LAKE SUPERIOR STATE UNIVERSITY

Information Technology Report
July 18, 2025

Agenda Item #1: Information Technology Update

☒ Information   ☐ Action   ☐ Discussion

Purpose:

To introduce the Board of Trustees to the role, scope, and current structure of the Information Technology department. This is IT's first formal report to the Board following the elevation of the Chief Information Officer (CIO) to Cabinet-level leadership.

Background:

The Information Technology department supports the university's academic mission and daily operations by managing core systems, infrastructure, and technology services. In March 2025, the CIO position formally became part of the President's Cabinet (referred to as *Senior Management Team* at LSSU). This change reflects a university wide shift to align IT as a strategic partner aligned with institutional goals.

The department's core functions include:

- Enterprise Systems (e.g., Banner, Moodle, Microsoft 365, VoIP)
- Network Infrastructure & Security
- Instructional and Classroom Technology
- User Support Services (Helpdesk, endpoint support)
- Institutional Research
- University Website Oversight

IT currently supports thousands of university owned devices and accounts across campus. With Institutional Research and Web Services now housed within IT, the division is positioned to offer integrated support for data-informed decision-making, digital communication, and strategic planning.

As part of ongoing collaboration across the state, LSSU hosted the MASU-CIO (Michigan Association of State Universities) meeting on June 19, 2025. The meeting welcomed nine CIOs in person—from Oakland University, U-M Dearborn, U-M Flint, Northern Michigan University, Central Michigan University, Michigan Technological University, Michigan State University, Eastern Michigan University, and Wayne State University—and three others virtually, including representatives from Ferris State University, Grand Valley State University, and MASU's

leadership. The discussion focused on shared challenges, digital transformation, and statewide higher education IT strategy.

The following day, on June 20, 2025, LSSU hosted the Merit Board of Directors meeting, welcoming 25 attendees to campus. All 15 public universities were represented, along with Merit's full leadership team. This quarterly in-person event rotates among member institutions, and this was the first time LSSU has hosted. Following the MASU meeting on June 19, a joint campus tour was held for both the MASU attendees and Merit leadership. Special thanks to Susan Fitzpatrick, Dr. Ashley Moerke, and Dr. David Travis for their time and engagement with these guests. Attendees were highly complementary of LSSU's campus, especially the CFRE facility, and expressed appreciation for the hospitality and professionalism shown during their visit.

This increased visibility and engagement with peer institutions reinforces LSSU's growing leadership role in statewide IT collaboration and further elevates the university's profile among its public counterparts.

Suggested Action/Motion:

N/A

President's Recommendation:

N/A

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Agenda Item #2: **Information Technology Security**

☒ Information   ☐ Action   ☐ Discussion

Purpose:
To update the Board of Trustees on recent cybersecurity initiatives aimed at reducing institutional risk, improving compliance, and preparing for future threat response capabilities.

Background:
Information Technology has made cybersecurity a top priority as threats across higher education continue to increase. Over the past several months, the department has focused on strengthening foundational controls, increasing risk visibility, and positioning the university to detect and respond to threats more effectively.

Key actions taken include:

- **Michigan State Police Cyber Command Assessment:**
  In collaboration with the Michigan State Police Cyber Command, IT conducted a comprehensive review of LSSU's cybersecurity posture in December of 2024. This external evaluation identified areas of strength and opportunities for improvement. The results are being used to prioritize next steps in our cybersecurity roadmap.
- **Integration with Merit Security Operations Center (SOC):**
  Pending Board approval, LSSU plans to onboard with the Merit SOC in October 2025. Merit will provide 24/7 real-time monitoring, alerting, and incident response services. This integration will significantly enhance the university's ability to detect and respond to cybersecurity threats in a timely and coordinated manner.
- **Threat Blocking and Visibility:**
  The University continues to actively defend against automated attacks and malicious traffic from foreign actors. In response to recent threats against the United States indicating a likely cyberattack, LSSU implemented specific geographic blocks including traffic from Iran as a proactive security measure. Over the past seven days, our systems have blocked approximately 334,000 attempted hits originating from Iran, Russia, and Lithuania, with the current rate averaging around 45,000 hits per day. Since implementing these advanced filtering rules, we have successfully blocked over 8.6 billion attempted connections, representing a substantial reduction in exposure to external threats.

- **Foundational Policy Development:**
  Several updated IT policies were implemented to improve security practices, including:
    - **Multi-Factor Authentication (MFA)** enforcement across VPN and core systems
    - **Third-party access controls**
    - **Endpoint device management** for university-owned equipment
- **Response Time Improvement:**
  The implementation of new tools and monitoring protocols has significantly reduced response time for identifying and addressing potential issues from days to minutes in many cases.

