INFORMATION TECHNOLOGY COMMITTEE

North Dakota Century Code Section 54-35-15.1 requires the Legislative Management during each biennium to appoint an Information Technology Committee in the same manner as the Legislative Management appoints other interim committees. The committee is to consist of six members of the House of Representatives and five members of the Senate. The Chief Information Officer of the state serves as an ex officio nonvoting member of the committee.

Pursuant to Section 54-35-15.2 the committee's responsibilities include:

1. Meet at least once each calendar quarter.
2. Receive reports from the Chief Information Officer.
3. Review the activities of the Information Technology Department (ITD).
4. Receive and review information related to information technology (IT) projects with a total cost of $500,000 or more, including startup and closeout reports.
5. Receive and review information regarding any IT project of an executive branch agency with a total cost of between $100,000 and $500,000 as determined necessary by ITD.
6. Receive a report from the Chief Information Officer regarding the recommendations of the State Information Technology Advisory Committee (SITAC) relating to the prioritization of proposed major IT projects and other IT issues.
7. Receive information from the State Board of Higher Education regarding higher education IT planning, services, and major projects.

Section 54-35-15.3 authorizes the Information Technology Committee to review any IT project or IT plan. If the committee determines a project or plan is at risk of failing to achieve its intended results, the committee may recommend to the Office of Management and Budget (OMB) the suspension of the expenditure or funding appropriated for a project or plan. This duty did not require action by the Information Technology Committee during the 2017-18 interim.

Section 54-35-15.4 provides the Information Technology Committee may request the State Auditor to conduct an IT compliance review, including an agency's IT management and planning as well as compliance with IT plans and standards. This duty did not require action by the Information Technology Committee during the 2017-18 interim.

The committee is responsible for receiving various reports, including:

- A report from the State Board of Higher Education regarding higher education IT planning, services, and major projects (Sections 15-10-44 and 54-35-15.2).
- A report from the Chief Information Officer regarding the recommendations of the SITAC relating to the prioritization of proposed major IT projects and other IT issues (Sections 54-35-15.2 and 54-59-02.1).
- A report from the Chief Information Officer regarding the coordination of services with political subdivisions and a report from the Chief Information Officer and the Chief Information Officer of the North Dakota University System regarding coordination of IT between ITD and higher education (Section 54-59-12).
- The annual report from ITD (Section 54-59-19).

In addition to its direct statutory responsibilities for the 2017-18 interim, the Legislative Management assigned the committee the following responsibilities:

- Receive a report from the Statewide Longitudinal Data System Committee on the status of the statewide longitudinal data system (SLDS), including recommendations for further development, cost proposals, proposals for legislation, and data sharing governance (Section 54-59-36).
- Receive a report from the Emergency Services Communications Coordinating Committee before November 1, 2018, regarding the use of assessed communications services fee revenue and recommendations for changes to the operating standards for emergency services communications (Section 57-40.6-12).
- Study the delivery and cost of ITD's services provided to state agencies, including a review of the department's cost of services, staffing, and billing processes. The study includes identifying improvements to the efficiency and effectiveness of the department's services that will result in reduced costs for state agencies.

Committee members were Representatives Corey Mock (Chairman), Randy Boehning, Glen Bosch, Christopher D. Olson, Gary R. Sukut, and Robin Weisz; Senators Howard C. Anderson, Jr., Kyle Davison, Richard Marcellais, Larry J. Robinson, and Terry M. Wanzek; and Chief Information Officer Shawn Riley.

The committee submitted this report to the Legislative Management at the biennial meeting of the Legislative Management in November 2018. The Legislative Management accepted the report for submission to the 66th Legislative Assembly.

INFORMATION TECHNOLOGY DEPARTMENT INITIATIVES

Cloud Computing

The committee received information from ITD regarding the department's cloud computing initiatives. Cloud computing is the delivery of computer services over the Internet. The department reported the department is transitioning to cloud computing because cloud technology has been an IT standard for 15 years, many on-premise technologies are becoming obsolete, and many new systems are cloud-based. The department reported cloud technology:

- Offers security, operational, and cost advantages;
- Allows for increased data storage capabilities at lower costs than on-premise data centers;
- Increases the ability to deploy new IT systems;
- Allows for the delivery of data and computer power to any platform at any location; and
- Improves experience delivery for customers, system up-times and backups, and deployment flexibility.

The committee learned ITD's strategy includes making North Dakota IT "cloud first." This means new IT systems will be evaluated for deployment in the cloud as the first option, and current IT systems will be evaluated for a transition to the cloud. Information technology systems will not be placed automatically in the cloud and all system transitions to the cloud must be made in collaboration with agency personnel responsible for the system and data. The department reported the cloud automatically does not make North Dakota IT more secure, but it positions the state to increase overall security at a lower cost than currently available using on-premise data centers. The department reported data in the cloud is encrypted and there are network boundary protections to secure the data.

The committee was informed the state has contracts to allow the purchase of cloud services from Microsoft, Amazon, IBM, and Oracle. The contract with Microsoft was renewed in May 2017 and the Amazon contract was renewed in July 2017. The Information Technology Department reported these contracts ensure North Dakota data is used only by and for North Dakota, considers account privacy and security, and complies with Chapter 44-04 and other North Dakota open record laws.

The Information Technology Department reported the costs of cloud computing services are approximately equal to on-premise technology costs currently, but cloud computing will offer cost-savings in approximately 5 years. The department is attempting to include the cost of cloud services in the ITD rate structure, rather than requiring state agencies to include the cost of cloud services in agency budgets. Although cloud costs may be incorporated into ITD rates over time, ITD does not know if rates will increase or decrease during the 2021-23 biennium.

The committee was informed the state will continue to partner with Dakota Carrier Network (DCN) as the state transitions to cloud services, which will provide faster service speeds. The Information Technology Department reported the increase in service speed could be obtained within the current ITD budget. The department reported additional equipment will be necessary but the equipment will be purchased by DCN.

The Information Technology Department executed a contract extension with DCN to increase the infrastructure and bandwidth capacity of the Statewide Technology Access for Government and Education network (STAGEnet). The extension is for 2 years, starting on July 1, 2019, and will include an additional 100 gigabyte capacity that primarily benefits K-12 and higher education, as well as state and local government. The extension reduces the cost per gigabyte of data provided and is considered a cost-neutral investment.

