

December 2019 Quarterly Report

State of Minnesota

Blue Ribbon Council on IT

This fourth quarterly report of the Blue Ribbon Council on IT includes a summary of the three meetings of the full council held in the fourth quarter of 2019, recommendations, and updates from the three sub-committees for Cybersecurity, Data Management & Privacy, and Modernization.

December 31, 2019

Governor Tim Walz
Lt. Governor Peggy Flanagan
Speaker of the House Melissa Hortman
Minority Leader Kurt Daudt
Senate Majority Leader Paul Gazelka
Senate Minority Leader Tom Bakk
MNIT Commissioner Tarek Tomes

Cc:
Members of the Blue Ribbon Council on IT

On behalf of the BRC-IT, we hereby submit the fourth quarterly report containing a summary of the meetings of the full council and the sub-committees. The Council has been fully engaged with many sub-committee meetings and full council meetings in these last three months of 2019. I am pleased with the work and progress of our members.

We look forward to continued progress and refined focus as we enter the last six months of our mission.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick King". The signature is written in a cursive, flowing style.

Rick King
Chair, Blue Ribbon Council on IT

Executive Summary

With the objective of closing out the year with a clear, unified direction, the Blue Ribbon Council on IT (BRC-IT)¹ held three full council meetings during the fourth quarter of 2019. In addition, each sub-committee maintained a schedule of either monthly or bi-weekly meetings. Members synthesized knowledge obtained in the first two quarters of the year and translated that knowledge into concrete recommendations. They also continued to elicit new information for future recommendations, holding meetings with external advisors who provided excellent advice and insight from industry and other levels of government. These interactions allowed the sub-committee members to come to the full council meetings with valuable information and to offer recommendations with broad context.

The recommendations identified in this report are a culmination of ideas discussed over the course of multiple meetings and agreed upon unanimously by council members.

¹ See Appendix 1 for an overview of the Blue Ribbon Council on IT.

Blue Ribbon Council on IT Recommendations

BRC-IT members offer the following recommendations to further the goal of ensuring reliable, secure and accurate information technology services.

Recommendation for Effective and Efficient Procurement

Effective and efficient procurement is critical to modernization of IT for the State of Minnesota. Current procurement law allows for the flexibility required to move at the speed of change, giving agencies the ability to find and engage vendors that can meet their needs, while also protecting vendors' proprietary information. Amending statutory law slightly or providing a clear interpretation of current statutes will enable innovative, faster procurement.

- 1. MNIT and the Department of Administration should ensure that agencies understand and use their authority and ability to engage more fully with vendors before a final vendor is selected.**

In order to improve outcomes for the State, Agencies must be able to engage in further conversation and Q&A with vendors. It enables maximum agility by allowing them to gather more detailed information with which they can make informed decisions that better serve the State.

Recommendation for a Modernization Playbook

With IT services centralized in MNIT and additional IT professionals embedded in agencies, there is potential for confusion and contradictory activity. Agencies and MNIT alike would benefit from a modernization playbook that clarifies roles and responsibilities and establishes the proper protocol for engaging MNIT and for ensuring successful development, procurement and implementation.

- 2. MNIT will convene a working group that includes MNIT and other agency representation to draft and present to the BRC-IT Modernization Subcommittee a high-level playbook for IT Modernization. It should cover the processes and responsibilities associated with business case development, process analysis, stakeholder engagement, acquisition, solutioning with vendors, talent strategy, managing change, systems operations, and system maintenance. It should ensure appropriate business process reengineering with strong stakeholder engagement.**

An IT system will only work when the right knowledge experts are available to help at the right stage of a process and if the right people are engaged in the right activities. A playbook can help to ensure this happens. The BRC-IT has a good mix of members who represent different perspectives that can help to shape an effective playbook. Recommendations should be provided to the Modernization subcommittee by February 1, 2020. This will allow sufficient time for evaluation and discussion by the Modernization subcommittee and the full council, before the June 2020 report recommendations are drafted.

Recommendation for Co-creation of a 10-year Modernization Outlook

MNIT maintains a large portfolio of applications. Some are brand new, some are nearing or at the end of life, and many fall somewhere between those extremes. MNIT monitors the health of this portfolio and has information that it is not currently shared with agency leaders, but could be. Agency priorities differ, as do their needs, and every agency should have a clear understanding of how and why various applications are used - and have a long-term plan for modernization. Agency leaders need clear guidance that will help them to evaluate risk and make decisions related to the IT required for their respective mandates.

