

2018



MONTANA LEGISLATIVE BRANCH
**INFORMATION TECHNOLOGY PLAN:
2021 BIENNIUM**

ADOPTED BY THE IT PLANNING COUNCIL AUGUST 14, 2018

A Report to the 66th Legislature from the Legislative Branch
Information Technology Planning Council

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From the Chief Information Officer

The Legislature is, at its core, an information processing organization. The businesses of lawmaking, analysis, and oversight are all centered on the ability to process and disseminate information. In this information age, the Office of Legislative Information Services (OLIS) exists to enhance the Legislative Branch's ability to gather, process, and distribute increasing amounts of legislative information quickly and accurately.

The 2021 Biennium Information Technology Plan represents OLIS's ongoing commitment to providing the Legislative Branch with the best information technology and communications services available. During the previous biennium, the decision to combine the Office of Legislative Information Technology and the Legislative Communications Office provided an opportunity to centralize and integrate services even further.

There are extraordinary opportunities for applying technology to an organization whose main product is information. The Legislative Branch recognizes this and continues to invest in, apply, and realize significant benefits from technology.

My staff and I are proud to work for, and be a part of, the Legislative Branch. We have developed this plan to guide our work for the biennium and to lay a strong foundation for continued service excellence.

Dale Gow
Chief Information Officer
Legislative Services Division

Introduction and Background

The 2021 Biennium Information Technology Plan has been prepared by the Office of Legislative Information Services to be presented by the Legislative Branch Information Technology Planning Council to the Legislative Council. This plan represents a coordinated effort to identify and respond to the current and future technology and communication needs of the Legislative Branch. The structure and function of the Legislative Branch are prescribed by constitutional law, statutes, and legislative rules as provided in section 5-2-504, of the Montana Code Annotated (MCA). The principal entities of the branch are:

- Senate (SEN)
- House of Representatives (HOU)
- Legislative Services Division (LSD)
- Legislative Fiscal Division (LFD)
- Legislative Audit Division (LAD)

The Legislative Branch's responsibilities include areas such as lawmaking, appropriation, taxation, oversight of the Executive Branch, and representation of local interests. The primary function of the Legislature is lawmaking, which consists of the drafting of, consideration of, voting on, and passage of legislation. Other responsibilities of the Legislature that support its primary function include research, fiscal analysis, legislation and policy development, information distribution, audit, and business and administrative services.



Addressing the Information Needs of the Legislative Branch

The Office of Legislative Information Services, which is housed within the Legislative Services Division of the Legislative Branch, provides communications and information technology services to the branch. The total budget including projects and operations for the 2021 biennium is \$3,824,377. This represents a 26.6% increase over the last biennium requested budget. The branch will spend 28% of the allocated budget on new investments as we make operations more efficient.

VISION

The vision for OLIS is to:

- Build and maintain alignment between business strategic vision and technology strategy
- Maintain modern, up-to-date technical platforms
- Conduct operations with mature processes, sophisticated tools, and efficient resource allocation
- Be appropriately staffed with qualified professionals
- Provide a secure environment that maintains confidentiality, integrity, and availability
- Partner with the Executive Branch to maximize value while respecting each branch's statutes

GUIDING PRINCIPLES

The guiding principles for OLIS are to:

- Organize and communicate information to enable its discovery and improve its meaningfulness
- Protect information in accordance with its business value, sensitivity, and longevity
- Invest in automation of business processes and modernization of systems to gain efficiency, improve business performance, and/or reduce business risk
- Maximize the exchange of quality information by accommodating various media types and technology
- Set policy and establish processes to guide the implementation, use, and management of technology in alignment with the business
- Maintain Legislative Branch independence in core business functions, and guard the integrity of all branch functions by producing objective, nonpartisan information

PURPOSE OF THE INFORMATION TECHNOLOGY PLAN

In 1989, the Montana Legislature adopted a comprehensive set of laws governing information technology (IT) planning in the Legislative Branch (Title 5, chapter 11, part 4, MCA). These laws were intended “to establish a mechanism for information technology planning encompassing broad policy needs, long-term direction for information systems use, and the effective implementation of a detailed plan for the legislative branch” (5-11-401, MCA).

The Legislature created the Legislative Branch Information Technology Planning Council (ITPC) to develop and maintain a branch information technology plan.

