

NORTH DAKOTA LEGISLATIVE MANAGEMENT  
Minutes of the  
**INFORMATION TECHNOLOGY COMMITTEE**

Wednesday, December 20, 2017  
Harvest Room, State Capitol  
Bismarck, North Dakota

Representative Corey Mock, Chairman, called the meeting to order at 10:00 a.m.

**Members present:** Representatives Corey Mock, Randy Boehning, Glenn Bosch, Robin Weisz; Senators Howard C. Anderson, Jr., Kyle Davison, Larry J. Robinson, Terry M. Wanzek; Citizen Member Shawn Riley

**Members absent:** Representatives Christopher D. Olson, Gary R. Sukut; Senator Richard Marcellais

**Others present:** See [Appendix A](#)

**It was moved by Senator Robinson, seconded by Representative Weisz, and carried on a voice vote that the minutes of the September 19, 2017, meeting be approved as distributed.**

### **INFORMATION TECHNOLOGY DEPARTMENT ANNUAL REPORT**

Mr. Dan Sipes, Deputy Chief Information Officer, Information Technology Department, presented information ([Appendix B](#)) regarding the Information Technology Department's (ITD) annual report. He said a new website platform was initiated during fiscal year 2017 that utilizes a single common code base to reduce costs and time needed for agency websites to become operational. He said this platform allows for easier security patches and reduces the cost to agencies to maintain the websites. He said 5 agencies are currently using this platform, 14 agencies are implementing the platform, and 5 agencies are evaluating whether to implement the new platform. He said the department has contracted with a vendor to perform automated phishing testing on state employees to promote cybersecurity awareness and provide information to the department. He said the department performed a strategic plan to identify areas of focus. He said the strategic focus areas are operational excellence, customer service, business integration, leadership and innovation. He said employee turnover was 7.29 percent in fiscal year 2017, compared to 4.56 percent in 2016 and 8.03 percent in 2015.

### **REPORT FROM THE CHIEF INFORMATION OFFICER**

Mr. Shawn Riley, Chief Information Officer, Information Technology Department, presented information ([Appendix C](#)) regarding the preliminary results of the department's operational assessment. He said ITD has three strategic pillars, including alignment, efficiency, and delivery, which are all driven by culture. He said ITD attempts to run operations, grow strategies and services, and transform services to allow for new efficiencies. He said ITD currently has allocated 91 percent of department resources to run operations, 9 percent to growth, and 0 percent to transformation. He said the preferred distribution of full-time equivalent (FTE) employees would be 50 percent responsible for running operations, 30 percent dedicated to growth, and 20 percent committed to transformation. He said the operational assessment compared the operations of ITD to a model developed by the National Institute of Standards and Technology and the Information Technology International Library.

Mr. Riley said the assessment identified 57 initiatives to improve information technology effectiveness, providing 26 priority recommendations. He said the assessment revealed employees enjoy working at ITD, but are concerned with information technology unification. He said the current funding model is leading to poor behavior and inefficiency. He said over 50 initiatives will develop as a result of the assessment, of which 10 will be started immediately. He said the initiatives will be prioritized based on the impact on run, grow, and transform percentages; unification; strategic pillars; services; and resources available. He said the timeline to complete 24 initiatives is 18 to 24 months.

In response to a question from Representative Weisz, Mr. Riley said the current ITD funding structure does not allow the department to be as effective as possible and encourages the department to charge more than necessary. He said the funding structure requires the department to charge for certain services that could otherwise be absorbed by the department.

In response to a question from Representative Boehning, Mr. Riley said the decision to buy or build certain products depends on the nature of the product and need of the user. He said commodity products, such as Microsoft Office or Google Docs, should be purchased while specialty products are better built by the department. He said while products built by the department are often more expensive than purchased products, built products may provide a greater longer-term value.

In response to a question from Chairman Mock, Mr. Riley said he was not aware of any other state governments operating a capability-maturity model involving run, grow, and transform metrics, although private sector organizations, such as Google, Microsoft, Mayo Clinic, and Cleveland Clinic, have utilized a similar model.