The Information Technology Department reported in June 2018 the department and OMB consolidated multiple Microsoft licensing enrollments into one Microsoft Office 365 agreement. The agreement covers 6,500 employees in 34 agencies, including the Governor's cabinet agencies, the Bank of North Dakota, and current department desktop support customers. Additional agencies may be added to the agreement. The agreement allows for additional security features, including multifactor authentication, self-service password reset, mobile device management, and data loss prevention.

As of June 2018, 30 state agencies are using 118 software-as-a-service applications or vendor-hosted applications in the cloud. The Information Technology Department reported no legislative action is necessary to continue to move applications and systems to the cloud.

Shared Services Unification

The committee received information from ITD regarding the department's shared services unification initiatives. The department is implementing an IT shared services unification plan to consolidate IT services, such as desktop support and help desk services, and to consolidate IT personnel in the Governor's cabinet of executive branch state agencies. The department reported the unification plan will improve IT productivity by establishing common systems and processes for communication and collaboration among executive branch agencies. The department reported the unification plan will focus on cost reduction and operational efficiencies and will provide data hosting, storage, and archiving opportunities. According to ITD, the unification will eliminate IT redundancies in executive branch agencies, decrease enterprise risk, improve IT investment success, and maximize cyber defense by utilizing the same system, data protection, and IT training. The state has seven service management systems and four application development models. The unification plan would reduce the state to one service management system and one application development model.

According to ITD, the state utilizes 91 percent of IT full-time equivalent (FTE) employees and resources for running operations, 9 percent for growing IT, and 0 percent for transforming IT. Through the cloud computing and shared services unification plans and other initiatives, ITD plans to allocate 50 percent of IT employees to running operations, 30 percent to growing IT, and 20 percent to transforming IT.

The Information Technology Department conducted an assessment of all executive branch IT employees, evaluating staff skills, needs, strategies, objectives, and costs. The major phases of the unification workforce transition process includes data gathering, transitional grouping, deep data analysis, and reporting. The department identified all positions in Governor's cabinet agencies that include IT-related functions to evaluate whether these positions would be included in the unification plan.

At the time of this report, ITD is in the deep data analysis phase. The department has identified 511 IT FTE positions, of which 344.30 FTE positions are employees of ITD and 167 FTE positions are from 12 Governor's cabinet agencies. Funding for the salaries of the 167 Governor's cabinet IT FTE positions totals $5.6 million from the general fund, $8.4 million from special funds, and $4.6 million from federal funds. The salaries of the 344.30 ITD FTE positions total $74.7 million, of which $12.2 million is from the general fund and $62.5 million is from special funds.

ITD reported the unification plan includes the reorganization of top positions in ITD, including the establishment of positions which will report directly to the Chief Information Officer (CIO), including a Chief Operations Officer (COO), Chief Data Officer (CDO), Chief Technology Officer (CTO), Chief Reinvention Officer (CRO), and Chief Information Security Officer (CISO). The CDO, CTO, and CRO are new positions while the COO and CISO are positions that exist in ITD, but titles and some job duties have changed. The department reported salary savings from vacant positions will be used to provide funding for the three new positions.

The unification plan will be completed in December 2018 and the plan will include cost-savings, long-term projections, and a new organization chart. The report phase of the unification plan includes providing information to the Legislative Assembly during the 2019 legislative session. The Information Technology Department's 2019-21 biennium budget request will include transfers of the 167 IT FTE positions from the Governor's cabinet agencies and the Department of Trust Lands to the new shared service. The budget requests will include a rebranding of ITD to the new shared service.

Cybersecurity

The committee received information from ITD regarding the department's cybersecurity initiatives. The committee learned from March 2018 through August 2018, the state has defended against 34 million vulnerability attacks, 3.3 million denial of service attacks, 88 million spam and phishing messages, and 1,300 "zero-day" attacks. A "zero-day" attack is a software attack that has no existing solution to mitigate the attack. The department reported state government must focus on delivering security services that will help the state effectively secure, defend, and respond to cyber attacks. North Dakota is a target for cybersecurity criminals because the state is the second largest energy producer in the country, has significant nuclear and conventional military assets, and has decentralized citizen data. The reports indicated data stolen in K-12 schools often is used for identify theft, ransom, and access to other systems. The department has started strategic, operational, and workforce initiatives to mitigate cybersecurity risks.

The Information Technology Department reported the state has cybersecurity insurance, but the insurance is valuable when responding to cybersecurity incidents rather than preventing cybersecurity attacks. The department reported cybersecurity insurance may provide protection from legal action following a breach of information, but does not address how to replace lost data or any potential reputation damages.

In July 2018, the state cybersecurity team detected more than 178,000 attacks on political subdivisions, of which 66,000 were targeting city governments and 111,000 were targeting county governments. The Information Technology Department reported North Dakota K-12 schools have been cyber attacked by North Korea and other nation states. According to the report, if ITD successfully defends against 99.999999 percent of cyber attacks, the state will still be breached every 18 minutes.

The information technology shared service includes 11 cybersecurity FTE positions to support 252,000 state, K-12, higher education, and political subdivision users. To address cybersecurity concerns, ITD will request $11.4 million for cybersecurity tools and systems, as well as 37 FTE positions as an optional package in ITD's 2019-21 biennium budget. The 37 FTE positions would include 8 state government FTE positions, 20 K-12 FTE positions, 5 higher education FTE positions, 2 FTE positions in the Securities Department and Department of Financial Institutions, and 2 political subdivision FTE positions.

The $11.4 million optional budget request does not include funding for the additional 37 FTE positions being requested. The $11.4 million request is considered a one-time funding request, but there would be ongoing expenditures of approximately $3.5 million to maintain the cybersecurity tools and systems.

The Information Technology Department reported the total cost to state agencies for ITD's cybersecurity initiatives is unknown. The department reported some cyber costs can be absorbed by ITD within the current service rates, but additional general fund appropriations may be needed. The report indicated an alternative funding option is to increase ITD service rates, which may require additional appropriations for state agencies to pay ITD for additional cybersecurity costs.

STUDY OF INFORMATION TECHNOLOGY DEPARTMENT SERVICES AND RATES

Background Information

The Legislative Management assigned the committee the responsibility of studying ITD services and rates pursuant to Section 8 of Senate Bill No. 2001 (2017). The study is to include an analysis of the delivery and cost of ITD services provided to state agencies. The study must include a review of ITD's cost of services, staffing, and billing processes and must identify improvements to the efficiency and effectiveness of ITD's services that will result in reduced costs for state agencies.

