



# LAKE SUPERIOR STATE UNIVERSITY

## Five-Year (2020-2024) Facility Assessment Plan



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## SECTION I: MISSION STATEMENT

The Mission and Vision Statements for LSSU are provided below.

### **Mission Statement**

We equip our graduates with the knowledge, practical skills and inner strength to craft a life of meaningful employment, personal fulfillment, and generosity of self, all while enhancing the quality of life of the Upper Great Lakes region.

### **Vision Statement**

Our programs grow and evolve in ways that keep our graduates at the cutting edge of technological and societal advances. As such, we will be viewed by our constituents as:

- The preferred regional choice for students who seek a quality education which provides a competitive edge in an evolving job market.
- An institution where relevant concepts are taught by quality faculty, and are paired with practical real-world experience to provide a well-rounded education.
- An institution which capitalizes on its location to instill graduates with an understanding of environmental issues and an overarching desire to be responsible stewards of the environment.
- A University that is highly student centered and empowers all students to realize their highest individual potential.

## SECTION II: INSTRUCTIONAL PROGRAMMING

Lake Superior State University offers the following degree programs. Programs range from professional to liberal studies and include areas such as Fine Arts, Engineering, Political Science, Nursing, Criminal Justice, and a wide range of sciences. A number of pre-professional degrees are also offered.

### ACADEMIC PROGRAMS

#### **Bachelor Degree Programs:**

- Accounting
- Biochemistry Pre-Professional
- Biology
- Business Administration
- Business Administration - Entrepreneurship
- Business Administration - International Business
- Business Administration - Management
- Business Administration - Marketing
- Chemistry
- Communication
- Computer Engineering
- Computer Networking
- Computer Science
- Conservation Biology
- Criminal Justice
- Early Childhood Education
- Electrical Engineering
- Electrical Engineering Technology
- Elementary Education
- Elementary Education: Special Education - Learning Disabilities
- English Language and Literature
- Environmental Health
- Environmental Science
- Finance and Economics
- Fire Science - Generalist
- Fire Science - Generalist Non Certification
- Fish Health
- Fisheries and Wildlife Management
- Forensic Chemistry
- General Studies
- Geology
- History
- Individualized Studies
- Kinesiology
- Language Arts
- Literature
- Literature - Creative Writing
- Manufacturing Engineering Technology
- Mathematics
- Mechanical Engineering
- Medical Laboratory Science
- Nursing
- Parks and Recreation

- Physical Science
- Political Science
- Prelaw (non-degree)
- Pre-Medical
- Pre-Pharmacy (transfer program)
- Pre-Veterinary
- Psychology
- Secondary Education
- Social Science
- Sociology

**Associate Degree Programs:**

- Chemical Technology
- Chemistry
- Computer Science
- Criminal Justice-Corrections
- Criminal Justice-Homeland Security
- Criminal Justice-Law Enforcement
- Early Childhood Education
- Electrical Engineering Technology
- Fire Science
- General Engineering
- General Engineering Technology
- General Studies
- Health/Fitness Specialist
- Health Studies
- Internet/Network Specialist
- Liberal Arts
- Manufacturing Engineering Technology
- Marine Technology
- Natural Resources Technology
- Paramedic Technology
- Small Business Administration
- Social Work
- Substance Abuse Prevention and Treatment
- Technical Accounting

**Certificate Programs:**

- International Studies
- Manufacturing
- MCOLES
- Paramedic Training

**Program Highlights:**

LSSU’s Center for Freshwater Research and Education (CFRE), the most recent project supported by state capital outlay, has been authorized for construction design and plans to open in 2020. The CFRE’s vision is to “Inspire our Community and Sustain our Great Lakes” and its mission is partnering to sustain Great Lakes resources through education, research, and community engagement. The new 18,000 ft<sup>2</sup> facility will continue, and greatly expand, the work of our faculty, staff and students to provide premiere training, education, and research in freshwater science and management, and will create strong national and international partnerships in freshwater research and education. There are state and federal initiatives

supporting demand for training in the scientific and educational fields provided by CFRE. In terms of talent and dollar attraction, retention and commercial spillovers, the State of Michigan has much to gain by growing and marketing Michigan's water research/education centers of excellence.

