIC DOOR OPENERS
- SPRINKLERS THRU-OUT
- ACCESS CONTROL SYSTEM
5 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1961 - MAIN BUILDING
1983 - ADDITION

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING Bldg.: MUSEUM/AUDITORIUM

Description	11/1/22
FOUNDATION:	499,400.00
SUPERSTRUCTURE	
FRAME	1,121,900.00
FLOORS	747,600.00
FLOOR COVERINGS	736,800.00
CEILINGS	353,900.00
ROOF STRUCTURE	1,199,900.00
ROOF COVER	1,401,600.00
INTERIOR CONSTRUCTION	4,101,100.00
BUILT-IN FIXTURES	1,732,800.00
ELECTRICAL	2,243,800.00
PLUMBING	733,100.00
HEATING	2,756,200.00
MISCELLANEOUS CONSTRUCTION	552,700.00
EXTERIOR WALLS	3,223,800.00
TOTAL LABOR AND MATERIALS	21,404,600.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	22,902,900.00
Depreciation %	23%
Sound Valuation	17,635,200.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: MUSEUM/AUDITORIUM

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE

OCCUPANCY - MUSEUM/AUDITORIUM

SIZE: TOTAL SQUARE FEET 55,085

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND

FLOOR COVER - CARPET IN OFFICES, LOBBY, GIFT SHOP, AUDITORIUM
CERAMIC TILE IN RESTROOMS AND CLASSROOMS
HARDWOOD FLOORS IN EXHIBIT A, B, AND C, STAGE
MARBLE TILE IN LOBBY, RECEPTION, COATS, SCULPTURE COURT, CORRIDOR, VESTIBULE, VINYL TILE IN STORAGE SERVING

ROOF STRUCTURE - OPEN WEB STEEL JOISTS, 1-1/2" METAL DECK
- 8' RADIUS QUARTER VAULT SKYLIGHT

ROOF COVER - STONE BALLAST ON SINGLE PLY ROOF MEMBRANE OVER STEPPED INSULATION OVER 3" RIGID INSULATION

CEILINGS - SUSPENDED ACOUSTICAL PANEL IN OFFICES
- SUSPENDED GYPSUM BOARD
- SUSPENDED CEILING PANELS, AUDITORIUM

INTERIOR CONSTRUCTION - MASONARY AND METAL FRAME PARTITIONS

BUILT-IN FIXTURES -
367 - PLASTIC FIXED THEATER SEATS WITH FABRIC UPHOLSTERED SEAT
3 - LOBBY DISPLAY CASES, SLIDING GLASS DOORS, 12 X 5'
32 - THEATER SEATS, PLASTIC FIXED WITH FABRIC UPHOLSTERED
1 - CURVED OAK RECEPTION DESK, 5' RADIUS LAMINATE WORK SURFACE
- LOBBY CURVED BENCH, OAK TOP
- OFFICE CASEWORK, LAMINATE
- KITCHEN CASEWORK, LAMINATE
- STAINLESS STEEL RINSE SINK
- LIGHTING GRID WITH LED LIGHTS
2 - FOLDING PARTITIONS
- PROJECTION SCREEN
- WINDOW TREATMENT

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

MUSEUM/AUDITORIUM: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
15 - WATER CLOSETS
14 - LAVATORIES
4 - URINALS
2 - DRINKING FOUNTAIN
1 - LOCHINVAR 92-GALLON WATER HEATER
1 - JOHNSON COMPUTERIZED
2 - SHOWERS
1 - ELECTRIC WATER HEATER

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
PHONE, DATA AND VIDEO LINES CONDUIT
1 - 1000 KVA TRANSFORMER

HEATING AND AIR CONDITIONING -
1 - TRANE MODEL CCDB35MEOM DRAW THROUGH CLIMATE CHANGER, #AHU-1
2 - NORTEC CONTROLLER HUMIDIFIERS
1 - JOHNSON THERMOSTATIC CONTROL
1 - TRANE MODEL 14-C CLIMATE CHANGER, #AHU-2
1 - TRANE MODEL 17-C CLIMATE CHANGER, #AHU-3
- PUMPS AS REQUIRE
1 - TRANE MODEL RAUJD10EBA132000010, 100 TON CHILLER #C10H04015
1 - LOCHINVAR KNIGHT MODEL KBN801 GAS FIRED BOILER, #F10H10143653
1 - LOCHINVAR KNIGHT MODEL KBN801 GAS FIRED BOILER, #F10H10143667
1 - TRANE MMDEL CSAA021UAL00, CLIMATE CHANHER AIR HANDLING UNIT #K17A04961 #AHU-4
1 - THERMA-STOR MODEL HI-E DRY 100 DEHUMIDIFIER
1 - DRI-STEEM MODEL GTS200, STEAM HUMIDIFIER
1 - LOCHINVAR MODEL WHN285, GAS , WALL-MOUNT BOILER, #1607102616001
1 - TRANE MODEL RAUJC30EB, ROOF TOP CONDENSING UNIT
1 - LOCHINVAR MODEL WHN285, GAS , WALL-MOUNT BOILER, #1603102505085
1 - ENVIRONMENTAL TECHNOLOGY MODEL APS-3C, SNOW/ICE MELTING CONTROLLER
77 - VAV BOXES

EXTERIOR WALLS - 4" STONE VENEER, 2" RIGID INSULATION, BLOCK BACK-UP
- 8" WITH 4" LIMESTONE BELT COURSES AND COPING
- ALUMINUM WINDOW FRAMING WITH 1" INSULATED LOW E GLAZI

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

MUSEUM/AUDITORIUM: continued

MISCELLANEOUS - ART STORAGE RACKS, TRACK MOUNTED
1 - RECESSED TRUCK DOCK WITH LEVELER
1 - SPRINKLERS THROUGHOUT
2 - CATWALKS
- AUDITORIUM AND MINI THEATER SOUND SYSTEM
- HOUSE PAGING SYSTEM
2 - ROLLING STEEL DOORS WITH ELECTRIC OPERATOR
- ALARM SYSTEM
- ACCESS CONTROL SYSTEM
- SECURITY SYSTEM
3 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: EXCELLENT
BUILT: 1991, ADDITION 2017

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: OBSERVATORY
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	12,100.00
SUPERSTRUCTURE:	
FLOORS	20,500.00
FLOOR COVERINGS	14,900.00
CEILINGS	12,600.00
ROOF STRUCTURE	24,600.00
ROOF COVER	17,200.00
INTERIOR CONSTRUCTION	72,100.00
BUILT-IN FIXTURES	84,300.00
ELECTRICAL	54,700.00
PLUMBING	31,300.00
HEATING	23,600.00
MISCELLANEOUS	17,200.00
EXTERIOR WALLS	120,200.00
TOTAL LABOR AND MATERIALS	505,300.00
ARCHITECT'S PLANS AND SUPERVISION	6%

Replacement Value New	535,600.00
Depreciation %	41%
Sound Valuation	316,000.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: OBSERVATORY - BRIMLEY ROAD

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE WITH 2 STORY TELESCOPE RECESS

OCCUPANCY - OBSERVATORY WITH CLASSROOM

SIZE: TOTAL SQUARE FEET 1,624 MORE OR LESS

FOUNDATION: POURED CONCRETE

SUPERSTRUCTURE:

FRAME - STRUCTURAL STEEL

FLOORS - 4" REINFORCED CONCRETE

FLOOR COVER - CARPET IN CLASSROOMS, VINYL ASBESTOS TILE

ROOF STRUCTURE - STEEL DECK ON JOIST

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL

INTERIOR CONSTRUCTION - FEW MASONRY PARTITION:
- GYPSUM BOARD WALL COVER

BUILT-IN FIXTURES -

1 - ASH-DOME HEMISPHERE ALUMINIZED STEEL TELESCOPE DOME, 14' DIAMETER WITH SHUTTER SYSTEM

1 - CIRCULAR STAIRWAY TO TELESCOPE ACESS

1 - LAMINATE DARKROOM COUNTER WITH STAINLESS STEEL SINK

1 - ALUMINUM FRAME CHALKBOARD, 20 X 4'

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
1 - WATER CLOSET
1 - LAVATORY
1 - SANITARY SINK
1 - DRINKING FOUNTAIN
1 - HOT WATER HEATER, 8 GALLON

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

OBSERVATORY: continued

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT TUBE FIXTURES

HEATING AND AIR CONDITIONING -

1 - TRANE MODEL GXX110F GAS FIRED FORCED AIR FURNACE 110,000 BTU/HR

MISCELLANEOUS - ACCESS CONTROL SYSTEM
1 - CAMERA SECURITY SYSTEM

EXTERIOR WALLS - CONCRETE BLOCK WITH EARTH BERM STUCCO FINISH
- FEW WINDOWS IN ALUMINUM SASH

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1981

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING Bldg.: OLESON CENTER

Description	11/1/22
FOUNDATION:	72,000.00
SUPERSTRUCTURE:	
FRAME	156,600.00
FLOORS	131,100.00
FLOOR COVERINGS	54,200.00
CEILINGS	80,700.00
ROOF STRUCTURE	204,100.00
ROOF COVER	138,000.00
INTERIOR CONSTRUCTION	754,500.00
BUILT-IN FIXTURES	212,700.00
ELECTRICAL	383,300.00
PLUMBING	226,500.00
HEATING AND AIR CONDITIONING	310,600.00
MISCELLANEOUS CONSTRUCTION	133,200.00
EXTERIOR WALLS	251,500.00
TOTAL LABOR AND MATERIALS	3,109,000.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	3,326,600.00
Depreciation %	28%
Sound Valuation	2,395,200.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: OLESON CENTER

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE

OCCUPANCY - CLASSROOM

SIZE: TOTAL SQUARE FEET 10,398

FOUNDATION: POURED CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - 4" CONCRETE SLAB ON SAND FILL

FLOOR COVER - CARPET IN OFFICES, CLASSROOMS; CERAMIC TILE IN KITCHEN; VINYL IN BATHROOMS, CLASSROOM 112

ROOF STRUCTURE - STEEL DECK ON STEEL JOIST
- HIP ROOF ON JOISTS AND TRUSSES, 1/2" PLYWOOD WITH INSULATION

ROOF COVER - ASPHALT SHINGLES, SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL; GYPSUM BOARD

INTERIOR CONSTRUCTION - MASONRY BLOCK PARTITIONS

BUILT-IN FIXTURES -
1 - HARFORD WALK-IN COOLER, 6 X 12'
2 - FOLDING PARTITION WALLS, 30 X 9'
- TOILET PARTITIONS
4 - PREP TABLES, 4-DOOR, LAMINATE, STAINLESS STEEL DOUBLE SINK, 84 X 30"
2 - GREENHECK STAINLESS STEEL GHEW900S CANOPY HOODS WITH EXHAUST FAN, LIGHTS, 108 X 42 X 24"
2 - DISH TABLES, STAINLESS STEEL WITH SINK, 96 X 30"
1 - HARFORD DURACOOL 86025-1161OR ROOFTOP WALK-IN COOLER REFRIGERATION UNIT, #H192OAC
2 - HOBART LXIH STAINLESS STEEL WAREWASHER
2 - INSINKERATOR SS-150 DISPOSER AND PRERINSE
2 - ANSUL FIRE PROTECTION SYSTEMS
2 - WALL SHELVES, STAINLESS STEEL, 24 X 18"
- VISUAL DISPLAY BOARDS
- WINDOW TREATMENT
1 - WORKSURFACE LAMINATE WALL MOUNTED 'L' SHAPE 19 LINEAR FT.
- BASE CABINET LAMINATE 2-STAINLESS STEEL SINK 22.5 LINEAR FT.
- WALL CABINETS LAMINATE 25.5 LINEAR FT.