The committee received information from ITD regarding rate types and fee structures, rate trends from previous bienniums, federal requirements regarding rates, how rates are established for each service, services provided to state agencies, the effect of salary and health insurance increases on rates, how cloud hosting affects rates, and how the shared services unification plan will impact services and rates. The committee also received information from representatives of the University System regarding higher education services and rates, from state agencies receiving IT services from ITD, and from the North Dakota Association of Counties regarding services provided by ITD to political subdivisions.

The Information Technology Department reported the funding associated with ITD service rates is $134.8 million in the 2017-19 biennium. The department operates as an internal service fund, which results in the federal government auditing ITD regularly to ensure ITD is not exceeding reserve maximums related to revenue collected for services provided to other state agencies. The maximum amount of reserves the federal government allows ITD to maintain is equivalent to approximately 2 months of operating costs.

Survey of State Agencies and Information Received

At the request of the committee, the Legislative Council surveyed state agencies regarding services received from ITD and rates charged for services provided. Of the 57 agencies asked to participate, 54 responded with completed surveys. Of the 54 responding agencies, 52 stated the agency receives IT services from ITD. The 52 responding agencies reported IT expenditures paid to ITD of $114,572,745 in the 2013-15 biennium, $106,193,013 in the 2015-17 biennium, and a projected expenditure total of $118,505,164 during the 2017-19 biennium. The agencies that do not receive services from ITD, the Northern Crops Institute and the Main Research Center, receive IT services from the North Dakota State University Core Technology Services.

The Information Technology Department provides 96 unique data processing services and 22 telecommunications services while applying a 4.9 percent overhead charge for all services provided. State agencies revealed the most common IT services received from ITD were telecommunication-related services, email hosting, network services and hosting, website development and support, website hosting, desktop support, file and print services, software development and maintenance, server hosting, application hosting, database hosting, records management, project management, video conferencing, and instant messaging.

A total of 50 agencies responded to a question related to the services provided by ITD, which asked the agencies to rank experiences with ITD related to certain categories. The agencies reported an average approval rating of 3.69 on a scale of 5 regarding ITD key performance measures. The agencies reported an average approval rating of 3.79 related to customer satisfaction and an average of 3.85 related to services provided by ITD. The 50 agencies rated overall experience with ITD as follows:

- 5 - Very satisfied - 6 agencies
- 4 - Mostly satisfied - 33 agencies
- 3 - Somewhat satisfied - 10 agencies
- 2 - Somewhat dissatisfied - 1 agency
- 1 - Mostly dissatisfied - 0 agencies
- 0 - Very dissatisfied - 0 agencies

The state agencies were asked if the rates charged by ITD were fair given the services provided from ITD. Of the 52 agencies receiving ITD services, 13 did not provide a conclusive answer to the question. Of the remaining 39, 12 agencies, or 30.8 percent, believed the ITD rates were fair while 27 agencies, or 69.2 percent, indicated dissatisfaction with the rates charged by ITD.

In response to information received as part of the survey of state agencies, the committee requested additional information from the State Auditor's office, Department of Trust Lands, State Library, Department of Agriculture, Council on the Arts, Parks and Recreation Department, State Water Commission, Department of Transportation (DOT), and the North Dakota Association of Counties regarding ITD services and rates. The agencies reported the overall service from ITD was satisfactory and rates were appropriate. The agency concerns included ITD's services being designed for large agencies rather than small to medium agencies, the need for ITD to partner with the private sector for agency specific needs, ensuring an accurate way to bill state agencies for ITD services, and suggesting ITD provide agencies additional e-commerce guidance.

The Information Technology Department reported the department's goal is to improve operational effectiveness, including managing the cost per unit of service provided to ITD customers. The study performed by the committee provided feedback ITD will use in operational assessments and unification initiatives.

Recommendation

Because rates charged and services provided by ITD may change due to recent department initiatives relating to cloud computing and shared services unification of information technology employees, the committee recommends the Legislative Assembly continue to monitor ITD services and rates and the impact on state agencies.

DISTRIBUTED LEDGER TECHNOLOGY AND BLOCKCHAIN

Background Information

The committee received information from representatives of ITD and IBM Corporation regarding distributed ledger technology and blockchain. Distributed ledger technology is a database containing replicated, shared, and synchronized digital data available to users at multiple sites, countries, or institutions without the use of a central administrator or centralized data storage. Blockchain is a new technology intended to help users trust data stored in information technology systems. Blockchain is a list of transactions shared between multiple parties in which new transactions are added at the end of the blockchain. The existing data is never changed or deleted when new data is added. If a portion of data is changed, the entire blockchain will change, resulting in the user being able to detect the change in data.

Blockchain was first used for cryptocurrency, specifically Bitcoin, but blockchain is not exclusively related to cryptocurrency. Blockchain technology is used in tracking fruits and dairy products from growers to consumers, tracking marijuana from seed to sale to consumers, and tracking grants.

The committee was informed blockchain for government involves four components--identity, business assets, privacy, and governance. Identity includes all known participants, business assets vary for each blockchain use, privacy addresses the confidentiality of transactions between parties, and governance relates to a group overseeing the rules and operations of blockchain technology and distributed ledgers.

Recommendation

The committee recommends House Concurrent Resolution No. 3002 providing for a Legislative Management study of distributed ledger technology and blockchain for state government. The study is to include the potential benefits of distributed ledger technology and blockchain for state government, including an evaluation of the effects on government accounting and budgeting, decisionmaking, information technology authentication, records management, remote

electronic voting, and other e-government services and applications, such as tax collection, land registry, distribution of benefits, digital currencies, and other potential benefits.

INFORMATION TECHNOLOGY DEPARTMENT STRATEGIC PLAN AND ANNUAL REPORT

Strategic Plan

Section 54-59-06 requires ITD to develop and maintain a business plan and Section 54-35-15.2 requires the committee to review the plan. Pursuant to that directive, the department prepared a strategic business plan for the 2019-21 biennium. The 2019-21 biennium strategic plan focuses on alignment, delivery, and efficiency. The plan includes establishing, maintaining, and delivering services that align IT investments and structures with the state's business needs, increasing work effort efficiency, and continuously improving how services are delivered. At the time of this report, the strategic plan is being finalized with the statewide information technology plan, which is scheduled to be completed in November 2018.

Annual Report

Section 54-59-19 requires ITD to prepare an annual report on information technology projects, services, plans, and benefits and to provide the report to the committee. Pursuant to the directive, the department prepared and presented reports for fiscal year 2017 and fiscal year 2018, which include an executive summary, rate comparisons, and information on the department's performance.