**INFORMATION TECHNOLOGY DEPARTMENT HELP DESK**

Mr. Gary Vetter, Director, Enterprise Services Division, Information Technology Department, presented information ([Appendix D](#)) regarding the ITD Help Desk, also referred to as the Enterprise Service Desk. He said the Help Desk is comprised of 1 service desk manager, 5 service desk analysts, 2 service desk interns, and 2 night operators. He said in addition to onsite staff operating the Help Desk Monday through Friday, there are also on-call staff on Saturday and Sunday. He said 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

Mr. Vetter said 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.

In response to a question from Representative Bosch, Mr. Vetter said any ITD Help Desk employee may receive a service call, including interns, but each employee has the opportunity to transfer the call to a higher priority level if the request is too complicated for the employee's abilities, resulting in a more experienced employee servicing the request.

**STATEWIDE INTEROPERABLE RADIO NETWORK**

Mr. Duane Schell, Director, Network Services Division, Information Technology Department, presented information ([Appendix E](#)) regarding the statewide interoperable radio network (SIRN). He said SIRN is a project to improve mission critical voice communications for the North Dakota public safety community. He said the 2017 Legislative Assembly approved House Bill No. 1178, which requires political subdivisions to add an additional fee of \$0.50 to the fee imposed on assessed communication services to be deposited in the newly established SIRN fund. He said this fee is expected to generate \$9.6 million of revenue for the SIRN project during the 2017-19 biennium. He said the current balance in the fund is \$727,238 and expenditures incurred to date total \$29,038. He said in addition to the \$0.50 fee, Section 7 of House Bill No. 1178 authorizes ITD to obtain a loan of up to \$15 million from the Bank of North Dakota for the SIRN project. He said the department has not yet obtained the loan.

In response to a question from Chairman Mock, Mr. Schell said the \$0.50 fee mandated in House Bill No. 1178 is assessed and collected by communication carriers who send the funds to local jurisdictions. He said the local jurisdictions then forward the funds to the State Treasurer for deposit in the SIRN fund. He said this process results in a delay between collection of the fee and deposit of the revenue into the SIRN fund. He said due to this delay, at this time it is difficult to estimate if the \$9.6 million in projected revenue will be collected during the 2017-19 biennium.

Mr. Schell said the Statewide Interoperable Executive Committee and the Large Project Oversight Committee approved a project charter for the SIRN project. He said the project is currently in the procurement stage, as a request for proposal was issued in November 2017. He said the deadline to receive vendor proposals is February 15, 2018, and anticipates a contract being entered into beginning in July 2018.

Mr. Schell said Section 8 of House Bill No. 1178 requires, by September 30, 2018, all North Dakota entities operating a public safety answering point (PSAP) to relinquish legal rights to any radio frequency required for the SIRN trunk system.

In response to a question from Representative Boehning, Mr. Schell said some PSAPs are hesitant to relinquish their rights to radio frequencies, but ITD has not yet encountered any problems with this process.

Representative Boehning expressed concern regarding the number of PSAPs. He said due to a lack of employees available for staffing, the number of PSAPs should be consolidated to eight to provide a regional PSAP system.

## **LARGE INFORMATION TECHNOLOGY PROJECT REPORTING**

Mr. Justin Data, Data Manager, Enterprise Service Division, Information Technology Department, presented information ([Appendix F](#)) regarding large information technology project reporting and the most recent quarterly summary status report ([Appendix G](#)). He said four projects reported in the planning stage and are not required to provide status reports, while one project moved into the execution phase during the third quarter of 2017. He said there are three iterative projects and two projects with budgets over \$5 million, all of which are operating in green status, reporting on schedule and within budget. He said of the remaining five major information technology projects with budgets less than \$5 million, four reported in green status, one in yellow status, and zero in red status.

Mr. Data said the project in yellow status, the Department of Human Services (DHS) CORE operating rules enterprise project, has concluded and the closeout report ([Appendix H](#)) revealed the project was 91.6 percent behind schedule but 4.1 percent under budget.

Mr. Data also provided the project closeout report ([Appendix I](#)) for the DHS transformed Medicaid statistical information system project, which reported 4.2 percent behind schedule but .024 percent under budget compared to the final baseline. He said the funding for this project was primarily from federal sources.