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

OLESON CENTER: continued

BUILT-IN FIXTURES - continued
3 - COAT RACKS, OAK WALL MOUNTED, 39X16"
3 - COAT RACKS, OAK WALL MOUNTED, 48X16"

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
7 - WATER CLOSETS
6 - LAVATORIES
2 - URINALS
2 - SANITARY SINKS
2 - DRINKING FOUNTAINS
1 - RHEEM RUUD 91 GALLON GAS WATER HEATER
1 - RHEEM WATER HEATER, ELECTRIC

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT TUBE FIXTURES
- INCANDESCENT SPOTLIGHTS IN LOBBY AND MEETING ROOMS

HEATING AND AIR CONDITIONING -
1 - TRANE YSC092A3RLA2FDOAO10/0300 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 7-1/2 TON CAPACITY, #635102686L
1 - TRANE YSC092A3RHA2FDOAOF11B10300 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 7-1/2 TON CAPACITY, #635102986L
1 - TRANE YSC048A3RHA2MD2A101300 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 4-TON CAPACITY, #635102880L
1 - TRANE YSC060A3RHA2TD2AOA/B10300 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 5 TON CAPACITY, #635102790L
1 - TRANE YSCO60A3RHA2TD2AOA/B10300 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 5-TON CAPACITY, #6351026654L
1 - AAON INC. RM-013-8-0-AA02-367 PACKAGED GAS/ELECTRIC ROOFTOP UNIT, 13-TON CAPACITY, #200609-AMGK28824

EXTERIOR WALLS - 8" CONCRETE BLOCK WITH FLUSH WOOD SIDING
- WINDOWS IN ALUMINUM SASH
8" SPLIT FACED CONCRETE BLOCK

MISCELLANEOUS -
1 - SPRINKLER SYSTEM THRU-OUT
1 - NOTIFIER MODEL APF - 200 FIRE ALARM CONTROL SYSTEM
1 - CANOPY, CONCRETE/STEEL, 6 X 12'
- ACCESS CONTROL SYSTEM
2 - CAMERA SECURITY SYSTEM
- SPRINKLER SYSTEM, MODIFIED FOR PUBLIC SCHOOL

QUALITY OF CONSTRUCTION: VERY GOOD
BUILT: 1978; ADDITION AND RENOVATED IN 2006

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING Bldg.: PHYSICAL EDUCATION

Description	11/1/22
FOUNDATION:	217,800.00
SUPERSTRUCTURE:	
FRAME	557,700.00
FLOORS	385,600.00
FLOOR COVERINGS	456,200.00
CEILINGS	170,500.00
ROOF STRUCTURE	382,800.00
ROOF COVER	178,500.00
INTERIOR CONSTRUCTION	1,536,900.00
BUILT-IN FIXTURES	178,400.00
ELECTRICAL	738,000.00
PLUMBING	540,000.00
HEATING AND AIR CONDITIONING	556,400.00
MISCELLANEOUS CONSTRUCTION	171,200.00
EXTERIOR WALLS	885,200.00
TOTAL LABOR AND MATERIALS	6,955,200.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	7,442,100.00
Depreciation %	54%
Sound Valuation	3,423,400.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: PHYSICAL EDUCATION

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE - PARTIAL TWO

OCCUPANCY - PHYSICAL EDUCATION

SIZE: LOWER LEVEL - 19,074 SQUARE FEET
UPPER LEVEL - 6,600 SQUARE FEET

TOTAL SQUARE FEET 25,674 MORE OR LESS

FOUNDATION: POURED REINFORCED CONCRETE

SUPERSTRUCTURE:

FRAME - STRUCTURAL STEEL WITH COLUMNS, BEAMS AND JOISTS

FLOORS - POURED CONCRETE ON GRADE, PRECAST CONCRETE

FLOOR COVER - CARPETING IN OFFICES, FITNESS CENTER; CERAMIC TILE IN SHOWER ROOMS, VINYL ASBESTOS IN CORRIDORS, HARDWOOD IN GYMNASIUM, DANCE ROOM

ROOF STRUCTURE - 2" FIBER ROOF TILE ON STEEL JOISTS

ROOF COVER - BUILT-UP COMPOSITION WITH INSULATION

CEILINGS - ACOUSTICAL TILE IN OFFICES, CLASSROOMS, LOCKER ROOMS CORRIDORS

INTERIOR CONSTRUCTION - BRICK ON BLOCK PARTITIONS INCLUDING BASKETBALL COURT, LOCKER ROOMS, CLASSROOMS OFFICE AND STORAGE ROOMS

BUILT-IN FIXTURES -

1 - ELEVATOR, 2,000 LB. CAPACITY, 2-STOPS

6 - RETRACTABLE BASKETBALL BACKSTOPS

1 - NEVCO ELECTRONIC SCOREBOARD

1 - POWER GYMNASIUM DIVIDER CURTAIN

1 - KITCHENETTE COUNTER

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

PHYSICAL EDUCATION: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
14 - WATER CLOSETS
12 - LAVATORIES
5 - URINALS
2 - SANITARY SINKS
4 - DRINKING FOUNTAINS
8 - SHOWER HEADS
1 - SUPER STORE 120 GALLON WATER STORAGE TANK

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT AND INCANDESCENT FIXTURES
- HIGH PRESSURE SODIUM FIXTURES IN GYMNASIUM

HEATING AND AIR CONDITIONING -

1 - AMERICAN STANDARD 10AB 21,000 CFM HORIZONTAL AIR HANDLER UNIT
1 - AMERICAN STANDARD 104 5,400 CFM MULTIZONE VENTILATING UNIT
1 - AMERICAN STANDARD 5,600 CFM VERTICAL VENTILATING UNIT
1 - AMERICAN STANDARD 2,000 CFM VERTICAL VENTILATING UNIT
- PUMPS AS REQUIRED
- M-FLEX ADJUSTABLE SPEED CONTROLLER
1 - LOCHINVAR MODEL KBN800 GAS FIRED DIRECT VENT BOILER # G08H10057992
1 - LOCHINVAR MODEL KBN800 GAS FIRED DIRECT VENT BOILER # G08H10057954

EXTERIOR WALLS - CONCRETE BLOCK
- FACE BRICK AT VESTIBULE ENTRANCE
- DRYVITON BLOCK WALL COVER

MISCELLANEOUS -

1 - FIRE ALARM SYSTEM WITH CONTROL BOX
1 - AUTOMATIC DOOR OPENER
- SPRINKLER SYSTEM THRU-OUT
- ACCESS CONTROL SYSTEM
2 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1969

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: POWERHOUSE
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	28,200.00
SUPERSTRUCTURE:	
FRAME	67,400.00
FLOORS	45,300.00
ROOF STRUCTURE	68,300.00
ROOF COVER	49,100.00
INTERIOR CONSTRUCTION	13,800.00
ELECTRICAL	414,000.00
PLUMBING	43,200.00
HEATING	1,591,100.00
MISCELLANEOUS	7,700.00
EXTERIOR WALLS	296,000.00
TOTAL LABOR AND MATERIALS	2,624,100.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	2,807,800.00
Depreciation %	58%
Sound Valuation	1,179,300.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: POWERHOUSE

KIND OF BUILDING: CLASS C

NO. OF STORIES: ONE

OCCUPANCY - BOILER HOUSE

SIZE: TOTAL SQUARE FEET = 3,580

FOUNDATION: POURED REINFORCED CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL I BEAMS WITH JOISTS AND COLUMNS

FLOORS - CONCRETE ON GRADE

ROOF STRUCTURE - TECTUM DECK ON 18 GALLON BOX

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

INTERIOR CONSTRUCTION - CONCRETE BLOCK RESTROOM PARTITION, 18 X 10'

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
1 - WATER CLOSET
1 - LAVATORY
1 - URINAL
1 - 80-GALLON WATER HEATER
1 - WATER COOLER
1 - SANITARY SINK

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

- POWER WIRING DISTRIBUTION SYSTEM WITH SQUARE D SWITCHBOARD
1 - 500 KVA TRANSFORMER ON PAD

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

POWERHOUSE: continued

HEATING AND AIR CONDITIONING -

1 - CLEAVER BROOKS MODEL CB428-500 PACKAGED BOILER, # 1-80366 2,092,000 BTU INPUT
1 - CLEAVER BROOKS MODEL CB428-700 PACKAGED BOILER, #L42353, 2,929,100 BTU INPUT
1 - CLEAVER BROOKS CR-266-200 PACKAGED BOILER, #L-48323
2 - TRANE UNIT HEATERS
1 - CLEAVER BROOKS MODEL CB-700-50-150 GAS FIRED PACKAGED BOILER # OL106948

MISCELLANEOUS - ACCESS CONTROL SYSTEM

EXTERIOR WALLS - FACE BRICK ON 12" CONCRETE BLOCK
- NORTH ELEVATION WINDOWS IN STEEL SASH
1 - OVERHEAD DOOR METAL/GLASS 12 X 10' HEIGHT

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1963

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: SCHOLARS HALL
REAL ESTATE - BUILDING

Description	11/1/22
BASEMENT:	
FRAME	721,700.00
FLOOR	248,500.00
CEILING	221,000.00
EXTERIOR WALLS	402,500.00
INTERIOR PARTITION	1,453,100.00
ELECTRICAL	725,000.00
FOUNDATION:	481,400.00
SUPERSTRUCTURE:	
FRAME	1,446,200.00
FLOORS	995,400.00
FLOOR COVERINGS	694,900.00
CEILINGS	437,300.00
ROOF STRUCTURE	493,500.00
ROOF COVER	276,500.00
INTERIOR CONSTRUCTION	2,913,600.00
BUILT-IN FIXTURES	290,600.00
ELECTRICAL	1,452,200.00
PLUMBING	1,356,500.00
HEATING	2,765,200.00
MISCELLANEOUS	51,400.00
EXTERIOR WALLS	1,363,000.00
FIRE PROTECTION	344,200.00
TOTAL LABOR AND MATERIALS	19,133,700.00
ARCHITECT'S PLANS AND SUPERVISION	7%
Replacement Value New	20,473,100.00
Depreciation %	43%
Sound Valuation	11,669,700.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: SCHOLARS HALL

KIND OF BUILDING: CLASS B

NO. OF STORIES: TWO WITH FULL BASEMENT

OCCUPANCY - CLASSROOMS, LECTURE ROOMS AND OFFICES

SIZE:

BASEMENT	19,996 SQUARE FEET
FIRST FLOOR	20,951 SQUARE FEET
SECOND FLOOR	19,092 SQUARE FEET
TOTAL SQUARE FEET	62,812 MORE OR LESS

FOUNDATION: POURED REINFORCED CONCRETE FOOTINGS

SUPERSTRUCTURE:

FRAME - CONCRETE COLUMNS AND BEAMS WITH REINFORCED CONCRETE

FLOORS - SLAB ON GRADE, PRECAST CONCRETE TEES

FLOOR COVER - CARPET IN OFFICES CORRIDORS AND CLASSROOMS;
VINYL TILE IN LABS

ROOF STRUCTURE - PRECAST CONCRETE TEES

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL THROUGHOUT

INTERIOR CONSTRUCTION - MASONRY AND DRYWALL PARTITIONS

BUILT-IN FIXTURES -

1 - OTIS ELEVATOR, 2,000 LB. CAPACITY WITH 3 STOPS, #40562
120 - WOOD TILT-UP CHAIRS WITH TABLET ARMS
77 - WOOD TILT-UP CHAIRS WITH TABLET ARMS
4 - CORRIDOR BENCHES, VINYL UPHOLSTERY
- RECEPTION WORK STATION
- WORK ROOM CABINETS
- CLASSROOM CABINETS

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

SCHOLARS HALL: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
14 - WATER CLOSETS
16 - LAVATORIES
6 - URINALS
1 - 80-GALLON WATER HEATER
4 - WATER COOLERS
2 - SANITARY SINKS

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT AND INCANDESCENT FIXTURES
2 - 500 KVA TRANSFORMER

HEATING AND AIR CONDITIONING -

1 - TRANE MODEL M-10 AIR HANDLING UNIT
1 - TRANE MODEL M-25 AIR HANDLING UNIT
3 - TRANE MODEL M-17 AIR HANDLING UNITS
1 - TRANE MODEL M-12 AIR HANDLING UNIT
1 - TRANE RTAC ROOFTOP AIR COOLED CHILLER, 160 TON CAPACITY
- STEAM FROM POWERHOUSE