The department monitors the cost and revenue for each service to ensure one service is not subsidizing another service. The federal government does not allow the department to charge rates that generate revenues in excess of costs; therefore, the department monitors its cash balances and adjusts rates accordingly.

The Information Technology Department's fiscal year 2018 revenue received from state agencies totaled $62.9 million. Of this amount, approximately $25.8 million, or 41 percent, is from the Department of Human Services (DHS). The department spent revenue received from state agencies on the following services: computer hosting (31 percent), software development (28 percent), direct bill-backs (18 percent), network services (17 percent), telephone services (5 percent), and other services (1 percent).

The Information Technology Department employee turnover rate was 8.03 percent in fiscal year 2015, 4.56 percent in fiscal year 2016, 7.29 percent in fiscal year 2017, and fluctuated between 6.70 percent and 9.75 percent each month during fiscal year 2018.

INFORMATION TECHNOLOGY STANDARDS AND STATEWIDE PLAN

Information Technology Policies, Standards, and Guidelines

Section 54-59-09 requires ITD to develop statewide information technology policies, standards, and guidelines based upon information received from state agencies and institutions. Except institutions under the control of the State Board of Higher Education, each executive branch agency and institution is required to comply with the policies and standards developed by ITD. Information technology policies, standards, and guidelines must be reviewed by the SITAC. The department has adopted policies, standards, and guidelines in a number of areas and continues to update and adopt new policies, standards, and guidelines as necessary.

Statewide Information Technology Plan

Section 54-59-11 requires every executive branch agency, except institutions under the control of the State Board of Higher Education, to prepare an information technology plan unless the Chief Information Officer grants an exemption. Section 54-35-15.2 requires the committee to review the plan. The plan must be prepared based on guidelines developed by the department and must be submitted to the department by August 15 of each even-numbered year unless the Chief Information Officer grants an extension. The Information Technology Department is required to review each entity's plan for compliance with statewide information technology policies and standards or to resolve conflicting directions among plans. Agencies of the judicial and legislative branches are required to file information technology plans with the department by August 15 of each even-numbered year. Based on the information technology plans, the department must prepare a statewide information technology plan. The statewide information technology plan must be developed with emphasis on long-term strategic goals, objectives, and accomplishments.

The Information Technology Department is finalizing the statewide information technology plan, which is scheduled to be completed in November 2018. The department will present the plan to the 2019 Legislative Assembly. The plan will include strategic focuses for each agency related to the Main Street Initiative, recovery, addiction, and behavioral health, reinventing government, strengthening tribal communities, and transforming education.

LARGE INFORMATION TECHNOLOGY PROJECTS

The committee is authorized to review any information technology project or information technology plan. If the committee determines a project or plan is at risk of failing to achieve its intended results, the committee may recommend

to OMB the suspension of the expenditure of money appropriated for the project or plan. In addition, the committee is directed to review a project startup and project closeout report for any large information technology project. A large information technology project is defined in Section 54-35-15.2 to be an executive, judicial, or legislative branch project with a cost of $500,000 or more or a higher education project that impacts the statewide wide area network, impacts the statewide library system, or is an administrative project.

Project Management Lifecycle Process

The committee received information regarding the project management life cycle process which includes:

- **Project origination** - Proposed projects are evaluated for the next planning cycle, and the selected projects are included in the biennial budgeting process.
- **Project initiation** - The overall parameters of a project are defined, and project management is established to monitor the project.
- **Project planning** - The exact parameters of a project are defined to ensure all the prerequisites for the project execution and control are in place.
- **Project execution and control** - The project developer produces deliverable results, and the project manager monitors the status of the project.
- **Project closeout** - The project is assessed to identify any lessons learned and best practices to be applied to future projects.

Review of Large Information Technology Projects

For major information technology projects in progress during the 2017-18 interim, the committee received and reviewed quarterly status reports compiled by ITD, project startup and project closeout reports, and other information regarding specific information technology projects. The following is a summary of the project startup and project closeout reports and the iterative project reports received by the committee:

Project Startup Reports

Agency	Project Name	Project Description	Estimated Cost	Estimated Completion Date
ITD	SLDS data utilization project	Data literacy supplement project for the prekindergarten through postsecondary education SLDS program	$6,475,690	September 2019
DHS	Operating rules health enterprise project	Health enterprise Medicaid management information system enhancement	$4,630,781	May 2017
DHS	Electronic health records replacement system	Replacement of two behavioral health electronic health record systems for the Field Services Division	$5,894,647	December 2018
Workforce Safety and Insurance	Extranet project	Project for a self-service portal for external Workforce Safety and Insurance stakeholders	$504,877	June 2017
Workforce Safety and Insurance	myWSI enhancement project	Enhancements for the myWSI system to review claim and report information	$735,509	June 2019
DOT	REAL ID project	Nationwide program to improve reliability and accuracy of state-issued driver's license and identification cards	$550,000	September 2018
DHS	New Medicaid cards project	Update to the health enterprise Medicaid management information system to comply with Center for Medicare and Medicaid Services	$2,513,220	December 2018
State Department of Health	Medical marijuana system	Implementation of a medical marijuana program for production, processing, sale, and dispensable medical marijuana	$231,000	December 2018

Project Closeout Reports

Agency	Project Name	Project Description	Actual Cost	Actual Completion Date
Workforce Safety and Insurance	Extranet project	Project for a self-service portal for external Workforce Safety and Insurance stakeholders	$469,031 (Budget of $504,878)	8 months - Same as scheduled

Project Closeout Reports				
			Actual	
Agency	Project Name	Project Description	Cost	Completion Date
ITD	SLDS	Implementation of a prekindergarten through postsecondary education data system	$8,102,927 (Budget of $8,296,286)	68 months -Same as scheduled
Judicial branch	Disaster recovery system project	Establish a disaster recovery site in a remote location to minimize data loss	$1,656,349 (Budget of $2,000,000)	14 months - Same as scheduled
DOT	Motor vehicle system redesign	Database replacement for all owner and vehicle records	$7,964,838 (Budget of $8,514,160)	21 months - Same as scheduled
DHS	Transformed Medicaid statistical information system	Improvement and expansion of Medicaid data repository	$1,907,721 (Budget of $1,937,496)	32 months - 1 month behind schedule
DHS	Operating rules health enterprise project	Health enterprise Medicaid management information system enhancement	$4,528,621 (Budget of $4,630,781)	13 months - 6 months behind schedule
Bank of North Dakota	Managed file transfer project	Develop a system to securely transfer financial files between the Bank and its partners	$596,498 (Budget of $646,152)	29 months - 2 months behind schedule
Department of Public Instruction	NDFoods 2.0 project	Enhancement of the NDFoods system, program applications, and claims foods management system	$676,020 (Budget of $2,454,622)	19 months - 20 months ahead of schedule
DOT	REAL ID project	Nationwide program to improve reliability and accuracy of state-issued driver's license and identification cards	$494,341 (Budget of $550,000)	8 months - 3 months ahead of schedule
State Department of Health	Immunization information system	Database for vaccination data for North Dakota residents	$3,568,398 (Budget of $3,932,794)	38 months - Same as scheduled

