

2019 BIENNIUM

A Report to the 65th Legislature from the Legislative Branch Information Technology Planning Council



LEGISLATIVE BRANCH

INFORMATION TECHNOLOGY PLANNING COUNCIL

2018-2019

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1 Introduction

The 2019 Biennium Information Technology (IT) Plan, presented by the Legislative Branch Information Technology Planning Council (ITPC), is founded in an enhanced, business-centric approach. The result is a reflection of the collaboration among the Office of Legislative Information Technology (OLIT) and the Legislative Branch business units:

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

This plan will provide an understanding of, and direction for, implementing technology solutions to maximize return on investment thereby meeting the business needs of the Legislative Branch.

Questions about the Branch's IT plan may be directed to:



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2 Executive Summary

It is critical for organizations to take the time to reflect objectively on the contribution that a team makes to develop a plan for the future.

The purpose of OLIT's 2019 Biennium IT Plan is to guide the use of information technology in the performance of the core mission of exercising the legislative powers of the government of the State of Montana; making laws, levying taxes, allocating funds, providing oversight, and representing local interests.

OLIT employed a 5-phase approach developing our IT Plan, illustrated below:



The first phase included a Customer Service survey and a Business Unit consultation process. The survey was conducted in 2016, the results, summarized herein, demonstrate a high degree of customer satisfaction. This baseline is an excellent benchmark for OLIT to monitor, evaluate and continuously improve our IT services and processes. Next, OLIT developed questionnaires and conducted interviews to gain insight into the future plans of OLIT's business units. The information drawn from this invaluable exercise formed the foundation of the 2019 Biennium IT Plan.

The team conducted a business-centric **SWOT** analysis approach which identifies OLIT's **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats.

In this planning cycle, OLIT has expanded on and updated our Vision and Mission statements to include Goals, Objectives, Critical Success Factors and Key Performance Indicators that guide our project portfolio. An illustration of our planned project portfolio is depicted in the 2019 Biennium Roadmap, including the following major initiatives:

- Session Systems Replacement (LAWS II)
- Data Management and Analytics
- Infrastructure Development
- Technology Modernization
- Website Redesign

The total budget including projects and operations is \$3,020,699. This represents an 11% increase over the last biennium IT budget. The branch will spend of the allocated IT budget on new investments as we make operations more efficient. Over the course of the last biennium, we have experienced significant technology changes largely related to the implementation of the Session Systems Replacement (LAWSII) project which introduced new programming languages and more than doubled the production server environment.

To conclude the 2019 Biennium IT Plan, OLIT reports on the accomplishments we achieved from the previous biennium's IT Plan.

3 Overview – Information Technology in the Legislative Branch

3.1 Purpose of the Information Technology Plan

3.1.1 Statutory Planning Requirements

In 1989, the Montana Legislature adopted a comprehensive set of laws governing IT planning in the Legislative Branch (Title 5, chapter 11, part 4, Montana Code Annotated (MCA)). The purpose of these statutes is "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 law further provides that the purpose of the information technology plan is:

- to ensure coordination of information system decisions so that the overall effectiveness of the Senate, House of Representatives, and legislative agencies may be improved; and
- to enhance coordination of Legislative Branch systems with Executive Branch systems whenever possible.

The Legislature created the Legislative Branch Information Technology Planning Council to develop and maintain a branch information technology plan. Members of the Planning Council are:

- the Secretary of the Senate;
- another representative of the Senate designated by the President;
- the Chief Clerk of the House of Representatives;
- another representative of the House designated by the Speaker;
- the Executive Director of the Legislative Services Division, who chairs the Planning Council;
- the Legislative Auditor;
- the Legislative Fiscal Analyst;
- the Consumer Counsel;
- the Chief Information Officer of the Legislative Branch; and
- a person designated by the Director of the Department of Administration to represent the IT responsibilities of the department, who serves as a nonvoting member of the Planning Council.