In addition to the new CFRE facility, LSSU's fish hatchery (formerly Aquatic Research Lab) will undergo renovation in 2019 to provide state-of-the-art facilities for training in fish culture. Natural Resource and Environment programs, such as fisheries and wildlife management, along with education, are strong programs that have great growth potential, particularly when the Center for Freshwater Research and Education (CFRE) is brought on line.

The Environmental Analysis Laboratory (EAL) at LSSU will also be integrated into the new Center for Freshwater Research and Education to expand analysis services to state, federal, and local environmental monitoring programs emphasizing education, research, and community service. US Environmental Protection Agency and MI Department of Environmental Quality approved analytical protocols are followed on all analyses allowing data from the Environmental Analysis Laboratory to be included in appropriate state databases. By providing the community with technical assistance for water quality analysis and monitoring, links are established between graduating seniors and potential employers. The EAL is currently one of a few laboratories nationwide that is capable of testing for algal toxins, an increasing threat to drinking water resources. The EAL is building additional capacity in this area to keep up with existing demands by state agencies for testing.

Other traditional and interdisciplinary environmentally-related programs will also be enhanced with access to the CFRE facility, including new programs in environmental education and existing programs including political science. The natural environs that surround LSSU support our outstanding natural resource programs, including fisheries and wildlife management, parks and recreation, environmental science, and geology. Our students are trained to hit the ground running when they start their careers. For example, the Michigan Department of Natural Resources has reported that their fish production staff includes as many as 75% LSSU graduates.

LSSU is also seeing the growth in business programs as a result of a Capital Outlay project which recently renovated Considine Hall, and which now houses the Lukenda School of Business. Moreover, the Lukenda School of Business recently received accreditation from the Accreditation Council for Business Schools & Programs (ACBSP). The accreditation process has helped the university improve the quality of our already strong and well-received programs, and raised the visibility of our business school.

The Exercise Performance Laboratory at LSSU is a fully functional laboratory offering a wide range of assessment and therapeutic modalities. Working hand in hand with our athletic program (pre and post season testing), hands on opportunities for the student abound. The instructional suite includes a prioritized classroom, observation room, and main laboratory. Features of the lab include a full cadre of assessment technologies from laboratory grade measures (e.g. VO<sub>2</sub>, ECG, blood chemistry profiles) to performance (e.g. force production, movement analytics) to therapeutic modalities (e.g. laser therapy, ultra sound, electro-stimulation) and more.

## **UNIQUE CHARACTERISTICS OF THE UNIVERSITY**

LSSU's board of trustees approved the following mission statement at their November 3<sup>rd</sup>, 2017 meeting.

*We equip our graduates with the knowledge, practical skills and inner strength to craft a life of meaningful employment, personal fulfillment, and generosity of self, all while enhancing the quality of life of the Upper Great Lakes region.*

This mission statement was drawn from 22 different “Listening Sessions” held with all major University constituencies in preparation for the search for the next President. Every session discussed the same questions, five of which relate to strengths, challenges, opportunities and dreams. Student surveys indicated that students are drawn to LSSU for its small campus atmosphere and unique programs. Courses of study at the University range from renowned professional programs, such as engineering, fisheries & wildlife, and fire science, to traditional liberal arts programs.

The University’s location plays an important role in its academic mission. The region’s abundant natural resources, international setting, rich heritage and large Native American population provide ample opportunity for the institution to design and offer academic programs appropriate to its mission.

Successful partnerships with charter schools, community colleges, other Michigan public universities, and other area agencies and institutions have created positive educational and economic impacts. The University continues to reach out to area residents, businesses, governments, social agencies and public and private institutions to develop new and more effective activities and programs. LSSU continues working in earnest to develop additional certificate programs to serve the needs of students, employers, and entrepreneurs throughout the state. Finally, Transfer Guides have been developed with multiple community colleges, including Alpena, Bay, Lansing, North Central, and Northwestern Michigan, in the areas of business, education, engineering, nursing and more.