Iterative Project Reports

Workforce Safety and Insurance - Claims and policy system replacement project

Replacement of core business applications related to claims and policies to improve customer service

Phase	Costs	Completion Dates
• Phase 1 - Planning and analysis	N/A	June 2015 (Actual)
• Phase 2 - Database consolidation and shared components refacing - (Releases 1 - 3)	$3,740,415 (Actual)	February 2017 (Actual)
• Phase 3 - Policy application redesign - (Releases 4 - 9)	$10,776,696 (Estimated)	June 2021 (Estimated)
• Phase 4 - Claims application redesign - (Releases 10 - 20)	$14,947,740 (Estimated)	June 2026 (Estimated)
• Phase 5 - Transition, program, closeout	$36,850 (Estimated)	June 2026 (Estimated)

Department of Human Services - Eligibility system modernization project

Replacement of eligibility systems with a single system to comply with requirements of the Patient Protection and Affordable Care Act

Phase	Costs	Completion Dates
• Phase 1 - Convert systems that determine eligibility under the federal Affordable Care Act	$49,842,739 (Actual)	February 2016 (Actual)
• Phase 2 - Planning for conversion of other system components	$102,923,705 (Estimated)	March 2019 (Estimated)
• Phase 3 - Eligibility coverages for aged, blind, and disabled individuals	$5,545,633 (Estimated)	December 2019 (Estimated)
• Phase 4 - Implementation of the low-income home energy assistance program	Unknown	Fall of 2020 (Estimated)

Workforce Safety and Insurance - Claims and Policy System

The committee received information from representatives of Workforce Safety and Insurance (WSI) regarding the claims and policy system replacement project. During the 2013-15 biennium, WSI terminated an information technology transformation program project, because the vendor, Aon eSolutions, Inc., failed to provide adequate evidence the project could be completed. Workforce Safety and Insurance filed suit against the vendor and received a settlement payment of $5 million. Workforce Safety and Insurance replanned the project and began development on the claims and policy system replacement project in July 2015. The project has five major phases, including 20 major release projects. The first phase includes business analysis and detailed planning, which was completed in June 2015. The second phase

includes database consolidation and shared components refacing and was completed in February 2017. All three releases of the second phase of the project were completed on time and under budget.

The third phase includes policy application redesign and is comprised of releases 4 through 9. Release 4 was completed 11.3 percent under budget and 4.0 percent behind schedule in November 2017. Release 5 was completed 10.7 percent under budget and 9.2 percent behind schedule in July 2018. As of August 2018, release 6 is 30 percent complete, is 27 percent under budget, and is scheduled to be completed in May 2019. Releases 7, 8, and 9 are estimated to be completed during the 2019-21 biennium at a total cost of $4,525,675.

The fourth phase includes claims application redesign and is comprised of releases 10 through 20. Phase four is estimated to begin during fiscal year 2021 and conclude in fiscal year 2026 at a total cost of $14,947,740. The fifth phase includes transition, programming, and closeout and is estimated to start and conclude during fiscal year 2026 at a cost of $36,850. The estimated cost of the entire claims and policy system replacement project is approximately $29.5 million.

Department of Human Services - Eligibility Systems Modernization Project

The committee received information from DHS regarding the eligibility systems modernization project, which is replacing the legacy eligibility determination systems with a fully integrated system that includes the federal Affordable Care Act requirements. The project includes four phases, each with separate budgets and timelines. The first phase was implemented in February 2016 at a cost of $49.8 million, including $10.7 million from the general fund. Phase 1 provides a self-service portal to assist individuals with determining eligibility under the federal Affordable Care Act requirements.

The second phase of the project, which determines eligibility for various programs, including the supplemental nutrition assistance program, temporary assistance for needy families, and the child care assistance program, is anticipated to be complete in the March 2019. The Phase 2 budget is $102.9 million, including $24.3 million from the general fund.

The third phase, which will implement the remaining Medicaid eligibility coverages for individuals who are aged, blind, and disabled, scheduled to start in October 2018 and conclude in December 2019. The Phase 3 budget is $5.5 million, including approximately $544,563 from the general fund.

The fourth phase, which will implement the low-income home energy assistance program, is scheduled to be completed in the fall of 2020. At the time of this report, a budget for Phase 4 has not been prepared.

Department of Human Services - Medicaid Management Information System

The committee received information from DHS regarding the Medicaid management information system project. The primary function of the system is the payment of Medicaid claims from health care providers for individuals enrolled in the Medicaid program. The project started in June 2006 with an original budget of $60,202,453 and an estimated completion date of April 2008. The current project budget is $113.1 million. Due to challenges with system development by the contracted vendor, the project was delayed.

The project was substantially completed in October 2015. As of September 2018, the total project cost was $105.3 million. The Department of Human Services anticipates an additional $2.9 million will be paid to vendors in 2019.

Until the system is certified by the Centers for Medicare and Medicaid Services (CMS), operations expenditures from the October 2015 "go live" date will be matched 50 percent with federal funds. When the system is certified, CMS will reimburse the state an additional 25 percent of all expenditures since October 2015 to provide a total federal match of 75 percent of project expenditures. The Department of Human Services expects the on-site certification visit from CMS to occur during the first quarter of calendar year 2019. The Department of Human Services reported 4,187,340 Medicaid claims were processed during fiscal year 2018, averaging 348,945 claims per month.