In developing and maintaining the Legislative Branch Information Technology Plan, the Planning Council is required to:

- approve and validate the branch enterprise architecture program that includes principles to maintain alignment with evolving business and technology needs;
- continually review analyses of existing and alternate information systems to identify candidates for automation, modernization, enhancement, improvement, or integration with new applications to support evolving Legislative Branch needs or functions;
- include in the plan a description of functions and services in the Legislative Branch and its agencies that would benefit from the application or improvement of information technology to provide better service to members of the Legislature, legislative agencies, and the public;
- prioritize information technology initiatives, taking into consideration expected effectiveness, probable cost, and alignment with the enterprise architecture principles;

- adopt technology standards within the enterprise architecture program that are appropriate to the business needs and technical environment of the Legislative Branch and its agencies; and
- consider information technology support of security, disaster recovery, and continuity of government.

By law, the Executive Director of the Legislative Services Division shall provide technical staff support to the Legislative Branch Information Technology Planning Council. Statutory duties related to this support role are:

- developing and maintaining an enterprise architecture program;
- developing analyses of existing and alternate systems to identify candidates for automation, modernization, or enhancement;
- assisting in assessing benefits and costs of alternate solutions;
- apprising the planning council of developments and trends in the technology industry;
- maintaining a liaison with and informing the Planning Council of plans and directions within the Executive Branch;
- selecting and purchasing supplies and equipment that support the enterprise architecture principles adopted by the Planning Council;
- providing information and advice regarding information technology support of security, disaster recovery, and continuity of government; and
- providing other assistance as may be requested.

Furthermore, the Executive Director shall encourage participation of appropriate personnel of the Senate, the House of Representatives, and other legislative entities in the provision of technical support.

After developing the Legislative Branch Information Technology Plan, the Planning Council must present the plan to the Legislative Council for adoption. Also, in order to fulfill the requirements of 2-17-518, MCA, the Legislative Council shall adopt enterprise principles and technical standards within an enterprise architecture program as a part of the Legislative Branch IT Plan, as provided for in 5-11-405, MCA, that will fulfill the intent of adequate rules for use of information technology resources for the consolidated Legislative Branch, as provided for in 5-2-504, MCA.

4 The Business of the Legislative Branch

This section describes the organization of the Legislative Branch. It also discusses the functions and roles played by IT in the branch's business.

4.1 Organization

The Montana Legislature is one of three branches of state government created by the Montana Constitution. The people of Montana express their will directly through the Legislative Branch, which enacts laws, levies taxes, and appropriates revenue received from those taxes to various agencies of government for public purposes.

The structure and function of the Legislative Branch are prescribed by constitutional law, statutes, and legislative rules. The branch consists of entities as provided in 5-2-504, MCA. The principal entities of the branch are the Senate and House of Representatives (which together compose the Legislature), the Legislative Services Division (LSD), the Legislative Fiscal Division (LFD), and the Legislative Audit Division (LAD). The mission, goals, and objectives for the Legislative Branch can be found on our website at www.leg.mt.gov.

4.2 Functions

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, consideration, voting on, and passage of bills. Other responsibilities of the Legislature that support its primary function include research, fiscal analysis, legislation and policy development, information distribution, oversight, and business and administrative services.

4.3 The Role and Purpose of Information Technology in the Legislative Branch Business

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, enhancing the ability to gather, process, and distribute increasing amounts of legislative information quickly and accurately is a necessity.

Technology is the primary tool used by the branch to collect, analyze, and disseminate information. Therefore, the Legislative Branch is dependent on its technology. When deciding how and for what purposes to use technology, it is critical to understand how it is incorporated into the Legislative Branch functions. 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 IT.

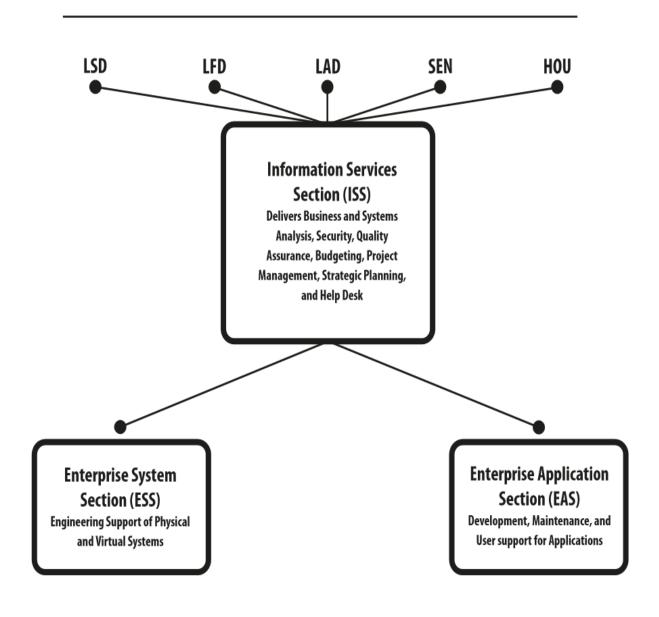
4.4 Current State of Legislative Branch Information Technology