EXTERIOR WALLS - FACE BRICK ON CONCRETE BLOCK
- WINDOWS IN ALUMINUM SASH
- 6" ALUMINUM CURTAIN WALL SYSTEM

MISCELLANEOUS -

1 - NOTIFIER FIRE ALARM SYSTEM WITH CONTROL BOX
1 - AUTOMATIC DOOR OPENER
- FIRE PROTECTION SPRINKLERS
- ACCESS CONTROL SYSTEM
3 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1963

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING
Bldg.: WEST HALL INNOVATION CENTER

Description	11/1/22
LOWER LEVEL:	
FRAME	291,400.00
FLOOR	215,000.00
CEILING	167,000.00
EXTERIOR WALLS	324,600.00
INTERIOR PARTITION	1,547,900.00
ELECTRICAL	715,500.00
FOUNDATION:	441,100.00
SUPERSTRUCTURE:	
FRAME	722,200.00
FLOORS	1,231,900.00
FLOOR COVERINGS	559,400.00
CEILINGS	414,500.00
ROOF STRUCTURE	640,100.00
ROOF COVER	250,400.00
INTERIOR CONSTRUCTION	3,799,500.00
BUILT-IN FIXTURES	806,100.00
ELECTRICAL	1,773,300.00
PLUMBING	1,546,600.00
HEATING	4,337,600.00
MISCELLANEOUS CONSTRUCTION	248,500.00
EXTERIOR WALLS	1,553,600.00
TOTAL LABOR AND MATERIALS	21,586,200.00
ARCHITECT'S PLANS AND SUPERVISION	7%
Replacement Value New	23,097,200.00
Depreciation %	11%
Sound Valuation	20,556,500.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: WEST HALL INNOVATION CENTER

KIND OF BUILDING: CLASS B/C

NO. OF STORIES: TWO WITH LOWER LEVEL, PENT HOUSE

OCCUPANCY - STUDENT CENTER, CAFETERIA, OFFICES AND LIBRARY

SIZE:

LOWER LEVEL	19,063 SQUARE FEET
FIRST FLOOR	32,065 SQUARE FEET
SECOND FLOOR	12,126 SQUARE FEET
PENT HOUSE	3,050 SQUARE FEET
TOTAL SQUARE FEET	66,304

FOUNDATION: CONCRETE FOOTINGS

SUPERSTRUCTURE:

FRAME - CONCRETE COLUMNS AND BEAMS
- STEEL

FLOORS - 4" CONCRETE SLAB ON GRADE, 2" CONCRETE TOPPING ON DOX PLANK; STEEL JOIST, METAL DECK, CONCRETE TOPPING

FLOOR COVER - CARPET TILE, QUARRY TILE IN KITCHEN, PLANK TILE

ROOF STRUCTURE - 6" DOX PLANK-PRECAST CONCRETE
- SKYLIGHTS AT COMMONS AREA

ROOF COVER - SINGLE PLY MEMBRANE WITH RIGID INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE; GYPSUM BOARD

INTERIOR CONSTRUCTION - MASONRY PARTITIONS, AND FRAME PARTITIONS

BUILT-IN FIXTURES -
1 - HOBART CLPS66LN AUTOMATIC DISHWASHER WITH STAINLESS STEEL DRAINBOARD AND DISPOSAL
1 - RANGE VENTILATION HOOD, 13' X 60" WITH EXTINGUISHING SYSTEM
1 - RANGE VENTILATION HOOD, 13' X 54" WITH EXTINGUISHING SYSTEM
1 - COFFEE STATION STAINLESS STEEL WITH SINK, 120" X 30"
1 - TRAULSEN 2-DOOR PASS THRU FOOD WARMER
1 - STAINLESS STEEL 3 BASIN POT SINK
3 - STAINLESS STEEL PREP TABLE, 96" X 30"
- STAINLESS STEEL TABLE WITH SINK, 120" X 30"

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

WEST HALL INNOVATION CENTER: continued

BUILT-IN FIXTURES - continued
1 - 3 COMPARTMENT STAINLESS STEEL SINK, 48" X 19"
1 - WALK-IN FREEZER, 16' X 9'
1 - MONTGOMERY 4,000 LB. ELEVATOR WITH 2-STOPS
1 - STAINLESS STEEL TABLE, 120" X 30"
- LAMINATE SALES COUNTERS IN BOOKSTORE
1 - COFFEE COUNTER, LAMINATE WITH CORIAN TOP, REFRIDGERATED DISPLAY CASE
1 - DELI WELCOME COUNTER, IRREGULAR SHAPED WITH HOT FOOD WELL (4) COLD FOOD WELL (4), BREATH PROTECTOR
8 - HAND SINKS, STAINLESS STEEL
- SALAD BAR COUNTER, LAMINATE WITH 3 COLD FOOD WELLS, BREATH PROTECTOR, CORIAN TOP
7 - LOCKERS
- SOILED DISH TABLE, STAINLESS STEEL
9 - SHELVES, STAINLESS STEEL
1 - KOLPAK WALK-IN REFRIGERATOR, 10 X 16'
- CIRCULATION DESK CASE WORK, LAMINATE, CORIAN TOP
1 - STAINLESS STEEL RANGE HOOD WITH EXTINGUISHER SYSTEM, 54" X 60"
1 - STAINLESS STEEL RANGE HOOD WITH EXTINGUISHER SYSTEM, 10' X 5'
1 - BEVERAGE WALK-IN COOLER, 23' X 7'9" X 8'6", 7 GLASS DOORS
1 - OPEN SHELF COUNTER, LAMINATE, CORIAN TOP, 64" X 25"
1 - MOBILFLEX GATE
1 - STAINLESS STEEL COUNTER, LAMINATE BASE, 2 SINKS, 14.5' X 30"
1 - COUNTER, STAINLESS STEEL LEGS, CORIAN TOP, 78" X 30"
1 - COUNTER, STAINLESS STEEL LEGS, CORIAN TOP, 28" X 30"
8 - BOOTHES, VINYL UPHOLSTERED, 78" X 36"
2 - WELCOME DESK, L SHAPE, LAMINATE, CORIAN TOP, 14 LINEAR FEET
6 - BOOTHES, VINYL UPHOLSTERED, 82" X 36"
1 - BASE CABINET, 3 DOOR, LAMINATE, CORIAN TOP, 82" X 24"
1 - FIREPLACE, GAS FIRED, 72" WIDE
1 - BOOKCASE, LAMINATE, 60" X 14" X 96"
1 - BOOKCASE, LAMINATE, 120" X 14" X 96"
1 - BOOKCASE, LAMINATE, 30" X 14" X 96"
1 - BASE COUNTER WITH STAINLESS STEEL SINK, CORIAN TOP, 111" X 25"
1 - WALL CABINET, LAMINATE, 111" X 12" X 30"
1 - BOOKCASE, LAMINATE, GLASS DOORS, 48" X 14" X 96"
1 - KONE ELEVATOR 3 STOP. 3500 LB. CAPACITY

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
19 - WATER CLOSETS
15 - LAVATORIES
7 - URINALS
3 - SANITARY SINKS
1 - WATER HEATER
3 - DRINKING FOUNTAIN/BOTTLE FILLER

REAL ESTATE - BUILTING NORTHWESTERN MICHIGAN COLLEGE

WEST HALL INNOVATION CENTER: continued

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- IT CABLE
- FIRE ALARM SYSTEM

HEATING AND AIR CONDITIONING - STEAM HEAT FROM POWERHOUSE
3 - LOCHINVAR MODEL FTXL850, GAS FIRED BOILER
1 - RENEWAIRE MODEL HE3X1NV, ENERGY RECOVERY VENTILATOR INDOOR UNIT
1 - TRANE MODEL CSAA-80, AIR HANDLING UNIT, #AHU-1
1 - TRANE MODEL CSAA-25 AIR HANDLER UNIT, #AHU-2
1 - TRANE MODEL CSAA-10 AIR HANDLER UNIT, #AHU-3
1 - MITSUBISHI MODEL MSY-GL18NA, MINI-SPLIT SYSTEM
- SNOW MELT SYSTEM
- PUMPS AS REQUIRED
- GEOTHERMAL SYSTEM

EXTERIOR WALLS - FACE BRICK ON CONCRETE BLOCK
- ALUMINUM CURTAIN WALL
- SOLID CORE ACM RAINSCREEN SYSTEM WITH DRY-LOC JOINTS
- KAWNEER SUN SHADE SYSTEM
- 4" HORIZONTAL INSULATED METAL PANEL SYSTEM
- ALUMINUM STOREFRONT
- BRICK VENEER, METAL STUDS

MISCELLANEOUS -
- FIRE SPRINKLERS THROUGHOUT
1 - PUBLIC ADDRESS SYSTEM, PUBLIC AREAS
1 - RADIO BROADCAST ANTENNA, 100'
1 - METAL OVERHEAD DOOR WITH DOCK LEVELER
- ACCESS CONTROL SYSTEM

QUALITY OF CONSTRUCTION: VERY GOOD

BUILT: 1963
KITCHEN AND BOOKSTORE ADDITION 2003
ADDITION AND RENOVATION 2019 AND 2020

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE
REAL ESTATE - BUILDING

Bldg.: UNIVERSITY CENTER
CAMPUS BOARDMAN LAKE

Description	11/1/22
FOUNDATION:	427,200.00
SUPERSTRUCTURE:	
FRAME	946,100.00
FLOORS	1,430,600.00
FLOOR COVERINGS	719,600.00
CEILINGS	579,300.00
ROOF STRUCTURE	434,000.00
ROOF COVER	285,100.00
INTERIOR CONSTRUCTION	4,090,900.00
BUILT-IN FIXTURES	211,300.00
ELECTRICAL	2,172,900.00
PLUMBING	1,280,200.00
HEATING	1,754,400.00
MISCELLANEOUS CONSTRUCTION	469,700.00
EXTERIOR WALLS	1,901,400.00
TOTAL LABOR AND MATERIALS	16,702,700.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	17,871,900.00
Depreciation %	33%
Sound Valuation	11,974,200.00

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: UNIVERSITY CENTER CAMPUS/BOARDMAN LAKE

KIND OF BUILDING: CLASS C

NO. OF STORIES: THREE

OCCUPANCY - OFFICE RENTAL, CLASSROOMS, OFFICES

SIZE:

TOTAL SQUARE FEET 59,460 MORE OR LESS

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND; STEEL PAN CONCRETE SLAB

FLOOR COVER - CARPET IN CLASSROOMS, OFFICES, CORRIDORS;
- CERAMIC TILE RESTROOMS
- VINYL TILE

ROOF STRUCTURE - STEEL JOIST, STEEL DECK

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE; GYPSYM BOARD

INTERIOR CONSTRUCTION - METAL FRAME PARTITIONS
- MASONRY PARTITIONS

BUILT-IN FIXTURES -

- KITCHEN CABINETS, LAMINATE WITH STAINLESS STEEL SINK

- OAK CREDENZAS, WALL MOUNTED

- LAMINATE BASE CABINETS

- MONTGOMERY HYDRAULICALLY OPERATED ELEVATOR, 3-STOP, 2,000 LB. CAPACITY #23504

- ADDITIONAL STOP FOR EXISTING OTIS ELEVATOR, 2100 LB. CAPACITY, #30485

- FOLDING PARTITION, 32 X 9', ROOMS 202 / 203

UNIVERSITY CENTER CAMPUS/BOARDMAN LAKE: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
31 - WATER CLOSETS
26 - LAVATORIES
9 - URINALS
6 - SANITARY SINKS
6 - WATER COOLERS
1 - HOT WATER HEATER, 85-GALLON

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- TRANSFORMER

HEATING AND AIR CONDITIONING -
- MC QUAY AIR HANDLING UNIT
- MC QUAY AIR COOLED CONDENSING UNIT
- RITE MODEL 150 WATER HEATING BOILER, GAS FIRED
- PUMPS AS REQUIRED
- TRANE GAS FIRED ROOFTOP HEATING AND AIR CONDITIONING UNIT
2 - RAYPACK MODEL H3-0514A GAS FIRED BOILER
1 - LIEBERT AIR CONDITIONER
1 - LIEBERT CONDENSING UNIT
- MC QUAY MODEL LSL-108 MAKE-UP AIR UNIT
- SNYDER - GENERAL MODEL ALP037C AIR CONDITIONING UNIT #5VM0507000
- VAV'S AND CONTROLS
1 - NIMBUS VIRGA III COOLING TOWER
26 - TRANE WATER FURANCE HEAT PUMP

EXTERIOR WALLS - FACE BRICK, BLOCK BACK-UP 12"
- STEEL STUD WALLS, T & G CEDAR SIDING
- 1" INSULATED GLASS, ALUMINUM FRAME

MISCELLANEOUS - SPRINKLERS LOWER LEVEL, SECOND AND THIRD FLOOR ADDITION
- FIRELITE FIRE ALARM AND SECURITY SYSTEM
1 - AUTOMATIC DOOR OPENER
1 - BERGEY WINDPOWER WIND TURBINE WITH 70'18" TRIANGULAR GUYED TOWER, CABLE TO BUILDING, FOUNDATION,POWER INVERTER
- ACCESS CONTROL SYSTEM
5 - CAMERA SECURITY SYSTEM
- SPRINKLER SYSTEM MODIFIED FOR PUBLIC SCHOOL

QUALITY OF CONSTRUCTION: VERY GOOD

BUILT: 1986; THIRD FLOOR OVER 1995 ADDITION, 2000.