The Legislative Branch uses a centralized internal information services staff in OLIS, which is overseen by the Legislative Services Division. OLIS is responsible for developing, implementing, and maintaining the IT and communications infrastructure for the branch. The office is led by the Chief Information Officer of the Legislative Branch and is also responsible for the development and implementation of the IT Plan.



...to establish a mechanism for information technology planning encompassing broad policy needs, long-term direction for information systems use, and the effective implementation of a detailed plan for the legislative branch.

5-11-401, MCA



Front row (left to right): Jessica James, Mike Allen, Alysa Semans, Jeff Thomas, Sabrina Bianchi, Molly Pertersen, Ryan Ball
Second Row (left to right): Peder Cannon, Gretchen Tigner, Jonny Santy, Thomas Castona, Kenny Bagg, Aubrey Curtis, Lindsey Krywaruchka, Josh Gillespie, Trista Glazier, Dale Gow.
Not Pictured: Sonia Gavin, Jim Gordon, Cyndie Lockett, Darrin McLean, Susan Murray

ITPC members

Secretary of the Senate

Representative of the Senate, designated by
the President

Chief Clerk of the House of Representatives

Representative of the House, designated by
the Speaker

Executive Director of the Legislative Services
Division, who chairs the Planning Council

Legislative Auditor

Legislative Fiscal Analyst

Consumer Counsel

Chief Information Officer of the Legislative
Branch

Person designated by the Director of the
Department of Administration to represent
the IT responsibilities of the department, who
serves as a nonvoting member

Members
of the ITPC
represent
the House,
the Senate,
and all
divisions
of the
Legislative
Branch

OLIS Organizational Chart

CHIEF INFORMATION OFFICER (CIO)
Dale Gow

ADVANCED TECHNICAL SERVICES (ATS)

MANAGER
Mike Allen

| | | |
|---|--|--|
| PROGRAMMER ANALYST Jim Gordon | DEVOPS SYSTEM ENGINEER Amy Moore | SYSTEMS ENGINEER Josh Gillespie |
| PROGRAMMER ANALYST Thomas Castona | DEVOPS SYSTEM PROGRAMMER Gretchen Tigner | SYSTEMS ENGINEER Peder Cannon |
| PROGRAMMER ANALYST Alysa Semans | | NETWORK ADMINISTRATOR Ryan Ball |
| PROGRAMMER ANALYST Jonny Santy | | NETWORK ADMINISTRATOR Kenny Bagg |

OPERATIONS SERVICES (OPS)

MANAGER
Lindsey Krywaruchka

| | | |
|---|--|---|
| SERVICE DESK NETADMIN Jeff Thomas | BUSINESS ANALYST Susan Murray | AUDIO/VIDEO COORDINATOR Jessica James |
| SERVICE DESK TECHNICIAN Sabrina Bianchi | BUSINESS ANALYST Aubrey Curtis | WEB CONTENT OFFICER Trista Glazier |
| | BUSINESS ANALYST Darrin McClean | PUBLICATIONS OFFICER Molly Petersen |
| | SYSTEM ANALYST SECURITY OFFICER Cyndie Lockett | LIBRARIAN Sonia Gavin |

Executive Summary

The development of the IT Plan, which serves as the strategic plan for OLIS, began in January 2018 by conducting a comprehensive assessment involving stakeholders, customers, and Legislative Branch staff to gain an understanding of the current conditions, risks and issues, challenges, and opportunities we will face in the coming biennium. The methodology and a more in depth look at the key findings from this needs assessment can be found in Appendix A.

HIGHLIGHTED FINDINGS

Current Conditions:

■ **Business Environment:** Because of the Legislative Branch's 2-year business cycle and the operational necessity of not making major changes during a legislative session, the branch only has 18 months between sessions to make major enhancements. During the 2018 interim, there was one special session of the 65th Legislature called, preparation for a potential special session, and a major security event, which took away from staff time dedicated to infrastructure changes.

■ **Organizational Environment:** OLIS is overseen by the Chief Information Officer, Dale Gow, and organized into two sections: the Advanced Technical Services Section, managed by Mike Allen, and the Operations Services Section, managed by Lindsey Krywaruchka. In all, a total of 24 FTE work for OLIS. The ITPC provides oversight for the work of OLIS and all other IT work within the Legislative Services Division, which is led by Executive Director, Susan Fox.