## **INITIATIVES WHICH MAY IMPACT FACILITIES USAGE**

The Center for Outdoor Recreation and Education (CORE) project is LSSU’s highest priority capital outlay project, and one which is critical to the University’s capacity to move forward in an initiative which is central to our university mission “to enhance the quality of life in the Upper Great Lakes.” The CORE facility is a classroom and activity space focused on outdoor education, recreational management, and management of recreational resources. It is a project which builds effectively on the groundwork laid by previous capital projects including Considine Hall which houses the Lukenda School of Business, and the Center for Freshwater Research and Education which focuses on preserving our greatest natural resource – freshwater. This project is positioned well to leverage the University’s geographic location, leverage existing academic programs, strengthen service to our region, and build programming that aligns with Michigan’s growth initiatives around the Outdoor Recreation Industry. The proposed facility will provide space for experiential learning related to recreational activities and programming in a year-round facility. This proposed facility, and the University’s main campus, are located adjacent to the world’s largest (by surface area) freshwater resource, national and state forests, mineral and geologic resources, a full ensemble of summer and winter activities; including a world-class

fishery. The University has a long tradition represented in the motto “redefining the classroom” and through the CORE project we will extend our field based activities in the natural sciences, engineering, and nursing to build upon the natural strength and beauty of our region and bring the Pure Michigan campaign into the academic “classroom”, training the next generation of outdoor advocates, educators, recreational experts, outdoor business leaders and environmentalists.

The University continues to plan for a future capital outlay project to add an additional 5,500 square feet to the Center for Applied Sciences and Technology (CASET). This expansion would provide much needed space to support growth in the robotics degree program. Currently, the laboratory equipment in CASET includes Fanuc, Staubli, and Kuka robot lines, conveyor systems, vision systems, sensors, and rotary index tables, which use a variety of software and programmable logic controllers (PLCs). This new addition would permit the institution to further expand the current appeal of robotics by incorporating mobile and service robots into its laboratory portfolio. The expanded laboratory facilities would include a water tank suitable for remotely-operated vehicle testing and acoustic testing. The facility is projected to grow enrollments in Engineering by as much as 50%, while simultaneously contributing to the economy and environment of the State of Michigan in three key areas: (1) Robotics & Automation; (2) Automotive vehicle development; and, (3) Great Lakes environment and maritime economy, with a focus on dynamic testing of handling and noise vibration and harshness performance, and modern vehicle dynamic control systems.

The WMH/LSSU Superior Simulation Center is a new innovative instructional and learning environment providing challenging, immersive simulation training for nurses, paramedics, and other health care professionals developed through a partnership with War Memorial Hospital (WMH) and Lake Superior State University. Through the use of the latest medical simulation technologies, the Superior Simulation Center serves to facilitate knowledge acquisition, skill proficiency, and patient care expertise for LSSU students and other learners in the healthcare field. At our Center, human patient simulators (manikins), ranging in age from infant to adult, are used to simulate real-life patient care experiences, including inter-professional medical and emergency situations. Computer programs that regulate the manikin's actions augment the reality of manikin-based simulations, and allow for real-time feedback to learners. Using manikins in clinical simulations allows current and future health care providers the opportunity to engage in patient care in a safe and regulated environment, helping them gain competence and confidence in their clinical patient care skills.

The unified Fire Science, Criminal Justice Program and Paramedic Technology programs have a critical need for program-specific spaces to accommodate their unique laboratory, classroom and office needs. The program offers the high-demand and critical Public Safety and Homeland Security tracks, programs that can educate Michigan’s firefighters, police, correction officers, paramedics, and other first responders. These combined programs have great growth potential. The University has set a goal to build a permanent and dedicated public safety training facility. An appropriate setting would provide a real life experience and allow students to study in a facility that is similar to what they would find on the job as a firefighter, police person and/or paramedic – roles which are often co-mingled in many rural municipalities.

Lake Superior State University has been working to comply with the Americans with Disabilities Act accessibility standards and a resolution signed on December 18, 2013 with the Department of Education, Office of Civil Rights to make accessibility improvements. As a historic campus



with a long list of deferred maintenance projects, this has been a real challenge. We have identified ADA projects in our five-year facilities assessment plan to comply with our resolution agreement.