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: UTILITY TUNNELS
REAL ESTATE - BUILDING

Description	11/1/22
APPROXIMATELY 6,925 SQUARE FEET OR 54,100 CUBIC FEET	
STEAM TUNNELS CONNECTING BUILDINGS SERVICED BY CENTERAL HEATING SYSTEM	
- INCLUDING LIGHTING AND DRAINAGE	
- REINFORCED CONCRETE CONSTRUCTION	
Replacement Value New	2,538,400.00
Depreciation %	55%
Sound Valuation	1,142,300.00

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: MAINTENANCE
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	143,600.00
SUPERSTRUCTURE:	
FRAME	121,900.00
FLOORS	141,800.00
FLOOR COVERINGS	19,200.00
CEILINGS	19,200.00
ROOF COVER	84,900.00
INTERIOR CONSTRUCTION	142,400.00
BUILT-IN FIXTURES	52,000.00
ELECTRICAL	142,800.00
PLUMBING	98,700.00
HEATING	43,500.00
MISCELLANEOUS CONSTRUCTION	116,400.00
EXTERIOR WALLS	159,300.00
TOTAL LABOR AND MATERIALS	1,285,700.00
ARCHITECT'S PLANS AND SUPERVISION	5%

Replacement Value New	1,350,000.00
Depreciation %	21%
Sound Valuation	1,066,500.00

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: MAINTENANCE

KIND OF BUILDING: CLASS S

NO. OF STORIES: ONE

OCCUPANCY - MAINTENANCE/STORAGE

TOTAL SQUARE FEET = 11,900

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - 6" REINFORCED CONCRETE OVER VAPOR BARRIER ON COMPACTED SAND

FLOOR COVER - VINYL COMPOSITION TILE;
- CARPET

ROOF STRUCTURE - STEEL

ROOF COVER - STANDING SEAM METAL ROOF WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE; DRYWALL

INTERIOR CONSTRUCTION - FRAME PARTITIONS

BUILT-IN FIXTURES -

11 LINEAR FEET OF PLASTIC LAMINATE BASE CABINETS WITH LAMINATE TOP, CONFERENCE ROOM

11 LINEAR FEET OF PLASTIC LAMINATE WALL CABINETS, - CONFERENCE ROOM

7 LINEAR FEET OF PLASTIC LAMINATE BASE CABINET WITH SINK, LAMINATE TOP, - LUNCH ROOM

7 LINEAR FEET OF PLASTIC LAMINATE WALL CABINETS, - LUNCH ROOM

19 - LOCKERS

- TOILET PARTITIONS

6 - MINI BLINDS

175 - LINEAR FEET OF CYCLONE FENCE, 10' HEIGHT WITH 3 SWING GATES

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

MAINTENANCE: continued

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
4 - WATER CLOSETS
2 - LAVATORIES
1 - URINALS
1 - SANITARY SINKS
1 - ELECTRIC WATER COOLER
1 - HOT WATER HEATER
2 - SHOWER STALLS

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- FLUORESCENT FIXTURES
- 400 WATT HIGH BAY FIXTURES

HEATING AND AIR CONDITIONING -
2 - REZNOR MODEL FE250 GAS FIRED SUSPENDED UNIT HEATERS
1 - PHILCO MODEL 5-TON CONDENSING UNIT
1 - PHILCO GAS FIRED FORCED AIR FURNACE WITH AIR CONDITIONING

EXTERIOR WALLS - DECORATIVE BLOCK
- METAL SIDING WITH INSULATION
2 - 12 X 10' METAL OVERHEAD DOORS

MISCELLANEOUS - FIRE SUPPRESSION SYSTEM
- ACCESS CONTROL SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 2001

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: LANDSCAPE BIN
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	7,800.00
SUPERSTRUCTURE:	
FRAME	3,800.00
FLOORS	7,700.00
ROOF STRUCTURE	5,700.00
ROOF COVER	5,900.00
EXTERIOR WALLS	9,700.00

Replacement Value New	40,600.00
Depreciation %	21%
Sound Valuation	32,100.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: LANDSCAPE BINS

KIND OF BUILDING: CLASS D

NO. OF STORIES: ONE

OCCUPANCY: STORAGE

DIMENSIONS - 45' X 15' X 8'/11' HEIGHT
- 60' X 20' X 11'/18' HEIGHT

TOTAL SQUARE FEET = 675

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - WOOD

FLOORS - CONCRETE ON SAND FILL

ROOF STRUCTURE - OPEN WOOD

ROOF COVER - METAL PANELS

INTERIOR CONSTRUCTION - FRAME PARTITIONS

EXTERIOR WALLS - WOOD

QUALITY OF CONSTRUCTION: GOOD

BUILT - 2001

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING
Bldg.: AUTOMOTIVE SERVICE TECHNOLOGY

Description	11/1/22
FOUNDATION:	133,200.00
SUPERSTRUCTURE:	
FRAME	303,000.00
FLOORS	231,500.00
FLOOR COVERINGS	39,900.00
CEILINGS	30,200.00
ROOF STRUCTURE	237,500.00
ROOF COVER	248,500.00
INTERIOR CONSTRUCTION	842,700.00
BUILT-IN FIXTURES	8,300.00
ELECTRICAL	612,500.00
PLUMBING	352,000.00
HEATING	163,200.00
MISCELLANEOUS CONSTRUCTION	237,100.00
EXTERIOR WALLS	609,700.00
TOTAL LABOR AND MATERIALS	4,049,300.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	4,332,800.00
Depreciation %	38%
Sound Valuation	2,686,300.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: AUTOMOTIVE SERVICE TECHNOLOGY

KIND OF BUILDING: CLASS C/S

NO. OF STORIES: ONE

OCCUPANCY - CLASSROOMS/TECHNOLOGY

TOTAL SQUARE FEET 18,328

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON SAND FILL

FLOOR COVER - CONCRETE SEALER
VINYL COMPOSITION TILE
CARPET

ROOF STRUCTURE - STEEL - STEEL JOISTS, METAL DECK

ROOF COVER - METAL STANDING SEAM WITH INSULATION
- BUILT UP COMPOSITION WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL TILE

INTERIOR CONSTRUCTION - MASONRY AND FRAME PARTITIONS;

BUILT-IN FIXTURES -
95 LINEAR FEET OF CYCLONE FENCE, 8' HEIGHT WITH 3 SWING GATES

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
4 - WATER CLOSETS
4 - LAVATORIES
1 - URINALS
1 - ELECTRIC WATER COOLER
1 - WASH FOUNTAIN
1 - WATER HEATER

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

AUTOMOTIVE SERVICE TECHNOLOGY: continued

MECHANICAL EQUIPMENT:

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES; FIRE ALARM SYSTEM

HEATING AND AIR CONDITIONING -
- VANTAGE II GAS FIRED SUSPENDED RADIANT HEAT
2 - EXHAUST WALL FANS
- ROOFTOP GAS HEATING UNIT WITH AIR CONDITIONING

EXTERIOR WALLS - FACE BRICK, BLOCK BACKUP
- 8" BLOCK
- METAL SIDING WITH INSULATION
3 - 14 X 12' OVERHEAD DOORS, METAL, ELECTRIC OPENER
1 - 16 X 12' OVERHEAD DOOR, METAL, ELECTRIC OPENER
1 - 14 X 14' OVERHEAD DOOR, METAL, ELECTRIC OPENER

MISCELLANEOUS: - AUTOMATIC FIRE SUPPRESSION SYSTEM
- COMPRESSED AIR SYSTEM
- VEHICLE EXHAUST FUME SYSTEM WITH 12 HOSE DROPS 3000 CFM CAPACITY
- ACCESS CONTROL SYSTEM
2 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 1982

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE REAL ESTATE - BUILDING Bldg.: GREAT LAKES CAMPUS

Description	11/1/22
FOUNDATION:	585,200.00
SUPERSTRUCTURE:	
FRAME	1,359,300.00
FLOORS	1,721,200.00
FLOOR COVERINGS	1,018,400.00
CEILINGS	274,200.00
ROOF STRUCTURE	751,400.00
ROOF COVER	1,631,200.00
INTERIOR CONSTRUCTION	4,728,200.00
BUILT-IN FIXTURES	3,255,600.00
ELECTRICAL	3,082,000.00
PLUMBING	1,263,000.00
HEATING	3,305,600.00
MISCELLANEOUS	85,900.00
EXTERIOR WALLS	3,772,800.00
FIRE PROTECTION	327,900.00
TOTAL LABOR AND MATERIALS	27,161,900.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	29,063,200.00
Depreciation %	19%
Sound Valuation	23,541,200.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: GREAT LAKES CAMPUS

KIND OF BUILDING: CLASS C

NO. OF STORIES: TWO WITH PENTHOUSE

OCCUPANCY: MARITIME ACADEMY, CULINARY ARTS, CONFERENCE CENTER

SIZE: FIRST FLOOR 35,670 SQUARE FEET
SECOND FLOOR 33,050 SQUARE FEET
PENTHOUSE 6,644 SQUARE FEET

TOTAL SQUARE FEET = 75,364

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND, VAPOR BARRIER
- STEEL, CONCRETE FLOOR ON STEEL DECK

FLOOR COVERINGS - VINYL TILE
- CARPET
- CERAMIC TILE
- CARPET TILE
- LINOLEUM TILE
- THINSET TERRAZZO FLOORING

ROOF STRUCTURE - LOWER ROOF, STEEL LONG SPAN BAR JOIST, STEEL DECK
- UPPER OOR, LIGHT GAUGE MONO-TRUSSES, METAL DECK

ROOF COVER - STANDING SEAM METAL DECK, INSULATION, VAPOR BARRIER
ICE AND WATER SHIELD AT EAVE
EPDM MEMBRANE WITH INSULATION
PREFINISHED ENGINEERED SNOW RETENTION SYSTEM

CEILINGS - GYPSUM BOARD
- ACOUSTICAL CEILING TILE
- GLASS

INTERIOR CONSTRUCTION - MASONARY AND FRAME PARTITIONS

BUILT-IN FIXTURES -
INTRO LAB:
4 - PREP TABLES, STAINLESS STEEL WITH SINK
1 - EXHAUST HOOD WITH FIRE PROTECTION SYSTEM
2 - POT SINKS, 3 COMPARTMENT, STAINLESS STEEL
1 - PREP TABLE, STAINLESS STEEL, 2 COMPARTMENT SINK

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

GREAT LAKES CAMPUS - continued

BUILT-IN FIXTURES - continued
INTRO LAB: continued
4 - HAND SINKS, STAINLESS STEEL
1 - COOKS TABLE, WITH SINK, STAINLESS STEEL

GARDE MGR LAB:
1 - EXHAUST HOOD WITH FIRE PROTECTION SYSTEM
2 - COOKS TABLE, STAINLESS STEEL WITH SINK, UTENSIL RACK, DOUBLE FACE
2 - WORK TABLES, STAINLESS STEEL WITH REFRIGERATED BASE, SINK
1 - POT SINK, 3 COMPARTMENT, STAINLESS STEEL
2 - HAND SINKS, STAINLESS STEEL