- 3. State agencies should work closely with MNIT to develop a 10-year outlook for business modernization, so they can jointly create a 5-year technology modernization plan.**

A technology strategy should derive from the business architecture and the needs of the business. Employing a collaborative user-centric approach will benefit both MNIT and the agencies. As they develop these agency-specific modernization roadmaps, MNIT will see opportunities for consolidation and reuse across the portfolio, and agencies will see opportunities to reevaluate business processes.

Recommendation for Partnership with Counties in Project Development

State agencies initiate projects and develop programs that rely on data shared with, used by, and needed by counties to deliver services to the people living in those counties. Those projects and programs can run more smoothly, with fewer implementation and budgetary concerns, if the counties are involved at the outset of project development and throughout the lifecycle of the program. To this end, the State has a great resource in the Minnesota County IT Leaders Association (MNCITLA). The association has expressed interest in earlier partnership in the development programs that have an impact on their services, so their data needs and challenges are aligned with those of the sponsoring state agencies.

- 4. State agencies should work closely with other governmental units (including through MNCITLA) and tribal governments as partners at the beginning of projects and include an assessment of their data needs and challenges.**

By engaging with the other governmental units and tribal governments, state agencies can avoid some of the complications that arise from implementation of programs and establish shared goals and responsibilities.

Recommendation for County Inclusion in Data Privacy and Management Policy Establishment

Representatives from other governmental units and tribal governments can bring value to the State by participating in the early stages of project planning and helping to establish data practices policies. It will also add practical insight to the decisions made and foster faster acceptance.

- 5. State agencies should include other governmental units (including MNCITLA) and tribal governments in the process of developing data privacy and management policies.**

MNCITLA offers much experience and boots-on-the-ground insight into data practices policies and how they affect their delivery of services with a membership of technology leaders from more than 60 counties. This body has expressed interest in active participation in these discussions, and the State should take advantage of their experience, as well as that of similar representatives of other governmental units and tribal governments.

Recommendation for Minimization of Data Collected on Individuals

Agencies should only acquire the data they need to deliver their services. Extraneous data creates unnecessary risk and responsibility.

- 6. The State should minimize the collection of unnecessary data on individuals (including Personally Identifiable Information, also known as PII) when developing programs, polices, and legislation, and should promote this practice in conversation with other governmental units and tribal governments.**

The State will benefit from policies and practices that facilitate the use of data already available and discourage the collection and retention of unnecessary data. The BRC-IT expects to engage

in further discussion about data collection and will propose a more comprehensive set of related recommendations in the final report.

Recommendation for Interoperability

Agencies must have the ability to communicate with each other and use each other's data when it is appropriate to do so to minimize costly and problematic duplication of data collected and held by multiple agencies. Common data definitions between agencies are required for interoperability of systems to share data.

- 7. State leaders should align data definitions to facilitate data sharing and system interoperability. In furtherance of this goal, MNIT should convene a working group of MNIT and agency staff to make recommendations regarding the creation of a common data catalog and a metadata framework.**

Acquiring only the data needed, and using data that already exists, reduces risk and helps agencies provide services more efficiently. In some cases, data sharing is not appropriate, but legal and policy considerations should be the only reasons data can't be shared. Interoperability through common definitions will ensure that technical barriers don't also get in the way of efficient data sharing.

Recommendation for Critical Infrastructure Protection

Based on continual national cybersecurity issues, cyber protection should be recognized as critical infrastructure. The costs for recovery of infrastructure and data are in the multi-millions of dollars for recent cyber-attacks in cities such as Baltimore, Atlanta, Houston, Pensacola and New Orleans to name a few. These attacks would significantly impact citizens' lives by preventing them from accessing services and by compromising their data privacy, while also creating a significant loss in revenue for the State. The costs to mitigate and repair far outweigh the costs to protect our citizens and systems in the State of Minnesota.