This section summarizes and self-assesses the current organizational and technical environment that supports IT processes and initiatives in the branch. The Legislative Branch uses a centralized internal IT

staff for daily operations and developing, implementing, and maintaining the IT infrastructure. Because of the 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. The branch must also take into consideration that a special session can be called at any time during those 18 months, taking away staff time to get infrastructure changes accomplished. The branch uses external IT resources (outsourcing) for major enhancements and to implement new technology for which the internal IT staff has not been trained. Often, the planned enhancements require more time than the IT staff has available, thus making outsourcing necessary. The branch also uses external resources for staff augmentation for session buildup and support.

4.5 OLIT Business Flow

OLIT BUSINESS FLOW



OLIT is headed by the Legislative Branch Chief Information Officer, and is supported by seventeen fulltime IT employees. OLIT is organized into three sections: the Information Services Section, the Enterprise System Section, and the Enterprise Application Section.

4.5.1 Information Services Section (ISS)

ISS is composed of four full-time employees: one section manager, two system analysts, and one help desk technician. This section is responsible for the Legislative Enterprise Architecture Program (LEAP), business and system analysis, information security, quality assurance, budgeting, project management, strategic planning, and the help desk operation.

4.5.2 Enterprise Systems Section (ESS)

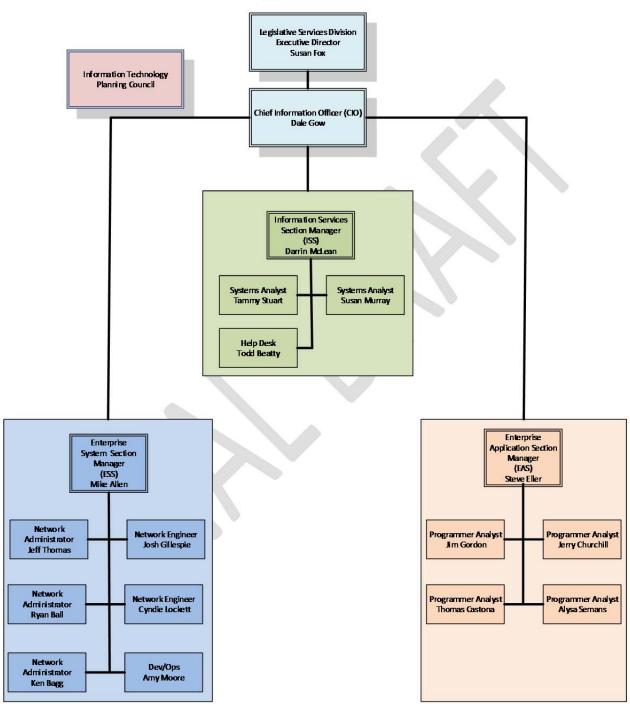
ESS is composed of seven full-time employees: one section manager, two network engineers, three network administrators, and a DevOps position. This section is responsible for designing, implementing, and day-to-day operational and engineering support of physical and virtual systems, work stations, printers, and other related hardware.

4.5.3 Enterprise Applications Section (EAS)

EAS is composed of five full-time employees: one section manager, and four programmer analysts. This section is responsible for the development, maintenance, and user support for all branch applications.