### **ECONOMIC IMPACT OF CURRENT AND FUTURE PROGRAMS**

It was estimated that each student who attends Lake Superior State University brings \$45,000 worth of economic activity to the region, for a total economic impact of \$113 million per year, according to a 2013 study undertaken by a LSSU professor and a senior finance and economics major. LSSU houses several laboratories and centers which contribute to the economic vitality of the region, both directly and indirectly. Some of these entities are highlighted below:

LSSU's Engineering Program has a history of over 30 years in robotics with both a minor and a concentration within existing engineering degrees, and it is among the top undergraduate programs in the nation. In the fall of 2018, LSSU added a Bachelor of Science degree in Robotics, to expand their program offerings. We are competing with programs much larger than ours, with space that is just barely adequate. The addition is very important for the university to maintain its leadership position among peers. There is an incredible demand for the graduates of robotics and other engineering programs offered at LSSU. LSSU's engineering graduates with the robotics specialization have 100% placement with starting salaries over \$60,000/year. Tremendous growth of about 35% per year in robotics applications in manufacturing is occurring. Further, robotics application in surgery, military, and human service is also rapidly expanding. We need to be ready to supply Michigan the talent it needs to respond to this trend which will be vital to growing our economy.

LSSU has partnered with the Eastern Upper Peninsula Intermediate School District (EUPISD) to launch an Early Middle College for our three-county region this coming year. In addition, a Career and Technical Education millage approved in May 2017 provides the opportunity for the University to partner in providing learning experiences and certificate programs to these area students.

The Arts Center at LSSU is home to an array of exciting live performances by visiting and local artists, as well as speakers addressing social, cultural, and intellectual concerns. It also provides dedicated space for the training of Lake State's performing arts students. By providing quality programming and engaging community outreach, and through the work of highly qualified faculty and staff, the Arts Center serves to fully integrate the performing arts into the liberal education that all LSSU students experience, as well as the lives of the people of the Great Lakes region. Facilities include a 674-seat theatre, black box theatre, music studio space, as well as traditional classroom space. The permanent collection of the Arts Center Gallery includes the L. F. Noyes Collection of Native American and Western Art. The recent move of the WMH/LSSU Superior Simulation Center onto the first floor of the Arts Center has created the need to identify alternative space on campus for the study of and engagement in the visual arts.

## **SECTION III: STAFFING AND ENROLLMENT**

### **CURRENT FULL AND PART-TIME STUDENT ENROLLMENT**

This fall's census day enrollment increased to 2007 students, up about 2% from last year. The first-time student retention rate is also up this year to 72.76%, which is 5.9% above the national average.

This fall, about 17% of our enrollment is part time, 95% of course enrollments are on the home campus, 1% at regional sites, 3% off campus or at other campuses, and about 1% delivered through distance education. Most courses are delivered in a classroom or lab setting; a few are provided through the internet or by tape delay.

### **FIVE-YEAR PROJECTION OF ENROLLMENT PATTERNS**

Similar to many small, rural schools around the country and particularly in Michigan's Upper Peninsula, full-time enrollment at LSSU has been declining over the past decade. For the first time in many years, however, first-time incoming freshman increased, growing 12% from 345 to 387 due to a greater focus on marketing and recruitment efforts this past year. Despite this increase in freshman, total enrollment may still take a few years to sustainably grow, since several previous years of declining freshman levels will still impact total enrollment numbers going forward.

Although demographic, affordability, and competitive trends will likely continue to present headwinds to growth, LSSU's Enrollment Management and Marketing team will seek to build on recent freshman growth by implementing a five-pronged, multi-year enrollment management and marketing strategy to improve across-the-board capabilities. Marketing has changed dramatically in the past five years, largely due to smartphones and inexpensive broadband.

Strategically, there are no "magic bullets" for small schools. LSSU must do a lot of things well on an integrated basis (i.e., not in silos or one-size-fits-all) since marketing is now an on-going, dynamic process that spans across many years and different markets, segments, intermediaries, competitors and media.