■ **Technical Environment:** A high-level overview of OLIS's technical environment can be found in Appendix B. It shows the complexities of having multiple locations along with a replicated system to ensure data integrity and security for the Legislative Branch.

■ External Impacts: The Legislative Branch coordinates regularly with external organizations, such as the Executive Branch, the Judicial Branch, the Montana University System, and local governments. This coordination is typically done through active participation on the following external groups:

- **Information Technology Board (ITB)**

The ITB, created by the 2001 Legislature, provides a forum to guide state agencies and local governments in the development and deployment of intergovernmental IT resources. The ITB also advises the Department of Administration on statewide IT standards and policies, the state strategic IT plan, major IT budget requests, and rates and other charges for services established by the department.

- **Information Technology Managers Council (ITMC)**

The ITMC is comprised of state IT managers whose responsibilities include reviewing statewide IT issues, providing feedback regarding information management policies, reviewing opportunities for the application of new information processing technology, and participating in statewide IT planning efforts.

- **Montana Information Security Advisory Council (MT ISAC)**

The MT-ISAC is a public-private partnership established to pass policy on cybersecurity, information sharing, outreach, and risk awareness. It influences information systems across the state.

■ The Legislative Branch uses external IT resources (outsourcing) for major enhancements and to implement new technology for which the internal staff has not been trained. Often, the planned enhancements require more time than staff has available, thus making outsourcing necessary. The branch also uses external resources for staff augmentation for session buildup and support.

■ Outdated and antiquated technology remains in use in limited cases.

■ Legislative Branch employees are eager to use more modern technology in areas such as video conferencing, electronic forms, social media tools, and data analysis and visualization.

■ There is not an enterprise solution to information management that is consistent throughout the Legislative Branch.

Risks and Issues:

The following risks and issues chart provides a summary of the current risks and issues impacting the business, organizational, and technical environments in which we operate.

| PRIMARY RISK | PROBABILITY | IMPACT | MITIGATION STRATEGY |
|--|-------------|--------|---|
| Loss of institutional knowledge due to retirement and turnover | High | High | OLIS will prioritize cross training and mentoring among staff, specifically working to have lead staff advise and provide oversight to new staff during the legislative session and for other core processes. |
| Security breach | Medium | High | The Legislative Branch has reinstated its priority for a security program. A security officer has been assigned to continue to build the program, with a specific emphasis on the five critical elements of security. |
| Staff resources stretched thin between multiple competing Legislative Branch priorities | High | Medium | Intermediate Outcome 4 in this plan (“The OLIS project portfolio is well defined and managed”) is intended to help prioritize and plan projects and incoming requests (through the Business Case Analysis process) and enable management to allocate resources in a way that meets the needs of the branch without overextending staff resources. |
| Unplanned mandates from the Information Technology Services Division within the Executive Branch, and from other external entities | Medium | Medium | OLIS will continue to foster strong working relationships with external partners and identify efficient means to meet demands, and will continue to use and improve the Business Case Analysis process within the Legislative Branch to vet and prioritize emerging internal needs. |

Challenges:

- Workforce challenges including recruiting, cross training, and providing professional training for staff, and retaining employees with more modern skillsets
- Personnel turnover resulting in a less experienced staff with an average service time of 3 years or less (9 of 23 staff members have been with OLIS for 3 years or less)
- During the 2019 biennium, an IT budget cut of 20% for the Legislative Branch, which delayed hardware life cycle replacement
- Executive Branch policy, and undefined condition-of-use requirements applied to the Legislative Branch
- Institutional knowledge retention and documentation
- Replacing antiquated technology within the limited amount of time provided during the interim, in addition to meeting the unplanned for and emerging needs of the Legislative Branch

Opportunities:

- Integration of publications, reference center, website and graphic design, and audio/video services with the information technology services into one office
- Automation of the processes that support lawmaking (i.e. Bill Draft Request process, Committee work, Codification, and Annotations)
- Training and professional development received by OLIS staff during the previous biennium
- Emerging technologies
- New content management system for the website allowing for responsive design and more content contributors
- New online streaming vendor providing users with access to media on a variety of devices

MISSION

The mission of OLIS is to evaluate, implement, and support information technology and communication solutions to enable the legislative process and operational functions in the most effective and efficient manner.