4.6 OLIT Organization Chart

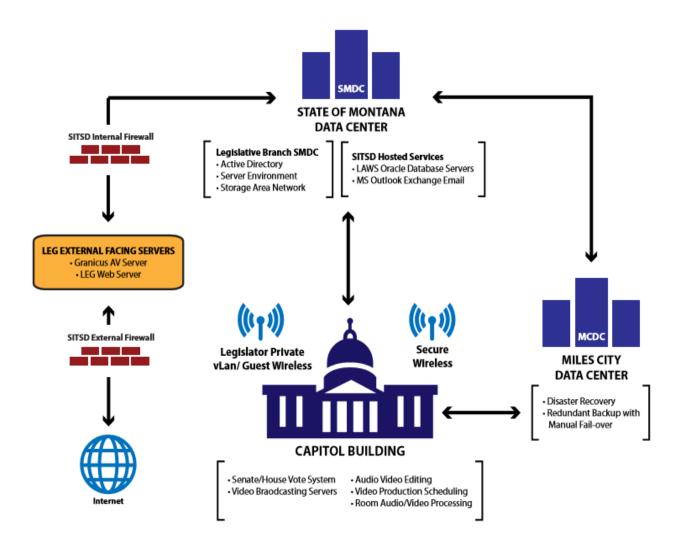
OLIT Organization Chart



4.7 OLIT Technical Environment

The high-level overview of OLIT's technical environment is illustrated below. This shows the complexities of having multiple locations along with a replicated system to ensure data integrity and security for the Legislative Branch.

OLIT TECHNICAL ENVIRONMENT



The following summarizes OLIT's SWOT Analysis

OLIT SWOT Analysis

STRENGTHS

S

- 1. Customer Service
- 2. Business Driven Partnership
- 3. Legislative Systems
 Enhancements
- 4. Branch IT Governance Process

OPPORTUNITIES



- Session Systems Replacement Project (LAWS II)
- 2. Data Management and Analytics
- 3. Infrastructure Development
- 4. SITSD Partnership

WEAKNESSES



- 1. Technology Modernization
- 2. Website Redesign
- 3. Legislative Session Technical Restrictions
- 4. Talent Management

THREATS



- 1. Institutional Experience
- 2. SITSD Mandates
- 3. Uncontrolled Distributed Solutions
- 4. Security Posture

5.1 Strengths

Customer Service

OLIT provides customer service to the Legislative business units through system support, business and systems analysis, application development, and end user support.

OLIT is recognized by our business units as an enabling and capable business partner. During our customer service survey and business interviews, the following results were reported:

- 90% of the respondents reported an 'excellent experience' with the help desk response to their issues
- 70% of the calls were resolved on the first call
- 73% reported that it was 'very clear' that they should call the Legislative Help Desk, and
- in particular, the business units expressed appreciation for OLIT's high level of technical competency and service levels that resulted in improved resolution of issues.

This is a measured customer service baseline, from which OLIT will evaluate and continuously improve our customer service responses.

Business Driven Partnership

The IT Strategic process has matured and created the opportunity for OLIT to engage Directors and appointed staff as active participants in the design of our strategic IT direction. This supports OLIT's focus on providing enhanced solutions and prioritizing business needs.

The feedback derived from both the interview process and the results of the customer service survey confirms that OLIT is meeting business needs and delivering excellent service.

Providing a tailored set of services ensures that each business unit realizes the maximum value from the branch's IT resources and investments. Additionally, as OLIT transitions from being IT-centric to business-focused, the role of the system analyst has expanded to include business analytics, ensuring the application of IT resources and solutions are aligned with business priorities.

Legislative Systems Enhancements

OLIT continues to add value to the performance and stability of the Legislative Systems through the Session System Replacement (SSR) project which will implement the LAWS II system. This will house the MCA in a safe and supportable environment allowing that data to be used in a modern system with open data standards, electronic workflows and advanced publishing processes. The new technology stack will reduce the need for resources to maintain obsolete technology skills. The current SSR Project includes:

 Mainframe – The most important part of the SSR project was to migrate the MCA and Annotations data from the mainframe into a system that could be maintained, housed, and supported internally. The new platform is the foundation for enhancement options in the future.

- Case Notes This component allows users to manage the Case Note entry process using
 integrated workflows. Efficiencies were realized through online dashboards and the addition of
 an editing tool that allows users to track changes, make comments, and accept modifications in
 documents.
- Annotations Building upon the Mainframe migration, the Annotation and MCA data is now
 housed in a unified document library instead of two separate databases. Additional features
 allow users to edit and proof work electronically and release updates into the master data set.
- Publications The work stream that feeds the publication process has been streamlined and simplified. This change significantly reduces manual work, transformation steps, and lead times to publication.
- Codification Key improvements in this area are related to using workflows, reduction of manual intervention points, automated insertion into the master document library, and the use of modern editing tools that allows for inline edit tracking and acceptance.
- Bill Draft Request (BDR) This component provides electronic management of the BDR process.
 Numerous paper tracking methods have been replaced by a dashboard that provides a real time view of BDR assignments to all team members and reduces transition time between users.