BAKERY LAB:
1 - WALK-IN COOLER
1 - WALK-IN FREEZER
2 - FIRE PROTECTION SYSTEMS
1 - PREP TABLE, STAINLESS STEEL, SINK, WATER METER/FILLER
1 - PREP TABLE, 2 COMPARTMENT SINK, STAINLESS STEEL, DISPOSAL
3 - HAND SINKS, STAINLESS STEEL
1 - POT SINK, 3 COMPARTMENT STAINLESS STEEL SINK, DISPOSAL, POT WASHER
1 - EXHAUST HOOD, STAINLESS STEEL WITH FIRE PROTECTION SYSTEM

FIRST FLOOR CONFERENCE DEMO KITCHEN:
1 - WALK-IN COOLER
1 - PREP TABLE, STAINLESS STEEL WITH SINK
1 - EXHAUST HOOD WITH FIRE PROTECTION SYSTEM
1 - DEMO TABLE, STAINLESS STEEL, SINK, MIRROR
1 - PLATING TABLE, STAINLESS STEEL
1 - UTILITY COUNTER, STAINLESS STEEL
2 - ICE BIN AND WATER FILLER, STAINLESS STEEL
4 - HAND SINKS, STAINLESS STEEL
1 - POT SINK, 3 COMPARTMENT, STAINLESS STEEL
1 - HOBART DISHWASHER WITH BOOSTER HEATER, DISPOSAL
1 - DISHWASHER HOOD WITH EXHAUST FAN, STAINLESS STEEL

ADVANCED COOLING LAB/SECOND FLOOR:
1 - WALK-THRU COOLER
2 - PREP TABLES, STAINLESS STEEL WITH SINK, 8'
2 - PREP TABLES, STAINLESS STEEL WITH SINK, 7 X 5'
1 - EXHAUST HOOD WITH FIRE PROTECTION SYSTEM
1 - FRONT SERVICE COUNTER
1 - BAKERY DISPLAY CASE
1 - HOT FOOD TABLE
3 - REFRIGERATED BASE
1 - UTILITY COUNTER
1 - UTILITY COUNTER WITH SINK
1 - BEVERAGE COUNTER 'L' SHAPE, 16'

GREAT LAKES CAMPUS: continued

BUILT-IN FIXTURES - CONTINUED

ADVANCED COOKING LAB/ SECOND FLOOR: continued
2 - DISH TABLES, STAINLESS STEEL FOR DISHWASHER WITH SINK
1 - POT SINK, 3 COMPARTMENT, STAINLESS STEEL
1 - HOBART DISHWASHER WITH DISPOSAL
1 - DISHWASHER HOOD WITH EXHAUST FAN
1 - HOSE SPRAY UNIT
1 - SERVICE STATION, "L" SHAPE, STAINLESS STEEL TOP, 35 L.F.
1 - FRONT BAR
1 - BAR SERVICE STATION AND ICE BIN
2 - PERLICK BLENDER STATIONS
1 - PERLICK REFRIGERATED BACK BAR
5 - PERLICK DRAINBOARDS
2 - PERLICK ICE BIN AND SPEED RAILS
1 - BAR SINK
5 - CORNER FILLERS, STAINLESS STEEL
1 - "U" SHAPE CARIAN TOP FRONT BAR, 60 L.F.

MARITIME ACADEMY:
1 - EXHAUST FUME HOOD
15 - LOCKERS, 2 TIER
1 - OTIS ELEVATOR, 2 STOP
2 - ROLLING DOORS, METAL, 24 X 10'
3 - ROLLING DOORS, METAL, 78 X 120"
1 - ROLLING DOOR, METAL, 10 X 10'
1 - ROLLING DOOR, METAL, 15 X 10'
3 - MOVABLE PARTITIONS, 48'

CULINARY ARTS:
1 - OTIS ELEVATOR, 2-STOP
1 - WALK-IN FREEZER
2 - WALK-IN COOLERS

PLUMBING - AN MODERN SYSTEM OF SANITARY FIXTURES CONSISTING OF:
36 - WATER CLOSETS
30 - LAVATORIES
13 - URINAL
5 - JANITOR SINKS
12 - DRINKING FOUNTAINS
3 - SHOWERS
2 - STORAGE TANKS, 752 GALLON CAPACITY
3 - HELLEN BRAND MODEL H200M, WATER CONDITIONING SYSTEM

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
- EMERGENCY LIGHTING

GREAT LAKES CAMPUS: continued

HEATING AND AIR CONDITIONING -

1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476412
12 - TRANE FNB04 CABINET UNIT HEATERS
3 - TRANE 90S UNIT HEATERS
4 - B & G HEATING EXCHANGERS
1 - TRANE MCC-40 AIR HANDLING UNIT, AHU-1
1 - TRANE MCC-40 AIR HANDLING UNIT, AHU-2
1 - TRANE MCC-25 AIR HANDLING UNIT, AHU-3
1 - TRANE MCC-35 AIR HANDLING UNIT, AHU-4
1 - TRANE MCC-40 AIR HANDLING UNIT, AHU-5
1 - TRANE RAUCC304 ROOFTOP CONDENSING UNIT, CU-3
1 - TRANE RAUCC504 ROOFTOP CONDENSING UNIT, CU-2
1 - TRANE RAUCC504 ROOFTOP CONDENSING UNIT, CU-1
1 - TRANE ROOFTOP CONDENSING UNIT, CU-4
1 - TRANE ROOFTOP CONDENSING UNIT, CU-5
2 - HEATWAY 1574 SNOW MELTING RADIANT FLOOR SYSTEM
87 - TRANE VAV BOXES (VARIABLE AIR VOLUME)
1 - DUO-AIRE MODEL CAA-2D ROOFTOP DIRECT GAS INDUSTRIAL MAKE-UP AIR UNIT, #565605B
1 - DUO-AIRE MODEL CAA-3D ROOFTOP DIRECT GAS INDUSTRIAL MAKE-UP AIR UNIT, #565605
1 - DUO-AIRE MODEL CAA-1D ROOFTOP DIRECT GAS INDUSTRIAL MAKE-UP AIR UNIT, #565605
1 - DUO-AIRE MODEL CAA-2D ROOFTOP DIRECT GAS INDUSTRIAL MAKE-UP AIR UNIT, #565605
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476415
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476426
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476414
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476425
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476431
1 - LOCHINVAR MODEL FTX850N-M13, GAS FIRED TUBE BOILER, #1639103476428

EXTERIOR WALLS - FACE BEICK, BLOCK BACK-UP
7-1/2" STRUCTURAL CURTAIN WALL SYSTEM
WITH 1" INSULATED GLAZING UNITS
OVERHEAD DOOR, GLASS/METAL
WITH ELECTRIC OPERATOR, 20 X 16'

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

GREAT LAKES CAMPUS: continued

MISCELLANEOUS:
- MARITIME ACADEMY DECK, STEEL FRAME, CONCRETE ON METAL DECK 1,262 SQUARE FEET
- CULINARY ARTS DECK, STEEL FRAME, CONCRETE ON METAL DECK, 460 SQUARE FEET
- ACCESS CONTROL SYSTEM
- CAMERA SECURITY SYSTEM

FIRE PROTECTION - FIRE PROTECTION SPRINKLERS

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: AERO PARK LAB
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	207,600.00
SUPERSTRUCTURE:	
FRAME	646,400.00
FLOORS	253,200.00
FLOOR COVERINGS	28,700.00
CEILINGS	14,500.00
ROOF STRUCTURE	431,800.00
ROOF COVER	390,500.00
INTERIOR CONSTRUCTION	608,000.00
BUILDING FIXTURES	60,300.00
ELECTRICAL	861,700.00
PLUMBING	350,100.00
HEATING	242,900.00
MISCELLANEOUS CONSTRUCTION	546,400.00
EXTERIOR WALLS	516,500.00
TOTAL LABOR AND MATERIALS	5,158,600.00
ARCHITECT'S PLANS AND SUPERVISION	6%

Replacement Value New	5,468,100.00
Depreciation %	40%
Sound Valuation	3,280,900.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: AERO PARK LAB

TYPE OF BUILDING: CLASS C

NO. OF STORIES: ONE

OCCUPANCY: LABORATORY WITH CLASSROOM

TOTAL SQUARE FEET = 29,600, MORE OR LESS

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL
- CRANEWAY

FLOORS - CONCRETE ON GROUND

FLOOR COVERINGS - CARPET AND CERAMIC TILE

CEILINGS - SUSPENDED ACDUSTICAL CEILING SYSTEM WITH EDGE TRIM, OFFICES

ROOF STRUCTURE - STEEL JOIST, METAL DECK

ROOF COVER - SINGLE PLY MEMBRANE WITH INSULATION

INTERIOR CONSTRUCTION - MASONRYAND FRAME PARTITIONS; STORE FRONT

BUILT-IN FIXTURES -
1 - COFFEE BAR, L SHAPE, LAMINATE, 15'6" X 8'4"
1 - BASE CABINET, LAMINATE, 3-DOOR/4-DRAWER WITH STAINLESS STEEL SINK
1 - WALL CABINET, LAMINATE, 2-DOOR WITH SHELF 66" X 16" X 24"
1 - PALLET RACKING SYSTEM
- TOILET PARTITIONS
3 - ROLLING DOORS, METEL, 8' X 8'

PLUMBING - AN APPROVED SYSTEM OF SANITARY FIXTURES CONSISTING OF:
7 - WATER CLOSET
8 - LAVATORY
3 - URINAL
1 - SANITARY SINK
1 - SHOWER
4 - ELECTRIC WATER COOLER
1 - WATER HEATER

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

AERO PARK LAB: continued

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
2000 AMP SWITCHBOARD
- SOLAR PANEL ARRAY, 3.6 KW

HEATING AND AIR CONDITIONING

1 - ABSOLUTAIRE MODEL AA6UMXDX, GAS DIRECT FIRED MAKE-UP AIR UNIT #25581
2 - AMANA HEAT PUMP SPLIT SYSTEM WITH CONDENSING AMBIENT PACKAGE
1 - RENEWAIRE MODEL HE2XRT ENERGY RECOVERY VENTILATOR
1 - FUJITSU MODEL PKA-A12GA DUCTLESS AIR CONDITIONER
1 - FUJITSU MODEL PVY-A12NHA CONDENSING UNIT
1 - BERKO MODEL SRA-2020DSAG ELECTRIC HEATER
5 - EXHAUST FANS
2 - AMERICAN STANDARD FREEDOM 95 DIRECT VENT GAS FURANCE
1 - ENERGY KNIGHT DUCTLESS AIR CONDITIONER
1 - SUSPENDEDGAS FIRED UNIT HEATER
1 - TRANE MODEL 4TTA3048D4000CA, CONDENSING UNIT, #152452UE3F

EXTERIOR WALLS - FACE BRICK, BLOCK BACK-UP
- HORIZONTAL RIBBED METAL, METAL FRAME
- METAL SIDING WITH INSULATION
- OVERHEAD DOORS

MISCELLANEOUS - AUTOMATIC FIRE SUPPRESSION SYSTEM
1 - AURORA 5 TON BRIDGE CRANE, 60' SPAN WITH YALE HOIST
1 - MEZZANINE WITH STAIRCASE
- ACOUSTICAL BAFFLES
- SKYSTREAM 3-7 WIND TURBINE, 45' TOWER
- GE EST FIRE ALARM SYSTEM
13 - WELDING BOOTHS MASONRY WITH FUME, HOODS, EXHAUST DUCT
1 - CRIB FENCE, 31 LINEAR FEET X 8' HEIGHT
1 - ATLAS COPCO MODEL GX7P, ROTARY SCREW AIR COMPRESSOR
- ACCESS CONTROL SYSTEM
12 - DOUBLE FACE WELDING BOOTHS WITH LIGHTS EXHAUST
3 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD, LEED CERTIFIED