## **NORTH DAKOTA VOTER DATABASE**

Mr. Jim Silrum, Deputy Secretary of State, Secretary of State's office, presented information ([Appendix J](#)) regarding attempted breaches of the North Dakota voter database during the 2016 election cycle. He said during the summer of 2016, the federal Department of Homeland Security became aware of web activity searching for election system vulnerabilities. He said 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. He said while North Dakota was targeted, the election system was not breached.

In response to a question from Representative Boehning, Mr. Silrum said it is unclear who was responsible for the attempted breach, but it was likely from nation-state governments. He said the individuals responsible for the attempted breaches were primarily searching for voter registration information in most states, but these attempted breaches could not be successful in North Dakota, as there are no voter registration requirements in North Dakota.

In response to a question from Senator Wanzek, Mr. Silrum said the attempted breaches in other states likely were made in an attempt to manipulate voter information, including voter precinct assignments, in order to cause confusion and prevent certain individuals from voting on election day. He said the attempted breaches also targeted information regarding North Dakota election results, but because North Dakota votes are marked on paper and counted on machines not connected to the Internet, it is not possible to tamper with North Dakota election votes remotely.

In response to a question from Chairman Mock, Mr. Riley said the State of North Dakota defends against over 7.5 million cyberattacks per month, originating from almost every country in the world, of which some are from organized governments, but most are unorganized attacks. He said all 50 states are attacked on a daily basis.

## **EDUCATION-RELATED INFORMATION TECHNOLOGY UPDATES**

### **Higher Education**

Mr. Darin King, Chief Information Officer, North Dakota University System, presented information ([Appendix K](#)) regarding higher education information technology activities. He said one project was completed during the third quarter of 2017, the North Dakota University System predictive analytics reporting implementation project. He said the project reported 26.7 percent under budget but 50.5 percent behind schedule. He said two projects were in the execution phase during the third quarter of 2017, both reporting in green status. He said the electronic grants administration project is currently 5.0 percent under budget but 18.0 percent behind schedule while the Blackboard Learning Management system project is 2.0 percent under budget but 6.1 percent behind schedule.

### **Education Technology Council**

Ms. Rosi Klobberdanz, Director, Educational Technology Council, Information Technology Department, presented information ([Appendix L](#)) regarding elementary and secondary education information technology activities. She said the Educational Technology Council was awarded \$1,465,763 for 101 projects in 85 school districts during the

2015-17 biennium, impacting 2,600 employees and 42,500 students. She said the E-Rate STAGEnet application was provided funding of \$2,375,000. She said as of October 8, 2017, there were 113,358 active students on PowerSchool.

In response to a question from Senator Davison, Ms. Kloberdanz said PowerSchool is not hosted on the cloud. She said PowerSchool information is entered by each school into servers hosted by ITD.

Mr. Schell said there are multiple security levels and access rights for schools, including firewalls. He said schools utilizing STAGEnet are using the private ITD network, not the Internet, so information entered by schools into PowerSchool is encrypted and transferred from the school to an ITD data center.

Regarding cybersecurity in K-12 schools, Ms. Kloberdanz said in order to protect students, staff, and data, the immediate areas of concern are security education; information security policies, procedures, and standards; and security-related maintenance. She said there is a network project currently in process to review network segmentation within the K-12 community. She said the project includes reviewing existing network firewall policies and creating additional zones within the network to further protect the K-12 community. She said EduTech is working with ITD security staff to develop K-12 information security guidelines, practices, and operational plans. She said security training and awareness are being offered as part of this project.

In response to a question from Representative Boehning, Ms. Kloberdanz said in addition to public schools, EduTech provides services to private schools and tribal schools.

Ms. Kloberdanz said nationwide, students utilizing SmartLab technology experience higher standardized test scores in English, mathematics, and science. She said the LaMoure Public School District was the first North Dakota school district to implement a SmartLab. She said as a result, the North Dakota Center for Distance Education (CDE) evaluated the use of SmartLab technology in the LaMoure Public School District to assess the impact on North Dakota student performance. She said by using data available through the statewide longitudinal data system, CDE concluded there is a probable connection between student SmartLab exposure and increased student performance in English, mathematics, and science.