To organize the work, and to better define a strategy for meeting the needs of our customers, this plan is organized into three Key Results Areas (KRAs) that represent the functional areas in which OLIS must excel or perform exceptionally well in order to successfully achieve our mission.

These areas are:

- Information Services
- Securing the Branch
- Operational Excellence

Within each KRA, we have defined the long-term outcome for the KRA and outlined multiple intermediate and short-term outcomes that define specific and measurable projects or processes that OLIS will undertake starting in July of 2019. We have worked to create a plan that is actionable, transparent, and measurable. The plan is organized as follows.

The Montana Legislative Branch Information Technology Plan for the 2021 Biennium

OUTCOMES AND PROJECTS/PROCESSES WITHIN
KEY RESULTS AREAS



Key Results Area: Information Services

LONG TERM OUTCOME

Enable the business of the Legislative Branch

INTERMEDIATE OUTCOME

Provide staff with the capability to share non-partisan data and information with the general public, legislators, and employees

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Develop a model for database management and data visualization for the Legislative Branch

Web content is updated, relevant, and supported on various devices and platforms

The Legislative Branch television channel is recognized among Montanans as the leading source for professional coverage of state government and gavel-to-gavel activities

PROJECTS/CORE PROCESSES

- Identify and implement a data visualization tool for the branch
- Develop and support the Legislative Fiscal Division SABHRS data analysis tool
- Replace legacy database functionality with modern tools that meet the needs of the branch
- Integrate the redesigned website with the LAWS environment
- Develop the “Legislator Portal”
- Define and plan for enhancements to the website
- Produce content on the TVMT channel that is current, well produced, and provides viewers across Montana with access to their government
- Modernize the branch video and audio equipment, and the technologies used to capture, produce, and broadcast legislative activities
- Assess ways to maximize viewership and reduce costs, such as new broadcasting mediums and ways to distribute the TVMT signal

Key Results Area: Information Services (cont.)

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Legislative Branch information and research is easily accessed, well managed, and maintained on a modern platform

- Adopt and implement an updated records management system for the branch
- Develop and implement new applications to automate the business of the House and Senate Chambers
- Identify and implement an enterprise solution for managing electronic content
- Develop and implement new applications to further automate the business of bill drafting and editing
- Develop and implement an application to conduct a comprehensive search of the legislative library's digital collection from the website

Collect and share information that is sometimes sensitive and large outside of the Legislative Branch network

- Develop a means by which branch employees can use web-based or other electronic forms for information collection
- Manage session data
- Provide the branch with a mechanism to transfer or retain large sets of data

The printing and distribution of publications is efficient, cost effective, and able to be accurately managed

- Update the application to manage subscribers and subscriptions
- Provide publications in a searchable electronic format to subscribers
- Improve ongoing support for LAD and LFD publications and integrate all branch publications into a coordinated and seamless process

PROJECTS/CORE PROCESSES

Key Results Area: Securing the Branch

LONG TERM OUTCOME

Protect the Legislative Branch's information technology systems and data from unauthorized use, disclosure, damage, modification, or loss

INTERMEDIATE OUTCOME

The Legislative Branch continues to develop the critical elements of its security program

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Security Program elements continue to be developed

Legislative Branch remote workers can perform their jobs as if in the building

Assets in the Legislative Branch are tracked and managed in an efficient and secure way

PROJECTS/CORE PROCESSES

- Program Charter and Policy Development
- Employee Awareness and Education
- Security Architecture Enhancements
- Security Management and Control
- Security Measurements and Metrics

- Develop a more robust and seamless remote access solution

- Develop a comprehensive inventory management tool for the entire inventory for the branch (IT, hardware, software, licensing, publications, furniture, etc.)

Key Results Area: Operational Excellence

LONG TERM OUTCOME

OLIS provides quality service that meets the defined needs of our customers

INTERMEDIATE OUTCOME

Recruit, retain, and train a high-performing workforce in OLIS

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Creation of a workforce development strategy for OLIS

PROJECTS/CORE PROCESSES

- Create individual development plans for each employee as part of their annual performance review
- Align staff training with the IT strategic plan
- Work with the LSD Executive Director and HR Director to offer competitive wages to staff
- Develop a customer-oriented culture within OLIS that fosters teamwork, outside-of-the-box thinking, inside-the-enterprise solutions, and an environment where staff understand their role and take pride in the work they do

Key Results Area: Operational Excellence (cont.)

