



INFORMATION TECHNOLOGY COMMITTEE

Thursday, October 21, 2021
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, Sebastian Ertelt, Keith Kempenich, Corey Mock*, Nathan Toman; Senators Cole Conley, Kyle Davison, Richard Marcellais, Dave Oehlke, Kristin Roers; Citizen Member Shawn Riley

Member absent: Representative Robin Weisz

Others present: See [Appendix A](#)

**Attended remotely*

It was moved by Senator Oehlke, seconded by Senator Roers, and carried on a voice vote that the minutes of the August 25, 2021, meeting be approved as distributed.

STUDY OF INFORMATION TECHNOLOGY UNIFICATION

Information Technology Department

Mr. Greg Hoffman, Director of Administrative Services, Information Technology Department, presented information ([Appendix B](#)) regarding fees and rates charged by the Information Technology Department (ITD) to state agencies for services provided, how information technology (IT) unification has affected rates, federal requirements of internal service fund agencies, how ITD manages the balance of the ITD operating service fund, and examples of rate reductions from prior bienniums. He noted:

- ITD maintains two billing categories, telecommunications rates and data processing rates.
- For each biennium, ITD establishes IT rates for services provided to state agencies during the spring of each even-numbered year before the biennium.
- ITD does not maintain different rates for services provided to executive and nonexecutive branch agencies or for federally funded agencies and general fund agencies.
- Certain agencies have underfunded IT needs, which has been discovered during the IT unification initiative.
- If IT efficiencies are realized which result in a decrease in cost, the decreased cost to the agency often results in an increase in the quantity of IT services requested by the agency of ITD.
- Not all efficiencies realized affect service rates.
- ITD is considered an internal service fund and is subject to federal Office of Management and Budget A-87 regulations, which are evaluated on June 30th of each year and which require ITD to limit available cash to the equivalent of 60 days of the agency's average operating expenses.
- ITD reduced service rates by \$1.6 million for servers, disk, and long distance telecommunication services during fiscal year 2016 and \$2.4 million for servers, disk, and hosting services during fiscal year 2017.

In response to questions from committee members, Mr. Hoffman noted:

- Salaries and wages, operating expenses, and other related expenses are considered when establishing IT rates for services to be provided to state agencies.

- ITD is concerned if the Legislative Assembly removes general fund appropriations from state agency budgets and appropriates the funding to ITD because federal funding received by agencies may no longer be available for IT services.

Mr. Duane Schell, Chief Technology Officer, Information Technology Department, presented information ([Appendix C](#)) regarding service level agreements entered with state agencies, services and rates agreed to, how the quality of services is measured, and the types and number of Help Desk requests from unified and nonunified agencies, including a comparison of the number of requests. He noted:

- ITD maintains service level agreements based on ITD services offered and only enters agreements with specific agencies if the agencies have unique service needs.
- There is no difference in ITD service level agreements with unified agencies and nonunified agencies; however, ITD and unified agencies engage in more detailed discussion regarding IT business needs, goals, objectives, and accomplishments compared to nonunified agencies.
- Services available to unified agencies which are not available to nonunified agencies include application patch and update management, service and demand management with real-time dashboard statistical updates, access to enterprise toolsets, and automation of manual processes.
- ITD receives an average of 12,000 Help Desk requests each month and after the integration of unified state agencies systems, the expectation is the average will increase to 13,000 to 14,000 each month as unified agencies cease management of their IT service needs.
- ITD has received feedback indicating a 96 percent satisfaction rate from agencies receiving services from ITD.

In response to a question from a committee member, Mr. Schell noted before IT unification there were more than 20 incident management software applications being utilized by executive branch agencies, which has been reduced to 5 applications.

Department of Trust Lands

Ms. Jodi Smith, Commissioner, Department of Trust Lands, presented information ([Appendix D](#)) regarding benefits or concerns of IT unification, any cost-savings realized as a result of IT unification, and a comparison of ITD invoices and bills for services provided to the Department of Trust Lands (DTL) before and after IT unification. She noted:

- The 2019 Legislative Assembly transferred 2 of DTL's 3 full-time equivalent (FTE) IT positions to ITD, resulting in DTL partially unifying IT services with ITD.
- DTL has experienced concerns with IT unification, including the timeliness of programming services provided by ITD and whether ITD or DTL staff are responsible for certain services and duties.
- Suggestions to improve the IT unification process include establishing a process for communication between unified agencies and ITD regarding roles and responsibilities after unification; providing a clear understanding of how IT unification will affect capital projects; requiring ITD service invoices to provide additional detail to increase transparency regarding which services are provided and at which rates; increasing communication between ITD and agencies when service rates are increased, decreased, or are added or removed from invoices; and encouraging ITD to recognize the unique business model needs of each unified agency.
- ITD invoices for services provided to DTL totaled \$136,034 during fiscal year 2018, \$158,039 during fiscal year 2019, \$208,881 during fiscal year 2020, and \$222,817 during fiscal year 2021.