Ms. Kloberdanz said test scores in these subject areas for LaMoure public school students in grades 4 through 12 increased by a greater margin than the rest of the state between the 2014-15 and 2016-17 school years. She said while there appears to be a probable connection between SmartLab exposure and increased student test scores, she cautioned that additional data must be collected to further evaluate this potential correlation. She said there are currently seven SmartLabs in North Dakota schools, while eight SmartLabs will be installed during the summer of 2018 and an additional eight SmartLabs will be installed at a later date.

**STUDY OF INFORMATION TECHNOLOGY DEPARTMENT SERVICES AND RATES**

The Legislative Council staff presented a memorandum entitled [Selected States Information Technology Budgets, Services, and Rates](#). He said information technology budgets of ITD, Montana State Information Technology Services Division of the Department of Administration (MSITS), South Dakota Bureau of Information and Telecommunications (BIT), and Minnesota Information Technology Services (MNIT) are largely funded through special funds. He said the information technology budgets for the 2015-17 biennium or fiscal years 2016 and 2017, were as follows:

Funding Source	North Dakota - ITD	Montana - MSITS	South Dakota - BIT	Minnesota - MNIT
	2015-17 Biennium	2015-17 Biennium	Fiscal Years 2016 and 2017	Fiscal Years 2016 and 2017
General fund	\$26,078,145	\$0	\$14,036,552	\$2,000,000
Federal funds	3,088,121	0	2,288,110	2,000,000
Special funds	148,624,918	85,968,487	93,911,065	926,000,000
Total funds	\$177,791,184	\$85,968,487	\$110,235,727	\$930,000,000

The Legislative Council staff presented a memorandum entitled [Results of a Survey of State Agencies Regarding Information Technology Department Services and Rates](#).

The Legislative Council staff said state agencies were notified that all responses provided related to the study would remain anonymous. He said of the 57 agencies asked to participate, 54 responded with completed surveys. He said of the 54 responding agencies, 52 stated their agency receives information technology (IT) services from ITD. He said 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 Legislative Council staff said 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.

The Legislative Council staff said of the 54 responding agencies, 37 reported their agency received IT services from private providers during the 2013-15, 2015-17, or 2017-19 (projected) bienniums. He said the agencies reported IT expenditures paid to private providers of \$52,931,032 during the 2013-15 biennium, \$184,105,848 in the 2015-17 biennium, and a projected expenditure total of \$151,583,904 during the 2017-19 biennium.

The Legislative Council staff said a total of 50 agencies responded to a question related to the services provided by ITD, which asked the agencies to rank their experiences with ITD related to certain categories. He said agencies reported an average approval rating of 3.69 on a scale of 5 regarding ITD key performance measures. He said 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. He said the 50 agencies rated their 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 Legislative Council staff said state agencies were asked if the rates charged by ITD were fair given the services provided from ITD. He said of the 52 agencies receiving ITD services, 13 did not provide a conclusive answer to the question. He said of the remaining 39, 12 agencies, or 30.8 percent, believed the ITD rates were fair while 27 agencies, or 69.2 percent, indicated they were not satisfied with the rates charged by ITD.

The Legislative Council staff said state agencies were also asked to indicate their preference for receiving IT services. He said 24 of the 47 responding agencies, or 51.1 percent, stated they would prefer to utilize a combination of ITD staff, agency staff, and private providers, while 12 agencies, or 25.5 percent, said they prefer to utilize ITD exclusively for IT services. He said five agencies, or 10.6 percent, indicated they would prefer to utilize both ITD staff and agency staff.

The Legislative Council staff said of the 54 responding agencies, 32 agencies, or 59.3 percent, employ FTE IT positions, totaling 188.75 FTE positions, ranging within agencies from 0.5 to 41.50 FTE positions.

### **OTHER INFORMATION**

Chairman Mock said the next committee meeting will be Thursday, March 22, 2017.

No further business appearing, Chairman Mock adjourned the meeting at 2:30 p.m.

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Levi Kinnischtzke  
Fiscal Analyst

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