- 8. Declare Cybersecurity Protection as critical infrastructure to allow for alternative funding capabilities, protection of operations and expeditious responses to emergencies.**

Cybersecurity incidents would have devastating effects on the security of citizens and systems. Minnesotans need to trust that all systems are protected from cyber threats to ensure protection of their data. This is as important as transportation systems, energy, communications, water and emergency services.

Recommendation for Long-Term Operational Cybersecurity Funding

Minnesota cannot fail on comprehensive cyber protection on behalf of its citizens. There is a need to ensure cyber protection and increased resiliency to the advancing cyber threats. This requires investing in long-term operational and maintenance funding.

- 9. Incorporate long-term, consistent, predictable and appropriate funding for cybersecurity operations, including maintenance, replacement and new purchase(s), into the State budget, based on a percentage of total spending.**

Without a direct and long-term funding source, information security capabilities will not be prepared for impending cyber-attacks, reducing resiliency for the State of Minnesota.

Recommendation for Creating Cybersecurity Public and Private Partnership

Creating a responsive public and private cybersecurity partnership will increase resiliency and protection for all. This would bring together best practices and capabilities to share technical knowledge to help support common cyber infrastructure strategy and commonality of practice.

- 10. Create a public/private partnership for cybersecurity to support other governmental units and tribal governments.**

A public/private partnership builds a cooperative environment allowing for joint response, shared best practices and alignment of security standards.

Recommendation for Creating a Cybersecurity Commission

Currently there isn't a mechanism to provide security information to the Legislature in the event of a major breach. Based on other significant events such as those in Atlanta, Georgia; Baltimore, Maryland; Houston, Texas; Pensacola, Florida and New Orleans, Louisiana we are recommending the Cybersecurity Commission documented in the September 2019 BRC-IT Quarterly Report include a method for members of the commission to receive briefings on sensitive cybersecurity information, to serve as a crisis management team and an ongoing operational committee for IT Security.

11. Within the LCC Legislative Commission on Cybersecurity, include procedures for the legislators to have appropriate security clearance and to hold closed meetings for briefings on the current condition of cybersecurity for the State of Minnesota.

With the ability to meet in private and with appropriate security clearance, this commission can review in-depth IT security and advise on building an executive dashboard on the health of cybersecurity at the State.

Monthly Meetings

Monthly meetings were held with the full BRC-IT in October, November and December. The selected topics and agencies that presented are listed in the table below. Summaries of the meetings follow.

October	Discussion	Procurement MNIT Procurement, Tracy Gerasch Department of Administration, Betsy Hayes
	Presentation	County and State Systems Interaction Renee Heinbuch, IT Director, Washington County Jason Lenz, IT Administrator, Lyon County
November	Discussion	Data Privacy Officer and Data Practices Governance BRT-IT Data Privacy Subcommittee Chair Eric Hallstrom
	Discussion	Project and Modernization Funding Over Fiscal Periods MNIT Commissioner Tarek Tomes
December	MNIT Update	Commissioner Tarek Tomes
	Discussion	Q4 2019 Recommendations & Report

OCTOBER 2019 MEETING SUMMARY

Chair King opened the October BRC-IT meeting by mentioning the recognition of some BRC-IT participants' work in other areas. The National Association of IT Officers recently named a program spearheaded by MNIT Commissioner Tarek Tomes as an award recipient, and BRC-IT Member Tewodros "Teddy" Bekele was recently named the chair of the Minnesota Broadband Task Force.

DISCUSSION: PROCUREMENT

BRC-IT Member Tom Butterfield initiated a conversation about the challenge of the procurement process in the context of state government. Modernization subcommittee meeting discussions, he noted, include a discussion of procurement challenges. He invited Betsy Hayes, the Chief Procurement Officer for the Department of Admin and Tracy Gerasch of MNIT Procurement to give an overview of the current procurement process.

After an informative presentation by Gerasch and Hayes and a robust discussion by the Council, it appeared that many of the problems attributed to the procurement process may in fact be misunderstandings and that even though an overhaul is not warranted, an awareness campaign of some sort could improve the procurement experience.

For example, Hayes noted that Minnesota was one of the first states in the country to adopt a 'best value' policy in 1998, which gives agencies in Minnesota greater freedom to select the 'right' vendor rather than just the cheapest. She also explained that the State's procurement process is guided by statutory language that is the envy of other states. It works so well that Minnesota has been asked by the National Association of State Procurement Officers (NASPO) to serve as the cooperative purchasing leader for a \$2 billion nation-wide master computer contract.