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE
REAL ESTATE - BUILDING

Bldg.: PARSEN-STULLEN
M-TEC

Description	11/1/22
FOUNDATION:	439,900.00
SUPERSTRUCTURE:	
FRAME	1,648,600.00
FLOORS	1,023,600.00
FLOOR COVERINGS	922,800.00
CEILINGS	458,700.00
ROOF STRUCTURE	573,700.00
ROOF COVER	714,300.00
INTERIOR CONSTRUCTION	2,503,900.00
BUILT-IN FIXTURES	749,200.00
ELECTRICAL	2,164,400.00
PLUMBING	1,172,900.00
HEATING	2,745,900.00
MISCELLANEOUS CONSTRUCTION	1,928,600.00
EXTERIOR WALLS	1,899,000.00
TOTAL LABOR AND MATERIALS	18,945,500.00
ARCHITECT'S PLANS AND SUPERVISION	7%

Replacement Value New	20,271,700.00
Depreciation %	22%
Sound Valuation	15,811,900.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: PARSEN-STULLEN M-TEC

KIND OF BUILDING: CLASS C

NO. OF STORIES: TWO

OCCUPANCY - CLASSROOM

SIZE: FIRST FLOOR 42,800 SQUARE FEET
SECOND FLOOR 22,200 SQUARE FEET

TOTAL SQUARE FEET - 65,000

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - CONCRETE ON GROUND, 5 1/2" SLAB ON METAL DECK, STEEL JOISTS

FLOOR COVER - RESILIANT TILE
- CERAMIC TILE
- TERRAZZO
- CARPET

ROOF STRUCTURE - PRE-ENGINEERED BOW SPRING STEEL ROOF TRUSSES STEEL JOIST, METAL DECK
ROOF COVER - SNAP-ON STANDING SEAM CURVED METAL ROOFING, PLYWOOD DECK WITH INSULATION
- SINGLE PLY MEMBRANE WITH INSULATION

CEILINGS - SUSPENDED ACOUSTICAL PANELS
- SUSPENDED GYPSUM BOARD
- SUSPENDED PREFORMED FLUSH ALUMINUM PANELS
- SUSPENDED ALUMINUM PANELS
- SUSPENDED VINYL FACED GYPSUM PANELS

INTERIOR CONSTRUCTION - MASONRY AND FRAME PARTITION

BUILT-IN FIXTURES -

- 350 LINEAR FT. OF LAMINATE BASE CABINETS
- 225 LINEAR FT. OF LAMINATE WALL CABINETS
1 - INFORMATION DESK, LAMINATE, 20 LINEAR FT.
1 - INFORMATION DESK, LAMINATE, 13 LINEAR FT.
5 - FOLDING PARTITIONS, 28 X 9'
- LOT OF VISUAL DISPLAY BOARDS

REAL ESTATE - BUILDING - NORTHWESTERN MICHIGAN COLLEGE

M-TEC: continued

BUILT-IN FIXTURES - continued
1 - STAINLESS STEEL SINK WITH DRAINBOARD, DISPOSAL, DISHWASHER
1 - DOUBLE COMPARTMENT SINK, STAINLESS STEEL
1 - TV CABINET, LAMINATE, 48 X 24 X 84"
10 - WARDROBE CABINETS, LAMINATE, 42 X 24 X 84"
1 - ISLAND CABINET, LAMINATE, 68 X 48 X 35"
1 - ISLAND CABINET, LAMINATE, 120 X 30 X 35"
- 40 LINEAR FT. LAMINATE WITH 3-DRAWER PEDESTAL BASE, 2-DOOR BASE
- 38 LINEAR FT. LAMINATE WITH 3-DRAWER PEDESTAL BASE
20 - LOCKERS, METAL, 2-TIER, 15 X 18 X 60"
28 - LOCKERS, METAL, 2-TIER, 12 X 12 X 60"
1 - OTIS PASSENGER ELEVATOR, 2-STOP
1 - LAB FUME HOOD, 47" WITH LAMINATE BASE CABINET
3 - PENINSULA LAB BASE CABINETS, LAMINATE WITH SINK, GAS, AIR, ACID PROOF TOP, 72 X 42"
- 12 LINEAR FT. LAB BASE CABINETS, LAMINATE, ACID PROOF TOP
- TOILET PARTITIONS
- MINI BLIND WINDOW TREATMENTS
- SIGNAGE
1 - DISPLAY CASE / DIRECTORY
12 - WELDING BOOTHS MASONARY

PLUMBING - A MODERN SYSTEM OF SANITARY FIXTURES CONSISTING OF:
22 - WATER CLOSETS
25 - LAVATORIES
8 - URINALS
2 - SANITARY SINKS
6 - ELECTRIC WATER COOLERS
1 - WASH FOUNTAIN
1 - SHOWER
1 - RAYPACK GAS FIRED DOMESTIC WATER BOILER WITH 115 GALLON STORAGE TANK

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES
1 - 1500 KVA TRANSFORMER ON PAD

HEATING AND AIR CONDITIONING -
1 - RAYPACK MODEL H-ADB-500 GAS FIRED BOILER
2 - RAYPACK MODEL H-ADB-750 GAS FIRED BOILERS
2 - RAYPACK MODEL H-6-962 GAS FIRED BOILERS
2 - RAYPACK MODEL H-4-1000 GAS FIRED BOILERS
1 - ITT BELL & GOSSETT HEAT EXCHANGER
2 - YORK MODEL H2CA300A46D CONDENSING UNITS, 25 TON CAPACITY
7 - YORK AIR HANDLING UNITS
1 - BALTIMORE AIR COIL MODEL F1443-0 FLUID COOLER

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

M-TEC: continued

HEATING AND AIR CONDITIONING - continued
1 - BALTIMORE AIR COIL MODEL F1463-P FLUID COOLER
- PUMPS AS REQUIRED
- BASEBOARD RADIATION
- RADIANT FLOOR IN STUDENT ACTIVITIES ROOM
1 - LIEBERT AIR CONDITIONING UNIT
1 - LIEBERT CONDENSING UNIT
1 - TRANE 2TRW4024A100011 CONDENSING UNIT, #6135KWL4F
- SOLAR THERMAL SYSTEM INCLUDING:
7 - MAZDON 30-TUBE SOLAR PANELS, 6 X 6' ON WALL MOUNTED STEEL FRAME
2 - STORAGE TANKS, 150 GALLON CAPACITY
- PUMPS
1 - MITSUBISIH SPLIT SYSTEM AIR CONDITIONER, 3 TON, ROOM 204

EXTERIOR WALLS - SPLIT FACE MASONRY WITH BLOCK BACK UP, 12"
- BLOCK, 8"
- HORIZONTAL METAL SIDING
- INSULATED GLASS IN ALUMINUM FRAME
3 - OVERHEAD DOORS, ROLL UP WITH ELECTRIC OPERATOR, 16 X 15', 28 X 22', 13 X 10'

MISCELLANEOUS - FIRE PROTECTION SPRINKLERS
- DATA/TELEPHONE/IT INFRASTRUCTURE
- DIGITAL FLOORING SYSTEM
2 - CANOPIES, STEEL FRAME, SPLIT FACE MASONRY, STEEL JOISTS, METAL DECK, STANDING SEAM METAL ROOF COVER, 13.5' X 14.5' X 10' HEIGHT
1 - SOLAR PV SYSTEM INCLUDING: 12 - BP SOLAR PANELS, 5 X 10'
- STEEL FRAME FOR PANELS, 42' WIDE 10' HEIGHT
2 - FRONIUS IG INVERTER
- WIRING
- SIMPLEX FIRE ALARM SYSTEM
1 - USA TANK MODEL 2520, WATER TANK STEEL, 25' DIAMETER X 20' HEIGHT, 66800 GALLON CAPACITY, #150115100A WITH CRANE STAIRCASE, SAND FILTERS
- FM200 FIRE SUPPRESSION SYSTEM FOR ROOMS 100 AND 204A
- ACCESS CONTROL SYSTEM
5 - CAMERA SECURITY SYSTEM

QUALITY OF CONSTRUCTION: GOOD

BUILT: 2000

R. A. SCHETTLER, INC.
Appraisal Engineers

Asset Acct.: NORTHWESTERN MICHIGAN COLLEGE Bldg.: NORTH HALL
REAL ESTATE - BUILDING

Description	11/1/22
FOUNDATION:	229,200.00
SUPERSTRUCTURE:	
FRAME	204,500.00
FLOORS	617,000.00
FLOOR COVERINGS	269,800.00
CEILINGS	169,300.00
ROOF STRUCTURE	201,600.00
ROOF COVER	212,300.00
INTERIOR CONSTRUCTION	1,903,600.00
BUILT-IN FIXTURES	1,095,400.00
ELECTRICAL	652,200.00
PLUMBING	806,500.00
HEATING AND AIR CONDITIONING	1,002,600.00
MISCELLANEOUS	95,400.00
EXTERIOR WALLS	763,700.00
FIRE PROTECTION	124,000.00
ELEVATORS	196,100.00
TOTAL LABOR AND MATERIALS	8,543,200.00
ARCHITECT'S PLANS AND SUPERVISION	6%

Replacement Value New	9,055,800.00
Depreciation %	4%
Sound Valuation	8,693,600.00

R. A. SCHETTLER, INC.
Appraisal Engineers

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

NAME OF BUILDING: NORTH HALL

KIND OF BUILDING: CLASS D

NO. OF STORIES: THREE

OCCUPANCY: STUDENT HOUSING

TOTAL SQUARE FEET = 46,730

FOUNDATION: CONCRETE

SUPERSTRUCTURE:

FRAME - STEEL

FLOORS - 4" CONCRETE SLAB, VAPOR BARRIER, INSULATION
- WOOD TRUSSES, WOOD DECK
- CONCRETE METAL PAN STAIRWAY

FLOOR COVERINGS - WOOD COMPOSITE, CERAMIS TILE, RUBBER BASE, CARPET, RESILIENT SHEET FLOORING

ROOF STRUCTURE - WOOD TRUSSES, WOOD DECK
- STEEL JOIST, METAL DECK

ROOF COVER - SINGLE PLY MEMBRANE OVER RIDGID INSULATION

CEILINGS - SUSPENDED ACOUSTICAL PANEL
- GYPSUM BOARD WITH KNOCKDOWN FINISH, PAINTED
- SUSPENDED WOOD SLAT PLANK CEILING SYSTEM

INTERIOR CONSTRUCTION - WOOD PARTITIONS, FEW MASONRY PARTITIONS

BUILT-IN FIXTURES - LAMIMATE KITCHEN CABINETS
- WOOD VANITY CABINETS
- LAMINATE LAUNDRY CABINETS

PLUMBING - AN MODERN SYSTEM OF SANITARY FIXTURES CONSISTING OF:
47 - WATER CLOSETS
49 - LAVATORIES
1 - URINAL
3 - SANITARY SINK
3 - LOCHINVAR MODEL SIT1199, INDIRECT WATER HEATER, 119 GALLON CAPACITY
2 - ELECTRIC WATER COOLERS
48 - SHOWERS

REAL ESTATE - BUILDING NORTHWESTERN MICHIGAN COLLEGE

NORTH HALL: continued

ELECTRICAL - AN APPROVED SYSTEM OF WIRING ALL IN CONDUIT WITH NECESSARY WALL PLUGS AND SWITCH BOXES

HEATING AND AIR CONDITIONING -
1 - LOCHINVAR MODEL FTX850, GAS FIRED TUBE BOILER, #239797
40 - CLIMATE MASTER HEAT PUMPS
6 - RENEWAIRE MODEL HEIXRT, ROOF TOP ENERGY RECOVERY UNITS
1 - LOCHINVAR MODEL FTX850, GAS FIRED TUBE BOILER, #216336
1 - LOCHINVAR MODEL FTX850, GAS FIRED TUBE BOILER, #216523
1 - GUNTNER MODEL GFH080, ROOFTOP DRY COOLER

MISCELLANEOUS - ACCESS CONTROL SYSTEM
6 - CAMERA SECURITY SYSTEM

EXTERIOR WALLS - HORIZONTAL CEMETITIOUS SIDING PANELS
- CEMENTITIOUS LAP SIDING
- ALUMINUM CURTAIN WALL
- ALUMINUM STOREFRONT
- BUILT-UP EYEBROW TRIM

ELEVATOR - KONE 3 STOP PASSENGER ELEVATOR, 4000 LB. CAPACITY, #9960649

YEAR BUILT - 2017

QUALITY OF CONSTRUCTION - GOOD

R.A. Schettler, Inc.
Certified
Appraisal Service
24634 W. FIVE MILE RD.
SUITE/UNIT 30
REDFORD, MI. 48239
(248) 705-5801
Industrial - Commercial
RAS
Residential - Institutional

NOVEMBER 1, 2022

ASSOCIATED GROUP UNDERWRITERS, INC.
39111 W. SIX MILE ROAD
LIVONIA, MICHIGAN 48152

TO WHOM IT MAY CONCERN:

AS REQUESTED BY THE MICHIGAN COMMUNITY COLLEGE RISK MANAGEMENT AUTHORITY, WE SUBMIT HEREWITH OUR CERTIFIED APPRAISAL OF LIBRARY HOLDINGS BELONGING TO NORTHWESTERN MICHIGAN COLLEGE, 1701 E, FRONT STREET, TRAVERSE CITY, MICHIGAN. THIS APPRAISAL INCLUDES MEDIA CENTER COLLECTIONS ONLY.