In response to questions from committee members, Ms. Smith noted:

- DTL would support ITD establishing a flat-rate fee for all ITD services.
- If an agency elects to partially unify with ITD like DTL did, it would be beneficial for ITD to conduct the start, stop, continue process with both staff unifying with ITD and staff staying with the original agency to clearly define duties of IT staff in both agencies.

Department of Transportation

Ms. Terra Miller Bowley, Deputy Director for Administration, Department of Transportation, presented information ([Appendix E](#)) regarding benefits or concerns of IT unification, any cost-savings realized as a result of IT unification, and a comparison of ITD invoices and bills for services provided to the Department of Transportation (DOT) before and after IT unification. She noted:

- DOT transferred 41 FTE IT positions to ITD for unification during the 2019-21 biennium.
- Benefits of unification include workstation standardization, server consolidation, and contract management.
- Concerns of unification include district DOT offices losing onsite IT support; a lack of communication with ITD regarding ITD services, rates, and support; and DOT financial management lacking IT expertise to review, evaluate, and potentially correct ITD invoices, which was previously done by the IT staff transferred to ITD.
- An accurate comparison of DOT IT costs before and after IT unification is not possible due to DOT and ITD's accounting policies regarding overhead costs differing, but generalized information by business function can be provided.
- DOT monthly invoices from ITD include more than 4,000 service charges ranging from \$0.01 to \$57,000.
- DOT IT expenses increased \$4.5 million or 18.5 percent from the 2017-19 biennium to the 2019-21 biennium, of which \$2.4 million was related to a driver's license and motor vehicle large IT project and \$2.1 million was related to other ITD service charges, including salary and benefit hourly labor rates, hardware, software, desktop support, and other services.

In response to questions from committee members, Ms. Miller Bowley noted:

- Some DOT IT projects and tasks undertaken after unifying with ITD could have been completed without unification but might not have been completed as soon, or certain strategic plans would not have been developed.
- DOT would support ITD establishing a flat-rate fee for all ITD services.

Insurance Commissioner

Mr. John Arnold, Deputy Insurance Commissioner, Insurance Department, presented information regarding the potential benefits, issues, and concerns of IT unification, and the agency's interest in being included in future IT unification initiatives. He noted:

- The Insurance Department employs 1 FTE IT position.
- The department is interested in unifying IT staff with ITD, but not at this time.
- A benefit of IT unification is having a larger team of IT staff to assist the agency with its IT needs.
- Concerns of IT unification include anticipated increases in IT costs after unifying with ITD and not having dedicated staff who are knowledgeable about national insurance IT systems.

In response to a question from a committee member, Mr. Arnold noted other employees of the Insurance Department are capable of performing duties of the FTE IT position if that individual is on vacation or unable to work for a short time period.

Department of Public Instruction

Mr. Ross Roemmich, Management Information Systems Director, Department of Public Instruction, presented information ([Appendix F](#)) regarding the potential benefits, issues, and concerns of IT unification, and the agency's interest in being included in future IT unification initiatives. He noted:

- The Department of Public Instruction (DPI) employs 7 FTE IT positions that often work collaboratively with ITD.
- Potential benefits of DPI unifying IT staff with ITD are joining an agency with established processes to allow for sharing of IT expertise and best practices.
- Workforce transition evaluations need to be completed before DPI considers unifying with ITD to analyze IT costs, prevent unnecessary organization hierarchy, and improve ITD output and service response times.
- It is unknown if the needs of K-12 schools could continue to be met by DPI if the agency unifies IT staff with ITD, but conversations between the two agencies are ongoing.

LARGE PROJECT REPORTING

Large Information Technology Projects

Mr. Justin Data, Director, Project Management Office, Information Technology Department, presented information ([Appendix G](#)) regarding large IT project reporting, including the most recent quarterly summary status report ([Appendix H](#)) and project startup reports and closeout reports completed in August and September 2021 ([Appendix I](#)).

