Legislative Council
600 East Boulevard Avenue, Bismarck, ND 58505

INFORMATION TECHNOLOGY COMMITTEE

Wednesday, August 23, 2023
Harvest Room, State Capitol
Bismarck, North Dakota

Representative Glenn Bosch, Chairman, called the meeting to order at 9:30 a.m.

Members present: Representatives Glenn Bosch, Josh Christy, Corey Mock, Jonathan Warrey, Robin Weisz; Senators Keith Boehm, Randy A. Burckhard, Kyle Davison, Jonathan Sickler; Citizen Member Kuldip Mohanty

Members absent: Representative Nathan Toman; Senator Greg Kessel

Others present: See Appendix A

BACKGROUND INFORMATION

Mr. Levi Kinnischtzke, Senior Fiscal Analyst, Legislative Council, presented a memorandum entitled *Supplementary Rules of Operation and Procedure of the North Dakota Legislative Management*.

Mr. Kinnischtzke presented a memorandum entitled *Information Technology Committee - Background Memorandum*. He reviewed responsibilities of the committee, committee recommendations from previous interims, related legislation from the 2023 legislative session, Information Technology Department (ITD) budgeting information, and background information regarding information technology (IT) unification and health IT initiatives.

Mr. Kinnischtzke presented a memorandum entitled *Information Technology-Related Statutory Provisions*. He reviewed statutory changes made by the 2023 Legislative Assembly related to the Information Technology Committee and ITD.

REPORT FROM THE CHIEF INFORMATION OFFICER

Mr. Kuldip Mohanty, Chief Information Officer, Information Technology Department, presented information (Appendix B) regarding his vision and plans for ITD and state government IT and an overview of ITD's divisions and services. He noted:

- ITD will prioritize strengthening operations, improving customer experiences, optimizing financial and process disciplines, and promoting a people-first culture; and
- ITD will be working on application inventory, quality assurance and testing, technology business partner engagement, remediation of vulnerabilities, capacity planning, IT strategic planning, data governance, artificial intelligence (AI), cybersecurity maturity assessments, cloud strategy, and financial transparency.

Mr. Greg Hoffman, Deputy Chief Information Officer, Information Technology Department, presented information (Appendix C) regarding ITD's budget for the 2023-25 biennium. He noted of the $556.3 million appropriation provided to ITD for the 2023-25 biennium; $214.2 million is for services provided to state agencies and political subdivisions; $100 million is for the statewide interoperable radio network (SIRN) project; $44.6 million is for various IT projects; $147.8 million is for the federal broadband, equity, access, and deployment (BEAD) grant program; and the remaining $49.7 million is for other programs, including cybersecurity, EduTech, the statewide longitudinal data system, K-12 network, geographical information system, health information network, and public safety programs.

Mr. Craig Felchle, Chief Technology Officer, Information Technology Department, presented information (Appendix D) regarding funding spent and expected to be spent from the federal Coronavirus Capital Projects Fund for broadband infrastructure grants and funding spent and expected to be spent from federal funds derived from the Infrastructure Investment and Jobs Act (IIJA) for the BEAD grant program. He noted:

- Of the $45 million appropriated from the Coronavirus Capital Projects Fund to ITD for broadband infrastructure grants, ITD anticipates spending approximately $38 million, of which $37.25 million is for grants to 11 telecommunication companies to provide broadband services to 2,111 locations in the state and approximately $750,000 is for ITD expenses to administer the grants;
- The remaining $7 million of funding from the Coronavirus Capital Projects Fund will be transferred by the Office of Management and Budget from ITD to the Department of Career and Technical Education for career academy inflationary costs during the 2023-25 biennium, pursuant to Section 10 of House Bill No. 1021;
- The Legislative Assembly appropriated $147.8 million of federal funds authority to ITD for the BEAD grant program for the 2023-25 biennium and as of August 2023, the federal government has awarded $130.2 million to ITD for the program;
- 3 percent of North Dakota households, or approximately 10,000 service locations, do not have access to reliable, high-speed broadband internet service and the BEAD funding made available through IIJA may allow North Dakota to become the first state to reach 100 percent broadband coverage statewide; and
- ITD is developing the BEAD 5-year action plan and digital equity plan and anticipates submitting an initial project proposal to the federal government in January 2024.