Overall, LSSU's Enrollment Management and Marketing team will seek to work smarter through data, analytics, technology, process, and targeting. Due to a slower growing marketplace, improving yield (i.e., productivity) throughout the admissions process will be key to bottom line results, not necessarily greater mass marketing activity.

LSSU's five-pronged enrollment management and marketing strategy is as follows:

1. Building LSSU's brand from the ground up since top-down branding become less effective for regional schools:
  - a. Build the brand through increased programmatic marketing (i.e., magnet programs that can attract good students from anywhere)

- b. Align/invest marketing expenditures to increase digital components versus more expensive traditional print/mail
- 2. Improving yield through increasing and optimizing targeted reach:
  - a. Better know our markets, customers, and competitors in order to drive strategies and tactics
  - b. Implementation of Customer Relationship Management (CRM) system and utilization of data analytics
  - c. Recruiter territory management to optimize our coverage and reach
  - d. Improve out of state recruitment via technologies and third-party platforms
- 3. Implementing financial aid (i.e., pricing) optimization modeling to better impact enrollment and net revenue yield.
- 4. Implementing up-to-date marketing and technology-based capabilities in order to build customization and scalability in all enrollment, marketing and recruitment efforts.
- 5. Engaging the campus, community, and alumni since marketing is not just the responsibility of the Marketing department.

In addition to this multi-year enrollment management and marketing strategy, LSSU will continue to develop new articulation agreements with community colleges and Canadian colleges.

Within its marketing strategy, LSSU will promote its One-Rate tuition program more aggressively out of state. Under the program, out-of-state residents are all charged the same tuition rate. LSSU was the first university in the state to establish a set tuition rate for all North American and global students, making LSSU open and affordable to a much wider range of students.

Historically, as a small regional public university, LSSU's focus has been on serving the needs of its region and traditional four-year, full-time students. The Upper Peninsula, however, will likely continue to experience slower full-time student growth versus the downstate areas of Michigan. Due to this demographic reality, LSSU is interested in growing its non-traditional, returning adult student population. The University will also continue to investigate various online/distance learning technologies for their appropriateness and cost efficiency.

Many adults in the Upper Peninsula have some college credits but have never obtained a degree. About 40 percent of all college students are older than 25, according to U.S. Education Department data. LSSU's non-traditional population is currently significantly less than that, meaning our program delivery is currently not meeting the needs of the non-traditional student. We are working to change that by working on models and methods of delivery that will make obtaining a degree feasible at any age and for most situations.

Overall, the University is committed to strategically growing enrollment both on the home campus, in the regional centers, and online, for traditional and non-traditional students. As such, the University will also continue to investigate other non-degree (i.e., certificate) opportunities.

### **PAST FIVE YEAR ENROLLMENT HISTORY EVALUATION**

As Michigan's economy has continued to struggle over the past few years, so has LSSU's enrollment. Additionally, due to its small size and lack of economies of scale and student demographics, LSSU has been disproportionately impacted in an adverse manner by the lower

than historical funding from State appropriations and by the State not fully funding the Michigan Indian Tuition Waiver.

LSSU does not actively recruit a large segment of graduating seniors (Native Americans) in its prime recruitment area because it is not feasible for the University to accept a disproportionately large number of students that do not pay tuition.

Over the past five years, the schools with the large declines in enrollment are as follows: Business, Social Sciences, Nursing, and Kinesiology. Schools that have grown or have only had relatively small declines are as follows: Education, Math & Computer Science, Biological Sciences, Physical Sciences, and Engineering & Technology.

### **STUDENT:FACULTY AND STUDENT:ADMINISTRATOR RATIOS**

The University's current student/full-time faculty ratio is 17 to 1. Maintaining a low student to faculty ratio is considered a major strength of the University, emphasizing as it currently does undergraduate education. Additionally, our students are in classes with qualified faculty, not graduate or teaching assistants. The student/administrative ratio is 22 to 1.

### **FUTURE STAFFING NEEDS**

Decisions about future staffing will be driven by academic programs demonstrating sustained enrollment growth and by providing, or enhancing, services that directly benefit students. A number of staffing cuts were made last year and many vacant positions were not filled due to decreasing tuition revenue. The University is currently reviewing its staffing levels across campus as well as revenue enhancing areas.