Secretary of State - File 2.0 Project

The committee received information from representatives of the Secretary of State's office regarding the File 2.0 project. The project is a business and license software system that started in October 2015 and will allow new companies to register businesses and file required reports online with the Secretary of State. The business registration, business information, and contractor licensing modules of the project will be deployed as early as October 2018, while the lobbyist module will be deployed by the end of 2018. The Secretary of State anticipates spending $2.5 million of the $2.7 million project budget. From September 2016 through August 2018, business registrations have averaged 1,655 per month with a low of 1,375 in July 2018 and a high of 2,124 in May 2017. The number of days for the Secretary of State's office to file a document has ranged from 10 to 26 days, with an average of 17 days, during this time.

Department of Public Instruction - NDFoods 2.0 Project

The committee received information from representatives of the Department of Public Instruction regarding the NDFoods 2.0 project. The NDFoods computer system was developed and managed by ITD in 2012 to manage United

States Department of Agriculture (USDA) child nutrition and food distribution programs, including program applications, claims, and USDA foods. The department reported the NDFoods 2.0 project will improve decisionmaking capabilities, staff efficiencies, and reporting processes. The project was completed in January 2018, 104.4 percent ahead of the anticipated completion date of September 2019. The total project cost was $676,020, which is $1,778,602, or 72.4 percent, less than the project budget of $2,454,622. The project was scheduled to include three phases; however, due to the ease of upgrading the system, Phases 2 and 3 were combined with the requirements of Phase 1, resulting in Phase 1 being completed $301,652 under budget and the Phase 2 and 3 budget of $1,476,950 not being needed.

PRIORITIZATION OF PROPOSED MAJOR COMPUTER SOFTWARE PROJECTS

Sections 54-35-15.2(13) and 54-59-02.1 require the SITAC to prioritize major computer software projects. The Chief Information Officer is to submit recommendations of the SITAC regarding major computer software projects to the Information Technology Committee, OMB, and the Appropriations Committees of the Legislative Assembly.

The committee received information from ITD regarding a preliminary prioritization of proposed major computer software projects for the 2019-21 biennium. Executive branch agencies internally prioritized IT projects and submitted the IT plans to ITD. The department compiled the preliminary list of the IT projects over $500,000 by funding source.

After the committee concluded its business, the SITAC met on October 30, 2018, to prioritize major computer software projects. The final list of prioritized major executive branch computer software projects proposed for the 2019-21 biennium is as follows:

Project	General Fund	Total Funds
General fund projects		
1. Information Technology Department - Statewide interoperable radio network	$53,000,000	$53,000,000
2. Information Technology Department - Cybersecurity tool set modernization	11,400,000	11,400,000
3. Information Technology Department - Unified data platform	1,000,000	1,000,000
4. Information Technology Department - North Dakota gateway portal project	6,000,000	6,000,000
5. Information Technology Department - Mainframe transition project	5,000,000	5,000,000
6. Information Technology Department - Citizen relationship management system	4,500,000	4,500,000
7. Department of Human Services - Basic care application replacement project	1,920,000	1,920,000
8. Information Technology Department - Statewide land parcel dataset project	1,060,000	1,060,000
Total general fund projects	$83,880,000	$83,880,000
Federal funds projects		
1. Secretary of State - Voting systems replacement		$9,500,000
2. Department of Human Services - Child and family services FRAME system replacement		25,000,000
3. Department of Human Services - Medicaid management information system technical stack upgrade		7,100,000
4. Secretary of State - ePoll Book implementation		3,000,000
5. Department of Human Services - Disaster supplemental nutrition assistance program replacement		2,120,000
6. Department of Human Services - Mainframe migration assessment		1,220,000
7. Department of Transportation - Roadway information management system replacement		5,590,000
8. Department of Human Services - Child and family services comprehensive child welfare information and payment system mainframe migration project		1,250,000
9. Department of Public Instruction - Early childhood integrated data system expansion		7,100,000
10. Department of Human Services - Master data management/master client index assessment		660,000
Total federal funds projects		$62,540,000
Special funds projects		
1. Department of Transportation - Driver's license system rewrite		$16,500,000
2. Department of Mineral Resources - Risk based data management system 3.0		4,040,000
3. Information Technology Department - IT service management system		2,000,000
4. Workforce Safety and Insurance - Claims and policy system - Release 7		1,700,000
5. Department of Transportation - Automatic vehicle GPS implementation		2,650,000
6. Workforce Safety and Insurance - Claims and policy system - Release 8		1,890,000
7. Workforce Safety and Insurance - Claims and policy system - Release 10		2,480,000
8. Information Technology Department - Application platform as a service implementation		1,330,000
9. Workforce Safety and Insurance - myWSI enhancement project - Release 3-4		850,000
10. Workforce Safety and Insurance - Claims and policy system - Release 9		930,000
11. Information Technology Department - Automation/orchestration platform implementation for delivery of services		900,000
12. Department of Transportation - Maintenance management system		3,850,000
13. Retirement and Investment Office - Teachers Fund For Retirement pension administration system modernization		9,140,000

Project	General Fund	Total Funds
14. Department of Transportation - Traffic data editing and analysis system rewrite		1,530,000
15. Department of Transportation - Mobile/digital driver's license project		3,150,000
Total special funds projects		$52,940,000
Total all projects	$83,880,000	$199,360,000

INFORMATION TECHNOLOGY DEPARTMENT COORDINATION OF SERVICES

Section 54-59-12 provides for the review and coordination of IT between ITD, higher education, and political subdivisions. In addition, Sections 15-10-44 and 54-35-15.2 provide that the Information Technology Committee receive information from the State Board of Higher Education regarding higher education IT planning, services, and major projects.

Higher Education

The committee received information from the State Board of Higher Education regarding higher education IT activities pursuant to Section 15-10-44 and 54-35-15.2. The report indicated the University System had the following major IT initiatives for the 2017-19 biennium:

- The identity access management system was completed 7.4 percent under budget and 74.1 percent behind schedule, largely due to vendor resource constraints. Actual project costs totaled $651,140 compared to a budget of $703,235. The project compiles more than 100,000 records daily, and replaced a system that was over 10 years old.
- The predictive analytics reporting project uses student data to improve student success at all 11 higher education institutions. The project was completed 28.0 percent under budget in August 2017 at a total cost of $1,036,424 compared to a budget of $1,441,195. The operations phase of the project is on hold because the nonprofit organization working on the project was acquired by a commercial company. The project also is on hold due to the timeliness of information and budget constraints. The committee was informed the SLDS may be able to accomplish everything predictive analytics reporting could accomplish, but at a lower rate.
- The Blackboard learning management project replaces learning management systems at higher education institutions with a single systemwide learning management system. The project has an estimated total cost of $2,919,203 and estimated completion date of August 2019. As of September 2018, the project is 2.5 percent under budget and 2.3 percent behind schedule. At the time of this report, seven campuses are using Blackboard, three more campuses are scheduled to begin using Blackboard during the 2019 spring semester, and one campus is scheduled to begin during the 2019 summer semester. The system is estimated to provide annual cost savings of more than $400,000.
- The Novelution Grants Administration and Management project is a modular based electronic grants administration application to provide a central repository for researchers to monitor projects and improve accuracy. As part of the project, the University of North Dakota will deploy three modules and North Dakota State University will deploy six modules. The project has an estimated total cost of $1,966,726 and estimated completion date of November 2021. As of September 2018, the project is 20.4 percent under budget and 5.9 percent behind schedule. The vendor agreement is a deliverable-based contract and, because the project was not deployed on schedule, no payment has been made as of the time of this report.
- The facilities management information system (FAMIS) cloud migration project transitions the on-premises FAMIS system to a software-as-a-service cloud-based FAMIS system. The project has an estimated total cost of $249,835 and estimated completion date of February 2019. As of September 2018, the project is 1.4 percent over budget and 6.8 percent behind schedule.

Elementary and Secondary Education

The committee received information from the Educational Technology Council (ETC), which is created by Section 54-59-17, regarding IT initiatives for elementary and secondary education. The council provides governance for EduTech and the Center for Distance Education (CDE). The council's initiatives include classroom transformation and new technology grants and approving schools' technology plans.

The Educational Technology Council has started a project called the North Dakota K-20W initiative to accomplish the vision of "every student, every school, cyber educated." The goal of the initiative is to create a comprehensive statewide approach to cybersecurity across North Dakota education systems and workforce organizations.

EduTech provides IT services and professional development to North Dakota elementary and secondary schools. EduTech continues to manage PowerSchool application upgrades and to assist faculty and staff with the implementation of Microsoft Office 365 in schools. As of July 2018, there were 112,641 active students on PowerSchool. The EduTech

pre-K-12 strategic plan summary includes a vision that all students will graduate choice ready, with the knowledge, skills, and disposition to be successful.

The committee was informed CDE continues to provide North Dakota's online distance education. During the 2017-18 school year, 8,050 courses were supported by CDE while serving 6,050 students and 173 North Dakota school districts. The course completion rate during the 2016-17 school year was 96.8 percent and was 94.4 percent during the 2017-18 school year. The Educational Technology Council reported a study of students in grades 4 through 12 revealed test scores in English, mathematics, and science increased when students had exposure to SmartLabs. As of September 2018, there are 13 CDE SmartLabs providing learning opportunities to 2,149 students.

Political Subdivisions

The committee received testimony stating the coordination of IT services between ITD and political subdivisions is essential to the efficient delivery of services. The department, through STAGEnet, provides the network connectivity, Internet access, firewall security, videoconferencing, and secure wireless access that supports the delivery of services. The department personnel meet regularly with the technology resources group of the North Dakota Association of Counties to discuss issues and strategize regarding future improvements and enhancements. The primary services provided relate to cybersecurity coordination and network service delivery through STAGEnet. Other areas of collaboration include 911 delivery coordination and basemap services, social services, clerks of courts, criminal justice information services, election system solution, Gentax, Health Alert network, the geographic information system hub, and the statewide interoperable radio network (SIRN).

OTHER INFORMATION

2019-21 Biennium Budget Request

The committee received information from ITD regarding the department's 2019-21 biennium budget request. The department's 2017-19 biennium budget included $245.1 million and 344.30 FTE positions. The department's 2019-21 biennium budget request will include a $77.3 million reduction, of which $58.9 million is considered one-time funding during the 2017-19 biennium and $18.4 million is a reduction to ongoing funding. The department is authorized 344.30 FTE positions for the 2017-19 biennium, but 17.00 FTE positions will be eliminated for the 2019-21 biennium to comply with the Governor's guidelines. Of the 17.00 FTE positions, 2.00 FTE positions will be from K-12 programs and 15.00 FTE positions will be from ITD operations. The committee was informed 23 ITD personnel have applied for the voluntary separation incentive program. The department anticipates approving 19 of the 23 applications. The department reported some of these positions will not be refilled while some positions will be rehired at lower salaries.

Statewide Longitudinal Data System Initiative

The Legislative Management assigned the committee the responsibility to receive a report from the Statewide Longitudinal Data System Committee on the status of SLDS pursuant to Section 54-59-36. The committee received information from ITD regarding the status of development of SLDS. During the 2017-18 interim, the North Dakota Choice Ready program was completed. This program is a tool to assist educators to ensure all students successfully graduate high school possessing the essential skills necessary to be ready for life. The program encourages students to strive to be postsecondary ready, workforce ready, or military ready. As of September 2018, 24,000 e-transcripts have been sent using SLDS, including 17,000 to in-state public institutions and 7,000 to private or out-of-state institutions. The Statewide Longitudinal Data System Committee recommendation for future development includes adding early childhood into SLDS and to provide reports on North Dakota college certificate attainment and employment in the state.

Emergency Services Communications Coordinating Committee

The Legislative Management assigned the committee the responsibility to receive a report from the Emergency Services Communications Coordinating Committee (ESCCC) regarding changes to the operating standards for emergency services communications pursuant to Section 57-40.6-12. The Emergency Services Communications Coordinating Committee was established in 2001 and is composed of two state and two local government representatives. The primary responsibility of ESCCC is to implement technologies that will efficiently and cost-effectively deliver 911 calls to one of the 21 North Dakota public safety answering points (PSAP). The primary funding source to provide 911-related services is through an emergency services communications system fee levied on telecommunication services in the state. All 53 counties and 1 city impose this fee. The Emergency Services Communications Coordinating Committee reported as of July 2018, 23 county and city jurisdictions charge the maximum $1.50 fee on assessed communication services while other jurisdictions charge a $1.00 fee.

The committee was informed ESCCC is focusing on Next Generation 9-1-1 progress, technology consolidation, training guidelines, and the relationship between land mobile radio or SIRN, public safety mobile broadband, and Next Generation 9-1-1. The Emergency Services Communications Coordinating Committee reported legislation may be needed to require location information when a call is received by a PSAP.