INTERMEDIATE OUTCOME

The OLIS project portfolio is well defined and managed

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Document and systematize the core processes within the business cycle of the Legislative Branch, and the support functions that are needed by OLIS staff

PROJECTS/CORE PROCESSES

- Process mapping the business cycles for each division in the branch and understanding the key processes within each to identify areas for improvement
- Continue to develop a policy and procedure system within OLIS

Key Results Area: Operational Excellence (cont.)

INTERMEDIATE OUTCOME

OLIS is efficient and effective at providing information technology support to the Legislative Branch

SHORT TERM OUTCOME(S): THE RESULT WE WANT IN 2021

Legislative Branch employees, legislators, and members of the public have one central point of contact for information services

Current support models for Legislative Branch hardware, software, applications, and other key processes are analyzed to identify areas for improved cost effectiveness

PROJECTS/CORE PROCESSES

- Further develop a centralized Service Desk to serve the branch
- Utilize Service Desk data to improve core processes in OLIS
- Upgrade the analog display boards in the House and Senate Chambers to digital boards that easily integrate with the digital vote system
- Assess key enterprise systems (Oracle, Convergence, and Disaster Recovery) to determine the most cost effective and streamlined course of action
- Use the Business Case Analysis process to appropriately and efficiently address unplanned mandates and requests

Budget

| 1. HB 2 PRESENT LAW: BUDGET TO MAINTAIN CURRENT OPERATIONS | | REQUEST |
|--|--|--------------------|
| a. | Operations | |
| | Hardware Replacement Cycle | \$871,350 |
| | Software Maintenance | \$500,750 |
| | Supplies | \$120,000 |
| b. | ITSD Services | \$1,568,277 |
| c. | Contracted Services | |
| | Microsoft Premier | \$144,000 |
| d. | Contingency Services | \$315,000 |
| e. | Staff Augmentation (Interns/Temps) | \$80,000 |
| f. | Training/Professional Development | \$100,000 |
| g. | Projects | |
| | Data Visualization Tool for Legislative Branch | \$50,000 |
| | Legacy Database Functionality Upgrades | \$75,000 |
| | | \$3,824,377 |

| 2. STATE BROADCASTING | | REQUEST |
|---------------------------------|---|--------------------|
| a. | Operations | |
| | Hardware Replacement Cycle | \$114,500 |
| | Software Maintenance | \$4,880 |
| | Supplies | \$12,500 |
| b. | Contracted Services | |
| | A/V Support (AVI Solutions) | \$109,065 |
| | External Streaming (SLIQ) | \$143,640 |
| | Production (MT PBS) | \$329,375 |
| | MT Historical Society (Archival of Digital A/V) | \$118,837 |
| | Transmission (Charter) | \$270,000 |
| c. | Contingency Services | \$20,000 |
| d. | Training/Professional Development | \$10,000 |
| e. | Projects | |
| | Closed Captioning (Hardware, Service for St Broadcasting) | \$147,500 |
| | Sound System Upgrade (Hearing Rooms) | \$150,000 |
| | | \$1,430,297 |
| 3. LEGISLATIVE REFERENCE CENTER | | REQUEST |
| a. | Subscriptions | \$42,300 |
| b. | EBSCO Annaul Subscriptions | \$19,000 |
| c. | FFIS Subscriptions (LFD Staff) | \$22,200 |
| d. | Lexis Nexis (LEG Staff) | \$12,100 |
| e. | Operational Supplies | \$400 |
| | | \$96,000 |
| SUBTOTAL (1 + 2 + 3) | | \$5,350,674 |

| 4. NEW PROPOSAL - FTE | | REQUEST |
|-----------------------|--------------------------------|------------------|
| a. | Network Administrator Position | \$143,573 |
| b. | Business Analyst Position | \$156,597 |
| | | \$300,170 |

SUBTOTAL (1 + 2 + 3 +4) \$5,650,844

| 5. LONG RANGE INFORMATION TECHNOLOGY APPROPRIATION | | REQUEST |
|--|-------------------------------------|--------------------|
| a. | Session Systems Replacement Project | |
| | Chamber Automation | \$1,500,000 |
| | Bill Drafting Editor Implementation | \$500,000 |
| | Legislator Portal | \$300,000 |
| b. | Digital Vote Systems Boards | \$1,000,000 |
| | | \$3,300,000 |



Appendix A: Needs Assessment

HOW THE PLAN WAS DEVELOPED

In the spring of 2018, the Montana Legislative Branch Information Technology Planning Council began the process of developing and updating its Information Technology Plan for the 2021 Biennium, working with staff from the Montana Office of Legislative Information Services. The following comprehensive needs assessment provides the methodology and key findings from each data source. Following data collection, analysis was conducted to help form the strategic plan to address the needs identified and set priorities for this biennium.