In addition, there is a misperception that a "cone of silence" shrouds the procurement process. It is designed to be fair and open, and it allows for more conversation than many realize. That openness can be a problem, according to several BRC-IT members, though, because during pre-proposal meetings in traditional RFP opportunities, vendors might choose not to reveal detail that would lead to the best selections.

New methods like Challenge-Based RFPs and Proof of Concept Procurement are being tested now. They offer greater flexibility and foster rapid feedback between agencies and vendors, with a greater focus on collaborative solutioning. In this model, the agency defines the problem or challenge, rather than the solution, which opens the door to possible solutions that are in the market (or could be built) that the agency may not have thought of.

In both traditional and these new Challenge-Based RFP situations, we must ensure that vendor information is protected where appropriate to unlock maximum potential. Hayes shared that

although the statutory language currently allows for this, it could be amended to provide more clarity.

Agency leaders noted these procurement processes and freedoms are not well-understood by agency staff, and it would be helpful to establish some level of procurement expertise within the agencies. Hayes agreed this would be helpful not only to the agencies, but also to the Department of Admin and MNIT. Procurement staff spend their time on contract review, negotiation and governance, so they have limited bandwidth for a broad training program or awareness campaign.

In response to the September 2019 BRC report suggesting that the Department of Admin and MNIT review procurement law and make recommendations, Hayes and Gerasch presented two suggestions to improve procurement: one to amend statutory language related to awards based on competitive proposals - not to change the current law, but to more clearly state what is already allowed; and the second to improve the technology available for procurement. The current process is still paper-heavy, and the Department of Admin and agency leaders and staff would benefit from an easy e-procurement system.

The other challenges discussed included the approval process for entering into IT service contracts (the threshold for review) and the lack of vendor accountability after a contract has been awarded. Both topics will be discussed further within the Modernization subcommittee, to establish flexibility for agencies and accountability for vendors.

In addition, simply increasing awareness about procurement protocol and policies has the potential to improve outcomes for agencies and in turn for citizens. If agency staff have good information about how to most effectively navigate the procurement process, they will be able to do it faster and will be more likely to identify the best vendor and the best solution. Minnesota can be proud of the example they set for state procurement leaders around the country. We want state agency staff to understand the value of the system we have.

PRESENTATION: COUNTY AND STATE SYSTEMS INTERACTION

BRC-IT Members Renee Heinbuch, IT Director for Washington County and Jason Lenz, IT Administrator for Lyon County, gave a presentation as representatives of the Minnesota County IT Leaders Association (MNCITLA) on the perspective of counties in state activities as they relate to the BRC-IT work. MNCITLA is a group of technology leaders from 60 counties, who began meeting and collaborating in 2004. They have one full-time employee and meet generally once per month.

Heinhuch reported that the counties have a good relationship with MNIT and shared some things for MNIT to consider in relation to system implementations and use by counties.

As a more general theme, Heinbuch expressed a request that county IT leaders be included early and often in project development and implementation. Involving them from the beginning can help avoid a lot of problems, and they want to be part of the solution. In some cases, state

agencies have developed and implemented projects involving county systems with no county IT involvement on the front end. This has an impact on them in terms of logistics and budget. This is particularly acute in small counties which don't have the same resources as larger counties to absorb new costs and mandates.

Heinbuch noted it would be helpful if MNIT could:

- consistently communicate best practices as new policies and systems are released.
- consider interoperability between state and county systems.
- factor into development and implementation plans the fact that security configurations of systems can vary from county to county.

NOVEMBER 2019 MEETING SUMMARY

The November meeting opened with two important points:

First, Chair King announced that BRC-IT members have been invited to participate in the Minnesota Cybersecurity Leadership Briefing at Metropolitan State University in early December. In addition to representatives from the Legislature, private industry, government, and academia, the BRC-IT will represent its overlapping concerns in the areas on the agenda for the briefing.

Second, MNIT Commissioner Tarek Tames reported that his agency has named the BRC-IT as the recipient of the Partner of the Year award for its important work.