### **AVERAGE CLASS SIZE**

Consistent with its mission emphasizing undergraduate education, for fall 2017, more than 80% of the main campus course lecture sections enrolled fewer than 30 students and 205 laboratory classes had fewer than 20 students per class. There are no planned programming changes that would suggest that this would not remain fairly stable for the foreseeable future.

## SECTION IV: FACILITY ASSESSMENT

### SUMMARY DESCRIPTION OF FACILITIES

A comprehensive building-by-building Facility Assessment Report addressing information requested by the State of Michigan is included as an appendix to this document. This assessment report is regularly updated. This plan identifies the needed repairs and improvements for the next five-years, reflecting the deferred maintenance associated with a campus that includes many aging, historical buildings.

Most of the information requested can be found in the body of the Facility Assessment section by building. Specifically included in the individual building reports is information related to:

- Applicable Mandatory Facility Standards
- Functional and Space Allocation
- Replacement Value
- Utility Systems Condition
- Facility Infrastructure Condition

The remaining information is summarized in several tables provided below and in the Appendix.

### UTILIZATION RATES

Utilization of academic space is reviewed each semester to ensure existing spaces are fully utilized. This data also provides important information needed for assessing future campus space requirements. The chart below summarizes this fall’s utilization rates in lecture rooms, laboratories, and other building academic spaces. Rates are looked at for 45 hour weeks (M-F, 8am-5pm) and 65 hour weeks (M-F, 8am-9pm).

<b>University Space Utilization</b>						
<b>Building</b>	Average % Use Lecture Room 45 hr Week	Average % Use Lecture Room 65 hr Week	Average % Use Labs 45 hr Week	Average % Use Labs 65 hr Week	Average % Use Total Building 45 hr Week	Average % Use Total Building 65 hr Week
Arts Center	38%	38%	16%	11%	23%	20%
Center of Applied Science and Engineering Technology	47%	36%	17%	15%	28%	23%
Considine Hall	43%	37%	44%	43%	43%	38%
Crawford Hall of Science	52%	40%	24%	21%	32%	27%
KJS Library	51%	40%	38%	33%	43%	36%
Norris Center	38%	32%	17%	14%	21%	17%
Campus Wide	45%	37%	26%	23%	32%	27%

## INFRASTRUCTURE CONDITION AND ADEQUACY

The University plans and budgets to address repairs and replacements and prioritizes the deferred maintenance of its aging buildings and infrastructure to the fullest extent possible but will never expect to be able to fully catch up with the backlog of deferred maintenance without assistance.

Research studies indicate that every \$1 of deferred maintenance results in \$4 of capital renewal costs in the future. We prioritize based on safety and student needs. We also consider the severity of a maintenance issue, meaning it will cost more to fix later if we don't fix it now or there is an imminent threat of failure. Recently we have re-prioritized in order to comply with ADA standards that are required by law. Deferred maintenance costs in Michigan's schools and universities is a big challenge, but particularly challenging to the smallest Michigan university with many beautiful, but aging, historic structures.

While there are still many needs to attain very good condition of all buildings and infrastructure, we are proud of how the campus looks. The campus grounds are a point of pride for the University and the City of Sault Ste. Marie and serves to attract students to our campus as well as many visitors. Additionally, attention has been given to underlying infrastructure that you can't see but is important to long-term sustainability and safety, such as the repair of underground utilities, electrical switch gears, and elevator retrofitting. Most of the planning is done in-house but the University secures professional assistance for architectural, engineering, landscaping and other facility planning and analysis as necessary. More attention has been given to equipment, technology, and classroom furnishings in recent years as well. The University's Strategic Plan serves as a guide in prioritizing projects. Some of the most recent projects and improvements are highlighted below.