Statewide Interoperable Radio Network

The committee received information regarding the SIRN. The 2017 Legislative Assembly approved House Bill No. 1178, which requires political subdivisions to impose an additional fee of $0.50 to the fee imposed on assessed communication services, to be deposited in the newly established SIRN fund. The fiscal note for House Bill No. 1178 estimated $9.6 million of revenue would be generated for SIRN during the 2017-19 biennium. The Information Technology Department reported the updated estimate of revenue to be collected during the biennium is $7.5 million to $8.0 million. The current revenue in the SIRN fund, as of September 2018, is $4.0 million. The Information Technology Department reported expenditures incurred through August 2018 totaled $49,975. The department is negotiating with a vendor for SIRN and intends to award the contract in December 2018.

In addition to the $0.50 fee, Section 7 of House Bill No. 1178 authorized ITD to obtain a loan of up to $15 million from the Bank of North Dakota for the SIRN project. The department reports it does not anticipate borrowing funds from the Bank of North Dakota for SIRN during the 2017-19 biennium.

Section 8 of House Bill No. 1178 requires, by September 30, 2018, all North Dakota entities operating a PSAP to relinquish legal rights to any radio frequency required for the SIRN trunk system. The Information Technology Department reported 41 counties have signed the SIRN memorandum of understanding and four counties have signed letters of intent to participate in the network. Five counties have either disagreed or partially disagreed with the memorandum of understanding, two counties have not presented SIRN information to the county commissions, and one county has not responded to SIRN communication requests. The department's goal is to have all counties participate in the SIRN project; however, participation from every county is not necessary for the project to be successful.

Electronic Payment Processing System

The committee received reports from ITD regarding the electronic payment processing system related to credit card fees, which was approved by the Legislative Assembly in Sections 10 and 11 of Senate Bill No. 2021 (2017). The department reported as the public pays fees to agencies by credit card, agencies absorb the related merchant credit card fees in the agency budget. The department reported the DOT, Secretary of State, Parks and Recreation Department, Game and Fish Department, WSI, and Highway Patrol have incurred the most credit card fees, and were approved by the Legislative Assembly to participate in the electronic payment processing system. Senate Bill No. 2021 allowed these agencies to borrow from the Bank of North Dakota to pay ITD to initiate a system to allow the credit card fees to be charged to customers rather than the agency. The Bank of North Dakota finalized a contract with Chase Bank in August 2017 to initiate the new system.

The Information Technology Department reported all the selected agencies declined the initial implementation of the system. In September 2018, DOT implemented the system on self-service kiosks to charge customers a 2.5 percent fee for credit card transactions. Job Service North Dakota and the Department of Labor and Human Rights voluntarily elected to implement the system.

Health Information Technology

The committee was informed ITD is continuing to develop the North Dakota Health Information Network (NDHIN). The North Dakota Health Information Network is a public-private partnership for the secure exchange of health information that enables clinical users, such as providers, nurses, and clerical staff to easily and efficiently view information relating to a patient's electronic medical record. The North Dakota Health Information Network allows for up-to-the minute decisions and faster diagnoses while allowing users to securely exchange clinical information. The North Dakota Health Information Network expansion project will establish health information network infrastructure, provide medication information and registry connections, and allow for administrative process automation and simplification.

Funding for the NDHIN expansion project includes $40.8 million of federal funding, which is available through September 2021, the anticipated completion date of the project. Funding for federal fiscal years 2018 and 2019 is $21.9 million, of which $19.7 million is from federal funds and $2.2 million will be provided from the electronic health information exchange fund and from health care providers. The Health Information Technology Office has entered contracts with Orion Health, HealthTech Solutions, and CedarBridge Group for the project. At the time of this report, the Health Information Technology Office is working with a vendor to do a gap analysis on the changes needed to the system for the expansion project.

Mainframe Migration

According to reports to the committee, there are two primary agencies utilizing the mainframe, DHS for the child support and economic assistance applications and DOT for the driver's license system, roadway inventory management, and traffic safety systems. The Information Technology Department reported there are a few other agencies on the mainframe, but those agencies have relatively minor systems supported on the mainframe, not core processes. As more agencies transition off the mainframe, the remaining agencies become responsible for a greater share of the cost of

maintaining the mainframe. The department reported DHS and DOT pay approximately 94 percent of the fees associated with the mainframe while the agencies with minor systems hosted on the mainframe pay the remaining 6 percent.

North Dakota Voter Database

In December 2017, the committee received information from the Secretary of State's office regarding attempted breaches of the North Dakota voter database during the 2016 election cycle. During the summer of 2016, the federal Department of Homeland Security became aware of web activity searching for election system vulnerabilities. In the spring of 2017, the Department of Homeland Security reported 21 states had been the target of attempted breaches of state election systems during the 2016 election cycle. The Secretary of State's office reported while North Dakota was targeted, the election system was not breached. It is unclear who was responsible for the attempted breach, but it was likely from foreign nation-state governments.

Information Technology Department Help Desk

The committee received information from ITD regarding the ITD Help Desk, also referred to as the Enterprise Service Desk. The Help Desk has the following service objectives:

Type	Effort Until Resolved/Contained	Final Resolution
Quick fix	First call resolution - 24/7	15 minutes
Priority 1	Immediate attention - 24/7	2 hours
Priority 2	Immediate attention - 24/7	4 hours
Priority 3	Business hours	1 day
Priority 4	Business hours	3 days
Priority 5	Business hours	1 week

The Information Technology Department reported during the month of November 2017, 92.5 percent of service requests were resolved within 15 minutes, while 6.1 percent were addressed within 60 minutes, and 1.3 percent required more than 60 minutes to resolve.

County Road Signage and City Street Mapping

The committee received information from the North Dakota Association of Counties regarding county road signage and city street mapping. The association reported it is difficult to have locational or street name signage for each rural intersection due to the cost of the signage and the labor to install the signage and the ongoing costs to maintain the signage. The cost to purchase and install signs range from $120 to $160 per intersection, depending on the sign. The estimated total cost for county intersection signs is more than $5 million. The association reported GPS mapping services have reduced the need for counties to have road signage at all rural intersections, although GPS mapping requires a cell signal, which is not always available in rural settings. The Department of Emergency Services is working with 911 jurisdictions on a statewide seamless base map project to create a geographic information system that will be used to route all 911 calls in the state.

Committee Tours

In June 2018, the committee toured Microsoft Corporation in Fargo. Presentations by representatives of Microsoft included Microsoft's TechSpark program; Microsoft cloud services, security, and potential for state government; and other Microsoft Corporation initiatives. In June 2018, the committee toured DCN in Fargo. The presentation by DCN included a review of services and facilities.