GATHER AND ANALYZE DATA

The following table summarizes the data sources utilized in the needs assessment, along with the methodology used to gather each data source and key findings.

| NEEDS IDENTIFIED DURING THE LAST IT PLANNING PERIOD | LEGISLATIVE DIVISION MEETING INPUT | WEBSITE ANALYTICS |
|---|--|---|
| <p><i>METHODOLOGY</i> Planned activities and progress on the Information Technology Plan for the 2019 Biennium were reviewed.</p> <p><i>KEY FINDINGS</i> Business and IT needs identified but not yet realized:</p> <ul style="list-style-type: none"> Continued technology modernization Implementation of data management and analytic tools Development of partnership between SITSD and Legislative Branch Reduce reliance on institutional knowledge Develop a security program Fine tune services offered by OLIS to meet business needs Develop IT government policies and processes Talent management | <p><i>METHODOLOGY</i> At a Legislative Division meeting on March 20, and March 22, 2018, OLIS staff solicited input from staff on their technology needs in the coming biennium by asking about emerging technologies, declining technologies, and trends in technology that need to be implemented into this planning cycle.</p> <p><i>KEY FINDINGS</i> Feedback from staff included:</p> <ul style="list-style-type: none"> Need to be able to automate mailing official correspondence Need to organize and preserve information according to law Need a more efficient way to collect information Need a way to mitigate the loss of knowledge when an employee leaves | <p><i>METHODOLOGY</i> Website analytics were reviewed, and members of the Montana State Legislature were asked to list features of the website that need to be improved.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> Website with responsive design A new process for content publishing needed Review and cleanup of data available on the website Update/change of technology that injects security issues into the web publishing process Complete integration with new Session System Replacement (SSR) services |

Appendix A: Needs Assessment (cont.)

| WORKFORCE DATA | REFERENCE CENTER SURVEY | PUBLICATIONS DATA |
|---|--|--|
| <p><i>METHODOLOGY</i> Workforce data on OLIS staff were compiled, including education level, field of study, average number of years of service, and special trainings and certifications.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • 13 FTE staff in Advanced Technical Services • 8 FTE staff in Operations Services • 7 major contracts including enterprise software and application support, audio and video streaming services, TVMT with Montana PBS, and Satellite Transmission Service | <p><i>METHODOLOGY</i> In August 2017, a survey was sent to Legislative Services, Legislative Fiscal, and Legislative Audit staff to assess ways in which the Legislative Reference Center can better meet the needs of the branch.</p> <p><i>KEY FINDINGS</i></p> <p>Identified needs from survey:</p> <ul style="list-style-type: none"> • Services offered need to be re-evaluated to better meet the current needc • Access to records need to be more readily available through user’s desktop browser | <p><i>METHODOLOGY</i> Compilation of number and types of subscribers to Legislative Branch and conversations with subscribers.</p> <p><i>KEY FINDINGS</i> There are 355 total active subscriptions. Subscribers vary widely and include customers such as book dealers, private law firms, local, state, and federal agencies, and legislators.</p> <p>Findings from conversations:</p> <ul style="list-style-type: none"> • Distribution process for the hard copy of MCA and Annotations needs process improvement • Legacy publications app is inadequate for the publication functions we need it to provide |