DISCUSSION: DATA PRIVACY OFFICER AND DATA PRACTICES GOVERNANCE

Data Management and Privacy Subcommittee Chair Eric Hallstrom introduced multiple guests whose participation in his subcommittee's meetings proved to be instrumental in the formulation of some of the recommendations coming out of that body; Renee Lopez-Pineda of Delta Airlines, Laurie Beyer-Kropuenske of the Minnesota Department of Administration, and Ellena Schoop from MNIT.

Lopez-Pineda described Delta's activities in the area of data privacy. In particular, she detailed the establishment of a dedicated data privacy office. The office consists of her and three analysts, with support from lawyers. In addition, they work with data "champions" within each unit of the organization.

The office focuses on data from the beginning of a project and through its life cycle. It monitors and controls how data are collected, used, stored, and disposed. Key to the office's mission is the ability to weave principles of proper data practices early in project development. She also

noted that the inclusion of legal representatives and authority in data decisions regarding technology projects is the trend in privacy industry.

Laurie Beyer-Kropuenske, of the Minnesota Department of Administration, provided additional information about the landscape of data practices in the State of Minnesota. Minnesota law governs openness as well as privacy, and the preliminary assumption in the State is that collected data is public. Consequently, the operating principle is to collect as little data as possible.

Beyer-Kropuenske noted a challenge in Minnesota: Every agency is its own authority in terms of data practices, and her office's role is primarily advisory. Each agency makes its own decisions on what to share, and those decisions sometimes conflict. There is no tie-breaker between agency decisions.

Ellena Schoop from MNIT has experience with the National Governors' Association, which collectively has examined and provided recommendations for these same issues. The organization has concluded that states should be sharing data to evaluate programs and make them better. The main obstacle to data sharing governance is more legal than technical. Legal opinions vary within agencies, and interpretation gets in the way of sharing. States need a "go-to person," a "tie-breaker."

Hallstrom seized on the theme and noted that it speaks to one concept that his subcommittee will likely develop further for a recommendation in the final report of the BRC-IT, that of the creation of a chief privacy officer role.

AGENCY DISCUSSION: PROJECT MODERNIZATION FUNDING OVER FISCAL PERIODS

Marianne Conboy from MMB and Jon Eichten explained the funding of projects from a state perspective. Funding comes primarily from three sources:

- Agency-based program budgets
- Change item funding from legislation
- The Information and Telecommunications Account (Odyssey Fund)

The funding structure bears some challenges. First, the agency-based funding tends to be sufficient for maintenance, but insufficient for updates. Second, the reality of biennial legislative funding creates challenges for projects that extend beyond legislative appropriations. A project might be only half complete after a number of years, then lose funding after those years of investment.

The Odyssey Fund provides some opportunity for agencies to preserve excess funds beyond the funding biennium for future qualified projects. Still, uncertainty about future approvals and some restrictions to the use of Odyssey funds create disincentives for agencies to use the

program, and they might choose to make sure they deplete their funds before the end of the biennium instead of preserving them.

Another area of concern is the fact that funding often does not take modernization and enhancement into account. Appropriations might include a fixed annual increase, but this doesn't account for necessary enhancements and improvements.

DECEMBER 2019 MEETING SUMMARY

The final full BRC-IT meeting of 2019 focused primarily on development of the Q4 report, with significant time devoted to line-by-line group evaluation of the proposed recommendations. The full committee reached consensus on all recommendations to be included in the report.

PRESENTATION: MNIT UPDATE

Commissioner Tomes provided a report on diversity and wage gaps in MNIT, indicating areas of improvement but also noting that areas of concern still exist. He also included brief updates on recent and upcoming project rollouts.

CHIEF INFORMATION SECURITY OFFICER CHANGE AND RESOLUTION OF APPRECIATION

Prior to the work on the Q4 report, Rep. Nash reported that Aaron Call, the State's chief information security officer, will leave his position to work in the private sector. Call worked directly with the BRC-IT and made significant contributions to sub-committee discussions to provide background information and insight into the status of the cybersecurity, data management and privacy, and modernization interests in the State. Call said he feels comfortable leaving his position, because the State is on the right path through deliberative efforts like those of the BRC-IT. In addition, he feels confident about leaving the position in the hands of Rohit Tandon, the new chief information security officer.