Mr. Justin Data, Director, Project Management Office, Information Technology Department, presented information (Appendix E) regarding IT initiatives for the 2023-25 biennium. He reviewed major IT projects and noted ITD is:

- Discussing how to prioritize major IT projects at the end of the interim due to the repeal of the State Information Technology Advisory Committee; and
- Considering two prioritization methodologies, including a methodology that evaluates a project's potential return on investment and impact on state government and the public, and a methodology that focuses on strategic alignment, citizen experience, the run-grow-transform model, infrastructure modernization, and system or process rationalization.

INFORMATION TECHNOLOGY SECURITY AUDIT

Mr. Joshua C. Gallion, State Auditor, presented information regarding the information security audit of ITD and the North Dakota University System. He noted the State Auditor's office contracted with a third-party vendor, Secure Yeti, to conduct the audit.

In response to a question from a committee member, Mr. Gallion noted the State Auditor's office has not received an appropriation for an information security audit of K-12 schools on the state network.

Mr. Casey Bourbonnais, Lead Technical Tester, Secure Yeti, presented information (Appendix F) regarding the information security audit of ITD and the University System. He noted:

- ITD, the University System's Core Technology Services, and the 11 higher education institutions were included in the audit;
- Physical locations tested during the audit included the ITD building, State Capitol, University of North Dakota, Williston State College, Minot State University, Lake Region State College, and Dakota College at Bottineau;
- The audit revealed 130 vulnerabilities throughout ITD and the University System, of which 1 is considered critical risk, 36 are high risk, 54 are medium risk, and 39 are low risk;
- The key findings of the audit include an insufficient number of University System analysts to effectively monitor the network (critical risk), an insecure ITD firewall configuration (high risk), excessive permissions for ITD and University System workstation users (high risk), digital verification of network traffic was not always enforced by ITD and the University System (high risk), and having insecure University System legacy protocols;
- The 2021 information security audit revealed 128 vulnerabilities, of which 5 were considered critical risk, 57 were high risk, 33 were medium risk, and 33 were low risk; and
- Positive results of the 2023 audit include an improvement in the number of critical and high risks compared to the 2021 audit, establishing the vulnerability management program, reducing the number of externally exposed assets, and transitioning to a zero-trust network model since the 2021 audit.

Mr. Michael Gregg, Chief Information Security Officer, Information Technology Department, presented information regarding the information security audit of ITD. He noted improvements made since the 2021 audit are mostly due to increased use of automation, which has reduced the number of help desk tickets and improved help desk service request response times.

Mr. Darin King, Vice Chancellor for IT/Chief Information Officer, North Dakota University System, presented information regarding the information security audit of the University System. He noted the University System agrees with the findings of the audit and that funding provided by the 2023 Legislative Assembly will help address some risks identified in the audit.

MAJOR INFORMATION TECHNOLOGY PROJECT REPORTING

Mr. Kinnischtzke presented a memorandum entitled *Major Information Technology Project Life Cycle*, which provides a summary of the project management life cycle process, executive and legislative branch activities, and statutory provisions related to planning and executing major IT projects. He reviewed major changes to the project management life cycle process, including how the process has changed as a result of the repeal of the State Information Technology Advisory Committee during the 2023 legislative session.

Mr. Data presented information (Appendix G) regarding major IT project reporting, including the most recent quarterly summary status report (Appendix H), and project startup and closeout reports completed since September 2022 (Appendix I). He also reviewed the major IT project active project dashboard.

EDUCATION-RELATED INFORMATION TECHNOLOGY UPDATES

Mr. King presented information (Appendix J) regarding the most recent quarterly status report on major IT projects (Appendix K), startup and closeout reports completed since September 2022 (Appendix L), and higher education IT initiatives and projects for the 2023-25 biennium. He noted:

- TargetX, the project to implement a new online admission application and customer relationship management system, experienced project planning and documentation concerns in January 2023; and
- As of August 2023, all higher education major IT projects are on schedule and within budget.