| SECURITY NEEDS | BROADCASTING DATA | HELP DESK TICKET DATA |
|---|--|--|
| <p><i>METHODOLOGY</i> Review of National Institute of Standards and Technology (NIST) “Framework for Improving Critical Infrastructure Cybersecurity,” which is used as a benchmark for the OLIS Security Program</p> <p><i>KEY FINDINGS</i> Business and IT needs identified but not yet realized:</p> <ul style="list-style-type: none"> • Continue developing the five framework functions from NIST to develop a culture that addresses the dynamic security needs of the branch | <p><i>METHODOLOGY</i> OLIS staff worked with stakeholders and MontanaPBS to conduct an assessment of TVMT customer and stakeholder needs, wants, and expectations. This was done through a survey and a facilitated feedback session in October 2018.</p> <p><i>KEY FINDINGS</i> Feedback from staff included:</p> <ul style="list-style-type: none"> • Primary customers are legislators and the public • Customers want complete coverage and the public needs transparency and accountability • Strengths of TVMT include its PBS partnership and its ability to be nimble • Weaknesses include program scheduling concerns | <p><i>METHODOLOGY</i> 2017 help desk ticket data were analyzed by OLIS staff.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • 2,979 tickets were created in 2017 • 91% open tickets were closed • Top ticket types: <ul style="list-style-type: none"> • Users - 903 • Software - 792 • Hardware - 573 • A/V – 376 • Web - 59 |

Appendix A: Needs Assessment (cont.)

| LEGISLATIVE AUDIT DIVISION NEXT50 | LEGISLATIVE FISCAL DIVISION STAFF SURVEY | LEGISLATIVE SERVICES DIVISION STAFF SURVEY |
|---|--|--|
| <p><i>METHODOLOGY</i> In late 2017 and early 2018, the Legislative Audit Division engaged in a strategic planning process to chart a course for their organization in the coming years. These strategic directions will be supported by OLIS.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • Independent data for analysis • New/innovative audit techniques using technology • Data records management • Process automation • IT training • Security • Social media presence • Website • Work paper documentation, format, and organization • Function specific systems | <p><i>METHODOLOGY</i> In March 2018, OLIS staff distributed an electronic survey to the Legislative Fiscal Division staff to assess their technology needs in the coming biennium. 9 responses were received.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • More powerful data analysis tools such as Excel 2016 and Tableau • Web data visualization • Data set from SABHRS with historic data (not in a Microsoft Access) • Change TVs to display schedules when not broadcasting meetings • Updated web browser • Improved docking/undocking experience • Update Office to current version • Better capability to query SABHRS and IBARS • Content Management System | <p><i>METHODOLOGY</i> In March, 2018, OLIS staff distributed an electronic survey to Legislative Services Division staff to assess their technology needs in the coming biennium. 28 responses were received.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • Replace PUBS to better understand, track, and manage subscribers • Data visualization • Enterprise Content Management • Video conferencing to allow remote attendance to meetings, hearings, etc. • Update legislator and staff database • Better network tools • Replace FATs, NICE, audit billing • Portal for legislators to input information in one place instead of on multiple forms • Electronic not paper order forms, reduce paper usage • Accessibility, user experiences, visibility by all • Fix bugs in amendment and bill drafting software and update to provide additional reporting |