- Nursing Simulation Center
- WMH Education Center
- Brady ADA Ramp
- Brady poly coat deck cover including stairs
- CASET 302 and 206 carpet installation
- Superior Room Renovation
- Cisler Galley grill upgrades
- Considine display case
- East Hall porch painting project
- Easterday House carpet installation
- Library 258 study space renovation
- Library 301 thru 307 and 314 thru 318 paint and carpet installation
- Library 131 thru 142 painting project
- Norris Alumni Hall of Fame Plaque enlargement
- Golf Simulator wall painting
- Norris Rink north hall painting project
- Norris rink locker room hot water shower project
- Osborn stair well tread and painting project
- Presidents House kitchen remodel
- Presidents House split unit AC system
- Presidents House painting project

- Student Activity Center curtain repair project
- Village lounge kitchen project
- Village C3 spit unit AC project
- Village C3 painting and carpet project
- Town House phase one kitchen, and bath flooring and cabinet renovation
- ISD flooring grant project
- Campus landscape bed renovation project
- CASET new roof
- Town House heat/domestic hot water repair
- Planetarium safety rail installation
- Fire extinguisher compliance replacement upgrade
- Cisler fryer hood upgrades

### **LAND OWNED BY THE UNIVERSITY**

The 115-acre campus of Lake Superior State University is situated on the site of the former U.S. Army's Fort Brady which overlooks Sault Ste. Marie, Michigan and Sault Ste. Marie, Ontario, the St. Marys River, and the Soo Locks; the busiest locks in the world. Fourteen of LSSU's buildings are listed on various historic registers creating a unique campus environment. The University also owns a few donated parcels, a couple of which are used for laboratory/research, and the rest it holds for resale.

### **OBLIGATIONS TO THE STATE BUILDING AUTHORITY**

The State holds title to Lake Superior State University's Arts Center until December 31, 2039 (a 30 year lease). The State holds title to Lake Superior State University's Considine Hall until September 1, 2052 (a 35 year lease).

## **SECTION V: IMPLEMENTATION PLAN**

### **PRIORITIZATION OF CAPITAL PROJECTS REQUESTED FROM THE STATE**

Number 1 for 2018: Center for Outdoor Recreation and Education (CORE).

Number 2 for 2024: Engineering and Robotics facility addition remains a priority.

### **DEFERRED MAINTENANCE**

LSSU recently engaged Johnson Controls (JCI) in an 18 month, \$23.6M, performance contract to address infrastructure upgrades, safety and security upgrades, and energy reduction initiatives. Nearly all of the initiatives will address aspects of the deferred maintenance on campus. The project began late in the summer of 2018 and is scheduled to be completed in early 2020. The project was designed to be self-funding, with savings generated from the energy reduction initiatives being used for debt service payment on bonds issued to finance the projects.

Current deferred maintenance backlog for general fund facilities is currently estimated at about \$7M. The Vice President for Finance and Operations works with the Director of Facilities Management to determine what projects will be undertaken in any given fiscal year. Input from the campus is gathered via the Shared Governance process.

### **STATUS OF ON-GOING STATE PROJECTS**

Governor Snyder enacted Public Act 268 of 2016, a Fiscal Year 2016 appropriations act that authorized planning for Lake Superior State University's Center for Freshwater Research and Education (CFRE) project July 13, 2016. The CFRE project was granted authorization for construction in Public Act 207 of 2018. LSSU is working with an A&E firm and other external partners in development of plans for the facility. Fundraising has begun and about 70% of the necessary matching funds have been receipted or pledged.

### **RATE OF RETURN ANTICIPATED ON PLANNED EXPENDITURES**

#### ***Center for Freshwater Research and Education:***

The CFRE project will allow LSSU to begin significant research activity in the Great Lakes region and attract new students to LSSU. About 40% of all Michigan Department of Natural Resources (MDNR) fisheries biologists and 75% of fish production staff are LSSU graduates; therefore expansion of the program will have significant impact on the MDNR. Additionally, LSSU provides the majority of all Atlantic Salmon in the Great Lakes (a multi-million dollar industry for Michigan).

#### ***Center for Outdoor Recreation and Education:***

LSSU proposed Center for Outdoor Recreation and Education (CORE) project will help the University fulfill its mission to serve the public good, providing one of the largest single indoor spaces in Michigan's Upper Peninsula or Northern Lower Peninsula region. This space will be



central to our expanded focus on recreational activities including space for wellness activities (i.e. walking, running, etc.) Such community focused activities, operated as educational practicum and training experiences for our students, will serve a dual purpose. The proposed facility would be among the most cost-efficient structures on the University campus on a square-foot basis.