THIS APPRAISAL IS REPORTED IN A NUMBER OF CATEGORIES AND FURNISHES AN UNBIASED STATEMENT OF VALUES. VALUES STATED ARE REPLACEMENT VALUE NEW, WHICH ARE DEFINED AS THE COST THAT WOULD BE INCURRED IN ACQUIRING AN EQUALLY DESIRABLE SUBSTITUTE FOR PROPERTY, WHICH IS DETERMINED IN ACCORDANCE WITH MARKET PRICES PREVAILING AT THE DATE OF THIS APPRAISAL AND REPRESENTS THE COST TO REPLACE NEW, THE PROPERTY IN LIKE KIND.

IN THIS ANALYSIS, WE HAVE RELIED ON THE BOWKERS ANNUAL GUIDE TO PROVIDE AVERAGE UNIT PRICES FOR COMMUNITY COLLEGE LIBRARY COLLECTIONS. WE HAVE MET WITH YOUR MEDIA DIRECTOR OR OTHER STAFF TO DISCUSS THESE VALUES AND TO MAKE ADJUSTMENTS FOR ANY SPECIAL CIRCUMSTANCES OR COLLECTIONS.

WE HAVE NOT EXAMINED THE LEGAL TITLES OF PROPERTY. THEREFORE WE DO NOT ASSUME RESPONSIBILITY REGARDING THE OWNERSHIP OF PROPERTY IN THIS APPRAISAL.

VERY TRULY YOURS,

R.A. SCHETTLER, INC.

R.A. Schettler, Inc.
Certified
Appraisal Service
24634 W. FIVE MILE RD.
SUITE/UNIT 30
REDFORD, MI. 48239
(248) 705-5801
Industrial - Commercial
RAS
Residential - Institutional

NOVEMBER 1, 2022

NORTHWESTERN MICHIGAN COLLEGE
1701 E. FRONT STREET
TRAVERSE CITY, MICHIGAN 49684

TO WHOM IT MAY CONCERN,

AS REQUESTED BY THE MICHIGAN COMMUNITY COLLEGE RISK MANAGEMENT AUTHORITY, WE SUBMIT HEREWITH OUR CERTIFIED APPRAISAL OF LIBRARY HOLDINGS BELONGING TO NORTHWESTERN MICHIGAN COLLEGE, 1701 E, FRONT STREET, TRAVERSE CITY, MICHIGAN. THIS APPRAISAL INCLUDES MEDIA CENTER COLLECTIONS ONLY.

THIS APPRAISAL IS REPORTED IN A NUMBER OF CATEGORIES AND FURNISHES AN UNBIASED STATEMENT OF VALUES. VALUES STATED ARE REPLACEMENT VALUE NEW, WHICH ARE DEFINED AS THE COST THAT WOULD BE INCURRED IN ACQUIRING AN EQUALLY DESIRABLE SUBSTITUTE FOR PROPERTY, WHICH IS DETERMINED IN ACCORDANCE WITH MARKET PRICES PREVAILING AT THE DATE OF THIS APPRAISAL AND REPRESENTS THE COST TO REPLACE NEW, THE PROPERTY IN LIKE KIND.

IN THIS ANALYSIS, WE HAVE RELIED ON THE BOWKERS ANNUAL GUIDE TO PROVIDE AVERAGE UNIT PRICES FOR COMMUNITY COLLEGE LIBRARY COLLECTIONS. WE HAVE MET WITH YOUR MEDIA DIRECTOR OR OTHER STAFF TO DISCUSS THESE VALUES AND TO MAKE ADJUSTMENTS FOR ANY SPECIAL CIRCUMSTANCES OR COLLECTIONS.

WE HAVE NOT EXAMINED THE LEGAL TITLES OF PROPERTY. THEREFORE WE DO NOT ASSUME RESPONSIBILITY REGARDING THE OWNERSHIP OF PROPERTY IN THIS APPRAISAL.

VERY TRULY YOURS,

R.A. SCHETTLER, INC.

R. A. Schettler, Inc.
Appraisal Engineers

Northwestern Michigan College

DATE: NOVEMBER 2022

Library Holdings by Building

Building Name	Circulating Books	Reference Books	Periodicals	Videotape	CD Rom	Sound Recordings	Other Holdings	Building Total
Innovation Center	1,501,850	196,664	69,250	22,515	0	0	0	$1,790,279
TOTAL	$1,501,850	$196,664	$69,250	$22,515	$0	$0	$0	$1,790,279

Appendix I

Campus Maps

NMC Main Campus

1701 E Front Street
Traverse City, MI

Northwestern Michigan College

1 Dennos Museum (DMC)
2 Scholars Hall (SH)
- Writing & Reading Center
3 Osterlin Building (O)
- Academic & Career Advising Ctr.
- Disability Services
- Intl. Services & Svc. Learning
- Student Life
  - Personal Counseling
- Student Success Center
- Tutoring Center
- Placement & Testing Center
- Veterans Lounge
4 Power House
5 Tanis Building (T)
- Enrollment Services
  - Admissions
  - Financial Aid
  - Records & Registration
- Math & Science Center
6 Les Biederman Building (LB)
- Health Services
7 Health & Science Building (HS)
- NMC Bookstore
  - Apartment Management
8 Founders Hall (FH)
9 Timothy J. Nelson Innovation Center & Library (IC)
- Campus Safety
  - Student IDs, Parking passes
- Hawk Owl Café
- Technology Help Desk
10 East Hall (EH)
11 Clock Tower
12 Fine Arts Building (F)
13 James Beckett Building (JB)
14 Campus Apartments
15 Oleson Center (OC)
- Child Care Center
16 Phys Ed Building (P)
17 Maintenance Building/ Shipping & Receiving
18 North Hall (NH)

Map Legend
- Campus Entrances
- Parking Lot
- Accessible Parking
- Accessible Entrance
- Bus Stop

N W E S

Eastern Avenue
North College Drive
Elm Lot
Cherry Lot
Dogwood Lot
Juniper Lot
Chestnut Lot
Maple Lot
Cedar Lot
Birch Lot
Aspen Lot
Pine Lot
Tamarack Lot
Poplar Lot
College Drive
E Front St
Munson Avenue
Fair Street
Indian Woods W
Indian Woods E
Apache
Huron
Wenonah
31
72

Map Legend

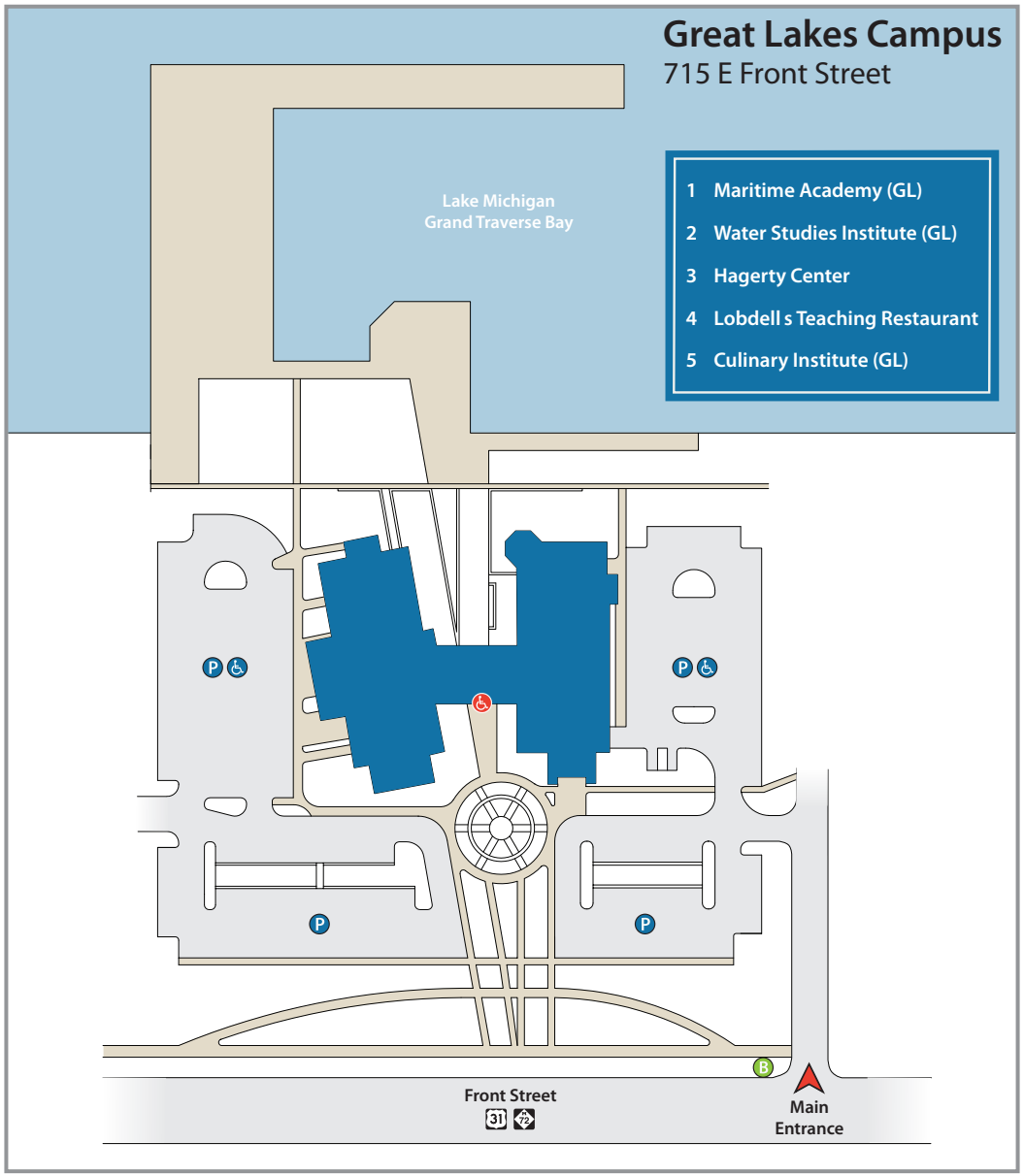
- Campus Entrances
- Parking Lot
- Accessible Parking
- Accessible Entrance
- Bus Stop

Northwestern Michigan College

N W E S

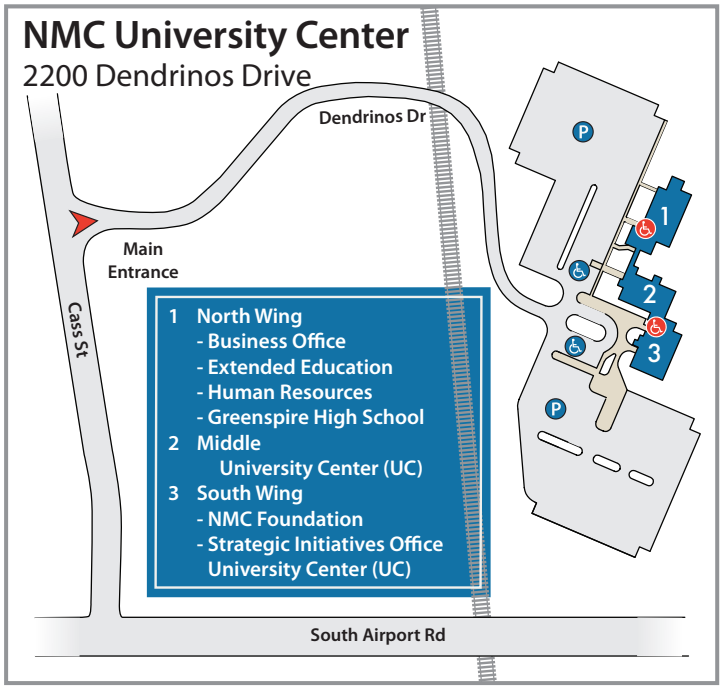
Great Lakes Campus

715 E Front Street



NMC University Center

2200 Dendrinos Drive



Aero Park Campus

2600 Aero Park Drive

FISCAL YEAR 2025
CAPITAL OUTLAY PROJECT REQUEST

Institution Name: Northwestern Michigan College

Project Title: Integrated Student Services Hub

Project Focus: [ ] Academic [ ] Research [x] Administrative/Support

Type of Project: [x] Renovation [ ] Addition [ ] New Construction

Program Focus of Occupants: Student Academic and Administrative Support

Approximate Square Footage: 26,000 square feet

Total Estimated Cost: $7,000,000

Estimated Start/Completion Dates: Project is ready for construction contingent upon authorization approval. Total build time is expected to be one-year.