Next Steps:

- Expand MFA coverage to all university systems and user types
- Launch targeted cybersecurity awareness training for faculty, staff, and student workers
- Continue building out a structured cybersecurity roadmap, aligned with Cyber Command recommendations and industry best practices

These efforts are critical to safeguarding institutional data, ensuring operational continuity, and supporting a secure digital environment for the LSSU community.

Suggested Action/Motion:

N/A

President's Recommendation:

N/A

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Agenda Item #3: Website Improvements

☒ Information   ☐ Action   ☐ Discussion

Purpose:
To provide an update on recent improvements to the LSSU website, including backend security updates, front-end performance enhancements, and improved user experience. These changes support recruitment, accessibility, and operational goals across the university.

Background:
As of February 2025, the university website transitioned to Information Technology for oversight. Since mid-March, a series of significant updates have been implemented to improve website performance, security, and usability. These updates were essential to reduce risk, enhance site visibility, and better serve prospective students, families, and campus stakeholders.

Back-End Upgrades:

- Created dedicated Staging/Development environment for testing and stability.
- Removed 25+ outdated plugins/themes; current count is zero outdated components.
- Upgraded from PHP 7.4 to PHP 8.0, addressing a critical security risk tied to using unsupported software.
- Brought WordPress up to date, from version 6.7 to 6.8.1, ensuring access to recent security patches and features.

Front-End Enhancements:

- Developed a custom image optimization tool, reducing image sizes by up to 60%, significantly improving load speed and performance.
- Adjusted header layout and began streamlining subpage banners to optimize "above the fold" visibility for high-value content.
- Rolled out hundreds of SEO improvements including better meta tags, header structures, alt text, and link accessibility, increasing visibility on platforms like Google.
- Applied broad User Interface and User Experience improvements to enhance user experience and content accessibility.
- Implemented new web monitoring software, checking the site every 5 minutes for uptime and errors—dramatically improving response time on issues.

Looking Ahead:

- A new site-wide search tool will be launched this summer to deliver more accurate and relevant search results.
- Continued efforts will focus on accessibility compliance, deeper SEO (Search Engine Optimization) integration, and alignment with strategic marketing goals.

These improvements position the website as a more responsive, secure, and student-focused tool, supporting LSSU's digital engagement and recruitment efforts.

Suggested Action/Motion:

N/A

President's Recommendation:

N/A

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Agenda Item #4: Merit Security Operations Center (SOC) Agreement

☐ Information   ☒ Action   ☐ Discussion

Purpose:

The purpose of this item is to secure Board approval of a three-year agreement with Merit's Security Operations Center (SOC), which will significantly enhance the university's ability to monitor, detect, and respond to cybersecurity threats in a timely and coordinated manner. This agreement also supports the university's compliance with evolving federal cybersecurity regulations, including requirements tied to Title IV financial aid eligibility.

Background:

Under the proposed agreement, Merit will provide Lake Superior State University with enterprise-level cybersecurity services through its Security Operations Center (SOC). As outlined in the agreement, Merit SOC will:

"Provide 24x7x365 operational monitoring, threat detection, security alerting, incident response support, and access to statewide higher education threat intelligence to improve visibility and resilience across the institution's digital infrastructure."

This includes real-time monitoring of network activity, centralized intrusion detection, expert analysis, and rapid incident response coordination all of which are essential components of a modern cybersecurity framework.

The annual cost for participation is $100,000, totaling $300,000 over the three-year term. This represents a cost-effective approach to achieving a high level of protection and regulatory compliance without the need to build and staff a fully independent internal SOC.

Participation in a formal SOC also aligns with new and emerging federal cybersecurity compliance mandates, including:

- The FTC's updated Gramm–Leach–Bliley Act (GLBA) Safeguards Rule, which requires institutions receiving Title IV financial aid to maintain continuous threat monitoring, incident response plans, and data protection protocols.
- The White House Office of Science and Technology Policy's Research Security Program guidance, which requires enhanced cybersecurity monitoring for institutions receiving

substantial federal research funding. These guidelines reference NIST SP 800-172, which recommends maintaining a formal Security Operations Center as a best practice.

This agreement will position LSSU to meet these mandates, improve institutional cyber resilience, and maintain eligibility for critical federal funding.

Year one of the agreement will be funded using proceeds from the sale of surplus IP addresses originally allocated to LSSU by Merit. Merit facilitates the sale and retains a portion of the proceeds in reserve for the university's future infrastructure needs. These available credits will be applied to offset the first year's cost, minimizing immediate budget impact and allowing LSSU to begin participation without drawing from new general fund resources.

Suggested Action/Motion:

The President recommends approval of the three year Merit SOC agreement as presented. Furthermore, the President recommends the Board authorize the President and/or CIO execute any and all documents related to this Agenda item.

President's Recommendation:

As presented.