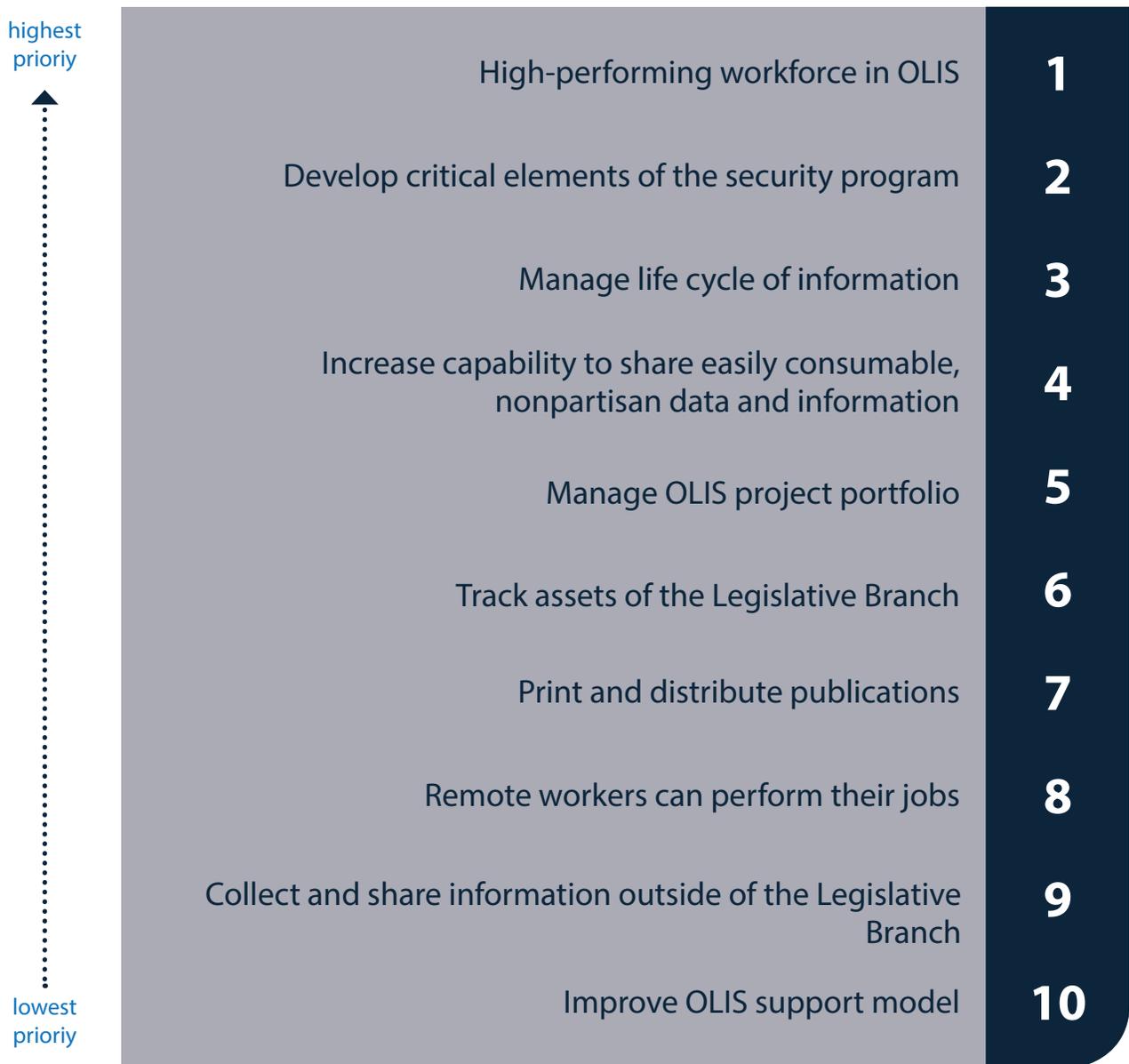
Appendix A: Needs Assessment (cont.)

| 2019 INFORMATION PLANNING DOCUMENTATION | SENATE NEEDS ASSESSMENT | HOUSE OF REPRESENTATIVES NEEDS ASSESSMENT |
|--|---|---|
| <p><i>METHODOLOGY</i> The previous 2019 Biennium IT needs assessment and final plan were reviewed to identify unmet goals and other trends in the services delivered by OLIS. This plan was developed and published in October 2016 and included an updated Vision and Mission statement as well as Goals, Objectives, Critical Success Factors, and Key Performance Indicators.</p> <p><i>KEY FINDINGS</i> The 2019 Biennium Information Technology Plan identified 5 major initiatives:</p> <ul style="list-style-type: none"> • Session Systems Replacement (LAWS II) • Data Management and Analytics • Infrastructure Development • Technology Modernization • Website Redesign | <p><i>METHODOLOGY</i> In April 2018, OLIS staff interviewed the Secretary of the Senate regarding the emerging technology and communication needs of the Senate.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • Customer support from OLIS is high quality and the Senate is satisfied with the support it receives • Vote System support and maintenance is high priority • Session preparation and support • Continue to conduct good analysis regarding emerging technologies and changes to key systems • Security important to legislators | <p><i>METHODOLOGY</i> In April 2018, OLIS staff interviewed the Chief Clerk of the House of Representative regarding the emerging technology and communication needs of the House.</p> <p><i>KEY FINDINGS</i></p> <ul style="list-style-type: none"> • Tracking and managing inventory and information • Security • Vote System customization • Centralized service desk for communications and IT support • Continue improving communications and audio/video support |

GROUP AND PRIORITIZE OUTCOMES

OLIS staff then worked with the Directors of the Legislative Branch divisions, the Secretary of the Senate, and the Chief Clerk of the House to review each priority outcome, identify which outcomes were of highest priority (through a forced ranking methodology), and discuss projects and processes that would support each outcome. From this exercise, the resulting prioritization of each outcome emerged.

Priority Outcomes Ranked From Most to Least Important by Legislative Branch Directors



Appendix B: OLIS Technical Environment