The project is uniquely positioned to strengthen LSSU's role in preparation of talented individuals to support the Outdoor Recreation Industry. The outdoor recreation economy generates 232,000 direct jobs, and \$26.6 Billion in consumer spending. Wages and salaries in of \$7.5 Billion contribute to \$2.1 Billion in state and local tax revenue (source: outdoorindustry.org). LSSU's CORE project will prepare students to make significant and positive contributions to this arena will have a major impact on our local community, region and state.



The Center for Outdoor Recreation and Education will serve two key functions. It will serve as the academic training ground for outdoor recreation professionals (recreational therapists, outdoor industry managers, small business operators, coaches and trainers) preparing them to make meaningful contributions to the state through job creation and economic growth. Michigan's Hot 50: Tomorrow's High-demand and High-wage Careers (source: Pathfinder.mitalent.org) identified over 2000 jobs for general and operations managers, and projected a percentage of job growth from 2014-2024 of 9.4%. These individuals will support job creation and academic growth as they plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources related to the outdoor recreation industry. Secondary benefits will be realized by the State as the Center supports and expands the engagement of individuals in outdoor activities.

Key to the success of the CORE will be the symbiotic relationship between the academic programs and the growth of the State outdoor recreation industry. For example, students in the Parks and Recreation degree program will apply academic content learned in their adventure planning curriculum to plan skills training events for paddle sports like kayaking, canoeing, and stand-up paddle boarding, events which Michiganders participate in at rates higher than the national average (source: outdoorindustry.com). Students in the Kinesiology program will learn about movement and fitness in their courses, and apply that knowledge as they work with senior adults in a weekly activity classes held in the CORE dome.

The Outdoor Industry Association estimates that 63% of Michiganders participate in outdoor recreation each year in activities that contribute to a high quality of life and which "attracts and sustains employers and families. Investing in outdoor infrastructure attracts employers and active workforces, ensuring those communities thrive economically and socially" (source: outdoorindustry.com). Pure Michigan's Talent Connect website list hundreds of jobs with the

search term ‘recreation’, including recreational aides, golf assistant recreation supervisor, therapeutic recreation specialists, fitness coordinators, facility managers, and employment at companies and industries that support Michigan’s recreation industry. Michigan’s Department of Technology, Management and Budget Labor Market Information has multiple entries related to recreation-related occupations, including recreation and fitness studies teachers, recreational therapists, recreational protective services, recreation workers. Long-term growth potential for recreational workers is estimated at 9% in Michigan. Nationally, the OIA estimates \$877 Billion in consumer spending and \$59.2 Billion in state and local tax revenue.

### **ALTERNATIVES TO NEW INFRASTRUCTURE**

The University has examined existing resources that could house the CORE project. The unique scope of the project requires a dedicated facility.

### **MAINTENANCE SCHEDULE FOR MAJOR ITEMS**

As previously mentioned, LSSU has begun a \$23.6M performance contract with Johnson Controls (JCI). The project will address:

- Upgrades to lighting
- Upgrades to HVAC systems
- Installation of new security and safety systems
- A new roof
- Installation of water saving devices
- Door and window replacement/upgrades
- Replacement of numerous pump, heaters, and other mechanical equipment
- Installation of CCTV system

The University has budgeted \$300,000 in our minor construction line item and \$400,000 in a Plant Fund for general non-routine maintenance. Additionally, the housing and food service auxiliaries will contribute approximately \$500,000 to a reserve and replacement fund.

### **CURRENT BUDGETED FOR NON-ROUTINE MAINTENANCE**

A Capital Outlay project, the CFRE program, has been authorized by the State for Design. After design work is complete and approved for construction, this project would result in \$13,200,000 of new research and instruction space for LSSU.

A grant for \$150,000 was secured for renovation of the University’s largest conference space and funding has been set aside to remove and replace underground storage tanks which are over 50 years old.

# **Appendix**

## **Five-Year Facility Assessment**

**2020 - 2024**