To recognize Call's significant contributions to the BRC-IT, Chair King proposed a resolution in appreciation of his services to the BRC-IT. All members approved.

Appendix 1

Blue Ribbon Council Overview

On February 6, 2019, by Executive Order 19-02, Governor Walz established the Blue Ribbon Council on Information Technology (BRC-IT), stating, “Minnesotans expect reliable, secure, and accurate information technology services when they interact with the State. That is why the Blue Ribbon Council on Information Technology was created to ensure the people of Minnesota have access to high-quality, dependable services.” He appointed Rick King, Executive Vice President of Thomson Reuters, as chair. The membership of the BRC-IT and sub-committee assignments is as follows.

BRC-IT Chair Rick King	Thomson Reuters	
Renee Heinbuch	Washington County	Cybersecurity Chair
Tewodros “Teddy” Bekele	Land O’ Lakes	Cybersecurity
Laurie Martinson	Dept. of Natural Resources (DNR)	Cybersecurity
Rep. Jim Nash		Cybersecurity
Sen. Melissa Wiklund		Cybersecurity
Dep. Comm. Eric Hallstrom	Management and Budget (MMB)	Data Mgmt & Privacy Chair
Comm. Margaret Anderson Kelliher	MN Department of Transportation (MN DOT)	Data Mgmt & Privacy
Rep. Kristin Bahner		Data Mgmt & Privacy
Jason Lenz	Lyon County	Data Mgmt & Privacy
Nancy Lyons	Clockwork	Data Mgmt & Privacy
Mike McCullough	National Marrow Donor Program	Data Mgmt & Privacy
Theresa Wise	formerly Delta/NW Airlines	Modernization Chair
Tom Butterfield	TCF Bank	Modernization
Dep. Comm. Lee Ho	Dept. of Revenue (DOR)	Modernization
Comm. Steve Grove	Dept. of Employment and Economic Development (DEED)	Modernization
Dep. Comm. Chuck Johnson	Dept. of Human Services (DHS)	Modernization
Richard Kolodziejski	MN Assoc. of Professional Employees	Modernization
Sen. Mark Koran		Modernization

Chair Rick King, MNIT Commissioner Tarek Tomes and the legislators (Senator Melissa Wiklund, Senator Mark Koran, Representative Kristin Bahner and Representative Jim Nash) are serving as ex-officio members for each of the committees. They will attend meetings of primary interest.

Appendix 2

Blue Ribbon Council Speaker List

April	Presentation	Cybersecurity Richard Puckett, CISO, Thomson Reuters
	Agency Overview	Department of Human Services Deputy Commissioner Chuck Johnson
May	Agency Overview	Department of Transportation Commissioner Margaret Anderson Kelliher
June	Agency Overview	Management and Budget Commissioner Myron Frans
July	Presentation	Clockwork: Human-Centered Design Thinking Micah Speiler, Director of Experience Design Danielle Miller, Experience Strategist
	Agency Overview	Department of Revenue Commissioner Cynthia Bauerly
August	Agency Overview	MN State Demographer Susan Bower
September		<i>Report Review - No Guest Speaker(s)</i>
October	Presentation	County-State Interactions Renee Heinbuch, IT Director, Washington County Jason Lenz, IT Administrator, Lyon County
	Presentation	Procurement Tracy Gerasch, MNIT Procurement Betsy Hayes, Department of Administration

Agency Overview

Department of Administration

Betsy Hayes, Chief Procurement Officer
Rachel Dougherty, Professional/Technical Manager
Luke Jannett, Acquisitions Manager

MNIT

Tracy Gerasch, IT Procurement Director

November Discussion

Chief Privacy Officer and Data Practices Governance

Deputy Commissioner Eric Hallstrom, MMB
Renee Lopez-Pineda, Director, Privacy Office, Delta Airlines
Laurie Beyer-Kropuenske, General Counsel and Community Services Director, MN Admin
Ellena Schoop, Enterprise Data Architect, MNIT

Discussion

MNIT Project and Modernization Funding Over Fiscal Periods

Commissioner Tarek Tomes
Marianne Conboy, Executive Budget Officer, MMB
Jon Eichten, Deputy Commissioner, MNIT

December

Report Review - No Guest Speaker(s)