State Information Technology Advisory Committee

Mr. Data presented information ([Appendix J](#)) regarding an update of changes made by the State Information Technology Advisory Committee (SITAC) related to the process of prioritizing and reviewing large IT projects. He noted:

- Agencies will resume submitting large IT project proposals to SITAC which contain agency identification information, which was included in the prioritization process before the 2019-21 biennium.
- Key information SITAC will consider when prioritizing IT projects during the 2021-23 biennium includes a financial evaluation of the estimated 5-year cost and benefit expectations, and other cost information; and certain strategic categories, including strategic alignment, citizen experience, the run-grow-transform initiative, infrastructure modernization, system or process rationalization, return on investment, and security.
- To compare various projects and their importance, SITAC will prioritize projects using a scale containing minimal, low, moderate, strong, and extreme evaluation options to evaluate the return on investment, business value, and improvement to public services.

In response to a question from a committee member, Mr. Data noted, with the exception of estimated cost information, SITAC rankings do not include information regarding resources available to work on and complete large IT projects.

In response to a question from a committee member, Mr. Shawn Riley, Chief Information Officer, Information Technology Department, noted ITD's order of priority for IT projects is to first buy, second reuse, and third build software or other IT products due to the cost of software and IT products.

Department of Human Services

Ms. Carmen Traeholt, Early Childhood Licensing Administrator, Department of Human Services, presented information ([Appendix K](#)) regarding the status of the early childhood integrated data system project and the child care licensing project and how the systems will be integrated. She noted:

- The early childhood integrated data system collects, integrates, maintains, stores, and reports information from various early childhood education programs from multiple organizations that serve children and families from birth to age 5.
- The child care licensing project will transition the licensing process to paperless licensing, will interface with the resource and referral website, provide for more efficient licensing review, and is projected to be complete in June 2022.
- The self-service early childhood portal will compile licensing, professional development, quality, teaching strategies, family support, school engagement, and professional development data of early childhood education programs.

EDUCATION-RELATED INFORMATION TECHNOLOGY

Mr. Hadi Partovi, Chief Executive Officer, Code.org, presented information ([Appendix L](#)) regarding the value of cybersecurity education for students and the workforce. He noted:

- Computer science courses are as important for students as traditional science, English, and mathematics courses.
- The benefits of students enrolling in computer science and cybersecurity courses include students outperforming their peers in reading, writing, mathematics, and science exams in elementary school; being 17 percent more likely to enroll in a 4-year college; and often earning higher wages after graduation.
- 75 of 194 North Dakota high schools offer computer science courses.

In response to a question from a committee member, Mr. Partovi noted Code.org provides free, open source computer science and cybersecurity curriculums and partners with the Department of Public Instruction and EduTech to instruct teachers.

Ms. Rosi Kloberdanz, Director, EduTech, Information Technology Department, presented information ([Appendix M](#)) regarding the status of elementary and secondary education IT activities and plans for the 2021-23 biennium. She noted recent EduTech activities and accomplishments, future initiatives, information regarding the PK-20W Initiative, K-12 computer and cybersecurity standards and credentials, public-private partnerships, and EduTech's goal to encourage North Dakota students to become computer science and cybersecurity professionals.

STUDY OF GOVERNMENT CYBERSECURITY

Veterans' Home

Mr. Hoffman presented information ([Appendix N](#)) regarding the effects of changes made in Senate Bill No. 2007 (2021) related to the Veterans' Home IT services, including the effect on state and local cybersecurity and the Statewide Technology Access for Government and Education Network (STAGEnet). He noted:

- Changes made during the 2021 legislative session related to the Veterans' Home IT services remove the requirement that the Veterans' Home receive IT services from ITD. He indicated the changes have the potential to weaken the security of the Veterans' Home and STAGEnet by increasing the frequency of malicious hacking and ransomware attacks.
- The Veterans' Home IT programs do not have vulnerability mitigation software and have less antivirus software coverage than would be provided by ITD.
- If an agency uses an alternative network to STAGEnet and a cybersecurity incident occurs, ITD's response time is approximately 24 hours instead of 15 minutes.
- The Veterans' Home does not intend to find an alternative to STAGEnet for Veterans' Home network needs as a result of Senate Bill No. 2007.

In response to a question from a committee member, Mr. Michael Gregg, Security Operations Director, Information Technology Department, noted if an agency is not required to comply with ITD network standards or uses an alternative network solution instead of STAGEnet, there is a security risk to other state agencies and political subdivisions when communicating with the agencies on STAGEnet because ITD does not have access to that agency's network activity.

In response to a question from a committee member, Mr. Schell noted STAGEnet is not owned by the state; rather, ITD leases fiber, circuits, and IT equipment from more than 30 telecommunication providers in the state to provide network services to state and local government agencies and the public sector.