Mr. Corey Quirk, Deputy Chief Information Officer, North Dakota University System, presented information (Appendix M) regarding the University System's enterprise resource planning (ERP) and market analysis initiative. He noted:

- During the fall of 2023, the University System intends to initiate an ERP and market analysis to identify a product to replace the current ERP software to better meet the financial, human resources, and student information system needs of the 11 higher education institutions;
- The University System has informed major stakeholders, is waiting on feedback from higher institution presidents, will be compiling recommendations from each institution, and between September 2023 and April 2024 intends to conduct a market analysis of other states and universities that have reviewed, implemented, or deployed new ERP systems within the last 10 years; and
- The University System anticipates requesting funding from the 2025 Legislative Assembly for the project, which has been named the ERP360 project.

STUDY OF INTEROPERABLE PUBLIC SAFETY COMMUNICATIONS SYSTEM GOVERNANCE

Mr. Kinnischtzke presented a memorandum entitled *Study of Interoperable Public Safety Communications System Governance - Background Memorandum*. He reviewed history of the SIRN project and governance and the responsibilities of ITD, the Department of Emergency Services (DES) Division of State Radio, Statewide Interoperability Executive Committee (SIEC), Emergency Services Communications Coordinating Committee (ESC3), and public safety answering points (PSAPs).

Mr. Felchle presented information (Appendix N) regarding SIRN governance, an overview of the SIRN trunk systems, memorandums of understanding with local entities, participation in SIRN, the status of the SIRN project, including plans for the use of funding appropriated for the project for the 2023-25 biennium, the status of radios purchased by local entities utilizing the state's cost-share program, and future concerns and needs of interoperable public safety communication system governance in the state. He noted:

- The SIRN project is governed by the 20-member SIEC, a 12-member SIEC subcommittee, and four regional boards;

- The SIEC is considering entering a memorandum of understanding with the Northern Plains Uncrewed Aircraft Systems Test Site to collaborate the SIRN project with the beyond visual line of sight uncrewed aircraft systems program, also known as Vantis, to increase reliability and coverage between flight crewmembers to ensure the safe operation of uncrewed flight operations;
- As of August 2023, ITD has reimbursed local public safety entities $9.7 million for 6,520 radios that are compatible with SIRN and has completed and integrated 46 of the 140 SIRN towers;
- ITD anticipates $33.3 million of 911 fee funding to be available through fiscal year 2026 and that ongoing operational expenditures of SIRN will total approximately $29.5 million, of which $5.9 million relates to connectivity costs, $11.8 million relates to tower maintenance, $4.5 million relates to labor costs, and $7.3 million relates to vendor maintenance;
- The SIRN project is projected to be complete in 2026; and
- Future needs of interoperable public safety communication system governance includes continued partnership between ITD, the Department of Transportation, Department of Emergency Services, and Highway Patrol to minimize contract duplication, reduce financial burden between agencies, and ensure active engagement and support with all stakeholders.

STUDY OF ARTIFICIAL INTELLIGENCE

Mr. Kinnischtzke presented a memorandum entitled *Study of Artificial Intelligence - Background Memorandum*. He reviewed information related to the committee's study of AI and the types of AI.

Mr. Ravi Krishnan, Chief Data Officer, Information Technology Department, presented information (Appendix O) regarding AI benefits and threats, including AI used by North Dakota state government agencies, future AI usage plans, and the effect of AI on cybersecurity of North Dakota state and local government. He noted ITD:

- Formed an AI team to bring together specialists in data science and robotic process automation; and
- Is developing AI policies and guidelines to address future AI needs of state agencies and developing data and cybersecurity policies and guidelines to address how the state can use AI while protecting against any potential AI misuse.

Mr. Gregg presented information (Appendix P) regarding the uses and concerns of AI in cybersecurity operations. He noted:

- AI is being used in ITD cybersecurity operations to respond to phishing incidents, build confidence for automatically closing or forwarding alerts to analysts, finding duplicate phishing emails, and allowing staff to focus time and resources on more important tasks;
- Dangers of AI for cybersecurity operations include increases in automated attacks, adaptive malware, intelligence botnets, and vulnerabilities in AI-generated code; and
- AI risk mitigation efforts include training staff for AI-enabled attacks and ensuring AI risks are considered as part of a defense strategy to prevent, detect, and respond to cybersecurity threats.

Ms. Terry Effertz, Executive Director, TechND, presented information (Appendix Q) regarding AI and the state of technology in North Dakota.

No further business appearing, Chairman Bosch adjourned the meeting at 3:19 p.m.

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Levi Kinnischtzke
Senior Fiscal Analyst

ATTACH:17