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

Is the requested project the top priority of the Five-Year Capital Plan? [x] Yes [ ] No

Is the requested project focused on a single, stand-alone facility? [x] Yes [ ] No

Note: Attached to this project request is a condensed, 1-page project summary.

Executive Summary
Student Services Hub – Renovation Project

Project Overview

Northwestern Michigan College is applying for Capital Outlay funding to renovate and upgrade the Osterlin Building on central campus into an Integrated Student Services Hub ("the Hub") or ("the project"). The Hub would become a central building for the College's key student service departments including admissions, advising, tutoring, counseling, financial aid, cashier's, international outreach, and more; it would add a Veteran's Lounge, testing center, and talent development services area. These services are currently spread out among three different buildings on central campus.

Built in 1961 and expanded in 1984, Osterlin has reached the end of its functional life and is in need of significant repairs and upgrades. This includes upgrades to the building envelope, HVAC system and a reconfiguration of the layout to maximize use of the existing building footprint. The project will also include energy efficiency upgrades and student focused spaces to enable collaboration and learning. The project will not impact tuition and will be cost shared from existing NMC reserves. The last Capital Outlay project funded at NMC was in 2018 for the West Hall Innovation Center Renovation Project.

Project Purpose

The purpose of this project is to address 3 main needs for NMC's central campus:

1. **Enhance an Existing Asset:** The Osterlin building is over 60 years old and has reached the end of its functional life. Instead of demolishing the structure, NMC intends to repurpose, transform, and extend the life of the building while creating a functional, centralized hub for key student services.
2. **Improve Student Efficiency:** Currently, students must travel to several different buildings for their support service needs. Consolidating all of our student support services into one area will allow students to access resources in one location. We believe this holistic customer service experience will lead to increased student retention and completion due to the enhanced experience.
3. **Improve Energy Efficiency**: The project would include a complete envelope overhaul including new energy efficient windows and doors, new insulation and a new exterior that would increase efficiency and sustainability. Additional project elements would include a new HVAC system and the installation of LED lights, all of which will help reduce the carbon footprint for this building.

Describe the Scope of the Project

The project is the complete renovation and modernization of the 60 year old Osterlin Building. The scope includes addressing deficiencies identified in the facility assessment report (**Appendix E of Five-Year Capital Plan**) and other overdue upgrades to transform the space into a centrally located hub for student services.

Specific project elements include:

- Updated information technology infrastructure
- Revised or improved building entrances
- Replace existing windows and exterior doors to increase efficiency
- Replace deteriorating stucco with new insulated metal panels to increase efficiency and sustainable design
- Updated facility to address ADA accessibility
- Upgrade/replace lighting with LED lights
- Replace inefficient HVAC system with new energy efficient system
- Elevator upgrades
- Electrical upgrades
- New interior finish
- Flexible and adaptable learning spaces for group and individual learning, spaces for career advising and workforce readiness partners
- Breakout spaces to support services to students
- Improved operating efficiencies
- Consolidation of student support offices

Once completed the Osterlin Building will be home to:

- Admissions
- Financial Aid
- Student Financial Services / Cashiers
- Registrar
- Counseling
- Career Services
- Health Services
- Veterans Lounge
- Advising and Tutoring
- Learning Services and Student Testing Center
- International Outreach and Service Learning

The project outcomes for our learners include:

- Integrated student support services
- Holistic advising experience to help them with their student success
- Improved customer service to students
- Increased use of student support services
- Improved retention rates

Please provide detailed, yet appropriately concise responses to the following questions that will enhance our understanding of the requested project:

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

   Northwestern Michigan College plays a pivotal role in talent enhancement and economic growth initiatives at the local, regional, state and national basis. A 2017 study conducted by EMSI, a leading provider of economic impact studies and labor market data to educational institutions, concluded that NMC “benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workers.” The study further found that NMC “benefits the state and local taxpayers through increased tax receipts” and “benefits society as a whole in Michigan by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.”

   Specifically, the study found that 1 out of every 22 jobs in the region is supported by the activities of NMC and its students. The study also reported that NMC added $42.3 million in income to the region during the analysis year as a result of its day-to-day operations. Further, the 2017 economic impact study conducted by EMSI found that for every $1.00 of public monies invested in NMC, taxpayers receive a cumulative value of $2.90 over the course of the student’s working lives.

   Therefore, the proposed integrated student services hub is critically important to ensure that NMC is able to continue meeting its goal of providing our communities

and learners with the skills, experiences and values that help them create social and economic wealth during their lifetime.

2. **How does the project enhance the core academic and/or research mission of the institution?**

   This project is closely aligned with NMC's mission of "providing lifelong learning opportunities to our communities." With an enrollment of approximately 4,000 students, services such as advising, tutoring, financial aid, and counseling play a key role in student success and completion.

   In 2017, financial aid was offered to 67% of our student population. A 2016 RAND study[1] and a 2019 University of Chicago study[2] found that **providing community college students with comprehensive wraparound services increases full-time enrollment and completion rates.** The 2019 study by the University of Chicago Poverty Lab found that providing wraparound support for community college students can improve their chances of persisting, resulting in nearly doubling their retention to the next term and leading to a 35% increase in full-time enrollment.

   Therefore, to support success and completion for our approximately 4,000 students, this project will allow NMC to provide a singular location to help students navigate enrollment, financial aid and advising. Delivering more consistent and timely answers will provide the project outcome of a more uniform, holistic customer service experience that will help attract and retain students.

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

   The integrated student services hub will be an adaptive re-purposing of a centrally located but outdated facility. The project maximizes the use of an existing building to accommodate the vast majority of our student support services in one location. In addition, the project leverages vacated space once home to the College's library, which has moved to our new Timothy J. Nelson Innovation Center. This transition leaves 26,000 square feet of centrally located space in the Osterlin Building that would not be repurposed in such a way to benefit all students.

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

   Yes, the project will address several health/safety deficiencies in the existing structure. The building was built in 1961 and expanded in 1984. A renovation and re-purposing of the building will allow us to update the building based on current

[1] https://www.rand.org/news/press/2016/11/30/index2.html

[2] https://news.uchicago.edu/story/study-evaluates-model-helping-students-complete-community-college

emergency management protocol and today's ADA requirements. In summary, some of the deficiencies addressed with a project would include:

- Additional barrier free restrooms
- Remodel of interior of buildings to eliminate ramps that are not ADA compliant
    - Currently the building utilizes a series of ramps to access portions of the building that are not compliant with the current ADA standards
- HVAC heating and cooling upgrades
    - Dated equipment will be replaced with a higher efficiency and environmentally compliant system
- Window and exterior door replacement
    - Replace dated windows with energy-efficient windows

4. **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?**

   NMC utilizes a robust analytic process for determining efficient use and utilization of our classrooms and spaces. We were one of the first colleges to use classroom efficiency rather than "go numbers" to determine enrollment decisions. Starting in 2000, NMC adopted an efficiency model whereby the college set an ambitious target to achieve an average of 90% fill rate for our classes. While not reaching that goal in every area due to the need to support smaller efficiency in some key specialty areas, the college average has reached between 82% and 85% in the last five academic years. Classes in some disciplines are entirely full.

   The College also analyzes the utilization of our current buildings using our R25 scheduling software. Our current utilization reports show that our adaptive learning spaces are at maximum use. These spaces are scheduled for large and small student study groups. Additionally, our reports show that simulation space is at capacity. These adaptive rooms are used by both credit and certificate programs. NMC was at capacity for our residential students and added an additional 150 new beds in 2017. Our residential halls are currently at 90% occupancy.

   This project would greatly assist in improving the utilization of existing space on campus. Specifically, with the movement of the library to a new building on campus, a large portion of the Osterlin building will be vacant. Further, as the building is currently configured, space is non-congruent and prevents students from seamlessly utilizing space and service. Once completed, the project would create a more holistic space for student support service activity. With more students living on campus, we believe areas such as counseling and health services will see more activity. Both of these departments are strained for space in their current location. Offices that are

currently being used by these departments will be able to be repurposed as additional classrooms or needed office space.

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

   Over the years, NMC has shown a commitment to sustainable design principles in construction of both new buildings and renovation projects. Although this is a relatively small renovation project, we will once again incorporate facility efficiencies wherever appropriate. This project will see the same level of commitment to integrate sustainable design principles to enhance operating efficiency as all of our building and renovation projects have seen.

   An example of how NMC's projects have adhered to sustainable design principals can be found in NMC's self-funded purchase and renovation of a former manufacturing facility in 2010 that has led to LEED certification. The new facility is used to teach our sustainable energy programs, construction trade and other technical programs that relate to the sustainable design fields. Each year the College commits to certain projects that will result in direct energy efficiencies. We have converted exterior and interior lighting to LED efficient lighting and installed occupancy sensors in classrooms, hallways, and restrooms.

   The following sustainability elements are planned for the Student Services Hub:

   - Upgraded lighting
   - Occupancy sensors
   - Energy efficient HVAC upgrades
   - Improved building envelope design around exterior doors
   - Improved roofing and other insulation

6. **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?**

   Yes. The college has reserve funds available to match state dollars for this project as well as resources from private contributions from the NMC Foundation.

   If authorized for construction, the state typically provides a <u>maximum</u> of 75% of the total cost 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?

   No, not at this time. NMC is committed to matching the required 50% for this project.

7. **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.

No, we do not anticipate an increase in operating costs if this project were funded. If anything, the improvements to the building should yield operating efficiencies in electrical and heating costs. Combining multiple departments should help reduce labor redundancies, and therefore the College will be able to save on labor costs in the long term after this project is completed.

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

   There will not be an impact on tuition costs as a result of the project because capital projects are planned for and built into a four-year budget model.

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

   If this project is not authorized it will be a detriment to our current and future students. We would also be left with space that will be vacant- following the move of our library to a new location. Further, if not authorized, the space would not be able to provide a more robust student support services area that will give students the ability to access a multitude of student support services in one location. Once completed, the Student Services Hub will be a more efficient way for students to access these services, which translates to more use and fewer time constraints.

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

    There is no viable alternative to this project. The project allows us to consolidate student support services in one area. This will result in a more holistic approach for our students and a more efficient delivery system for staff. We expect this to result in time savings for students with greater results.

    Any alternative would only allow for us to make limited changes based on space capacity. This does not allow for a unified holistic experience for our students. Additionally, the alternative would not address many of the ADA compliance concerns we have with this dated facility.

    Based on the age of the facility and the need for a unified student support service center we believe that this project will best meet all of the objectives for the Student Learning Support Services Renovation Project.

13. History of prior appropriations received by the institution through the capital outlay process.

Project	Year
Integrated Science & Tech Learning Center	2002
West Bay Great Lakes Campus	2004
Oleson Center Renovation Project	2006
West Hall Innovation Center Project	2018