Mr. Mark Johnson, Administrator, Veterans' Home, presented information ([Appendix O](#)) regarding IT initiatives and activities undertaken as a result of changes made in Senate Bill No. 2007 and the agency's plans for IT and cybersecurity services during the 2021-23 biennium, including cost associated with those services. He noted the Veterans' Home has chosen to continue receiving IT and cybersecurity services from ITD for the 2021-23 biennium to avoid purchasing additional computers and Microsoft Office 365 licenses and having to host a private email server that may not integrate with state systems.

In response to a question from a committee member, Mr. Johnson noted because the Veterans' Home IT budget was not adjusted as a result of the policy changes made in Senate Bill No. 2007, the Veterans' Home is able to pay ITD for services provided during the 2021-23 biennium.

Political Subdivisions

Mr. Hoffman presented information ([Appendix P](#)) regarding revenue received from state agencies and political subdivisions for IT services, potential alternative cybersecurity funding sources, and any proposed legislation needed related to political subdivisions potentially paying their share of the cost of government cybersecurity. He noted:

- ITD collected \$6.5 million from service fee revenue during the 2019-21 biennium and through October 21, 2021, ITD has collected approximately \$825,000 from service fee revenue during the 2021-23 biennium, of which less than 5 percent was collected from political subdivisions.
- It is unknown what metric should be used to allocate government cybersecurity costs to state agencies compared to political subdivisions. Potential metrics include the number of agencies, counties, cities, universities, and schools; endpoints managed by each organization; risk assessments; training; or other cybersecurity policies.
- Potential funding sources for government cybersecurity include the general fund, foundation aid stabilization fund, state aid distribution fund, or funding from public-private partnerships.

In response to a question from a committee member, Mr. Riley noted nearly all counties, cities, and school districts cooperate and collaborate with ITD regarding IT services and cybersecurity policy.

Ward County

Mr. Jason Blowers, Information Technology Director, Ward County, presented information ([Appendix Q](#)) regarding cybersecurity services provided by ITD, cybersecurity needs, the feasibility of paying for the local share of government cybersecurity services, and any preventative cybersecurity threat controls implemented, such as multi-factor authentication or zero trust security procedures. He noted Ward County:

- Employs 4 FTE IT positions and supports 280 end users and 340 exchange email accounts.
- Collaborates with ITD for various IT and cybersecurity services, including desktop and server operating system critical updates; application updates; troubleshooting of state-owned applications; installation and administration of antimalware, firewall, access control policies, and other policies; employee onboarding; and end user training.
- Collaborates with other county IT departments to share cybersecurity policies and best practices.

City of Fargo

Mr. Ron Gronneberg, Chief Information Officer, City of Fargo, presented information ([Appendix R](#)) regarding cybersecurity services provided by ITD, cybersecurity needs, the feasibility of paying for the local share of government cybersecurity services, and any preventative cybersecurity threat controls implemented, such as multi-factor authentication or zero trust security procedures. He noted:

- ITD provides various IT and cybersecurity services to the City of Fargo, including providing access to STAGEnet, Interactive Video Network video conference, next generation firewall services, antivirus scanning, malware detection, sandboxing of unknown attachments, dark web motioning services, and installation of equipment to protect against distributed denial of service attacks.
- The City of Fargo utilizes multi-factor authentication for all city external Internet connections and maintains its firewall and applications between STAGEnet and the City of Fargo production networks to provide local control and additional protection against cybersecurity attacks.
- Evaluation of risk, cost, and impact on time and staff resources are needed before implementing cybersecurity tools.
- The City of Fargo is willing to discuss the feasibility of paying for the local share of government cybersecurity costs.

Bismarck Public Schools

Mr. Casey Mueller, Assistant Director of Technology, Bismarck Public Schools, presented information ([Appendix S](#)) regarding cybersecurity services provided by ITD, cybersecurity needs, the feasibility of paying for the local share of government cybersecurity services, and any preventative cybersecurity threat controls implemented, such as multi-factor authentication or zero trust security procedures. He noted Bismarck Public Schools:

- Provides technology services for 13,468 students and 2,247 employees, including classroom and administrative technology, network and security services, and infrastructure and support technology.
- Provides user awareness training and establishes policies, standards, and safeguards to increase cybersecurity education of students and staff and promote cybersecurity best practices.
- Works with ITD by utilizing STAGEnet; implementing systems, applications, and user protections; sharing firewall technology for antivirus scanning and protection against distributed denial of service attacks; using ITD systems and dark web monitoring services and endpoint protection services, and sharing information.
- Obtains cybersecurity insurance through the North Dakota Insurance Reserve Fund.

No further business appearing, Chairman Bosch adjourned the meeting at 4:01 p.m.

Levi Kinnischtzke
Senior Fiscal Analyst

ATTACH:19