Branch IT Governance

OLIT views good governance and management as imperatives for consistent administration of IT operations. While management relates more to the efficiency of professionals working towards a target or goal, governance is a considered approach towards an enterprise vision for products and processes that can be turned into achievable goals and targets for the organization as a whole. The Branch has a relatively mature and effective governance structure, manifested in a strong collaborative partnership between OLIT and our business units. This is rooted in a consultative approach to setting our strategy and the resultant initiatives. The Branch's operating model, development and refinement of these processes, and enterprise architecture governance (LEAP), serve to integrate IT and the business units. OLIT continuously strives to be both well-governed and well-managed.

5.2 Weaknesses

Technology Modernization

Due to higher priority initiatives and funding constraints, OLIT has not kept pace with modernization of in-house applications, as well as our web and mobile solutions. These projects are being analyzed now that the LAWS II architecture has been determined. Addressing capability and technology gaps is the focus of the Branch's technology governance process and the Legislative Enterprise Architecture Program (LEAP). It is imperative that OLIT continue to partner with the business units to take advantage of new technology while maintaining the integrity of our technical environment.

Website Redesign

The non-modern user interfaces of the Legislative Website leads to missed opportunities for Legislators, stakeholders, and constituents. In order to meet the expectations of its users, the branch's website requires features such as an updated look and feel, mobile-centric capabilities, user-friendly access to information, improved search functions, and dynamic content, which can be changed or updated in real time. Additionally, a modern content management system will be selected, with the capability to efficiently manage web content.

Legislative Session Technical Restrictions

OLIT's biennium business cycle allows for 18 months of project implementation and a 6 month restriction on technical enhancements. This self-imposed restriction ensures the highest level of network uptime rates to prevent disruptions to the Legislative session. Although OLIT maintains the same level of day-to-day operational support, we need to take full advantage of the 6-month technical restriction period to focus on project planning and communication in readiness for project implementation.

Talent Management

OLIT does not have a well defined talent management plan. Current training and development of staff are generally reactive or ad hoc as opposed to being proactive and in accordance with a focused strategy that is aligned to the evolving technology environment. There is a risk that the training of current staff, and acquisition of new talent will continue to lag and business responsiveness may decline. OLIT needs to proactively plan and execute training for our staff. The talent management strategy will be developed to derive specific recruiting, retention, and training plans which will then be proactively funded and executed. This approach will evolve into a continuous improvement process thereby keeping the Branch's technical staff's skills aligned with the technologies and business needs.

5.3 Opportunities

Session Systems Replacement Project (LAWS II)

The SSR Project is an ongoing opportunity to provide enterprise content management for the Montana Code Annotated (MCA) datastore. The Chamber Interface and Committee Management areas are the first modules being explored for enhancement. One key improvement will be increasing the speed at which information is exchanged between users, both chambers, and the public. Exploration into additional improvements in the Bill Drafting process and technical tools, like PL/SQL, are also planned. The project team will continue to work with users to enhance existing LAWS II components while making sure the environment is effective and stable.

Data Management and Analytics

The Legislative Branch strives for transparency in government through the management and presentation of information. The volume of data and analysis in the branch continues to grow and the analysis toolsets in the branch have generally not kept pace with the demand. OLIT's challenge will be to implement solutions with modern tools that have the capability to put sophisticated analytics in the hands of policy analysts, auditors, legislators, staff and even the public at large.

Infrastructure Development

During this biennium, OLIT will continue to research and apply new technologies, reduce maintenance costs, and minimize our hardware footprint. We take a proactive approach to ensure the Branch's technical infrastructure meets the business units' requirements. In support of the new LAWS II environment, we have doubled the number of servers and diversified from a homogenous Microsoft environment to a 50/50 split of Microsoft and Linux operating systems. 80% of the network systems are in the State of Montana Data Center (SMDC) and are 85 % virtualized. We also utilize the disaster recovery site in the Miles City Data Center (MCDC).

SITSD Partnership

The partnership between OLIT and the State Information Technology Services Division (SITSD) provides the opportunity for inter-branch cooperation. It is OLIT's responsibility to the Legislative Branch, the constituents and taxpayers, to continually seek effective and efficient IT solutions. SITSD may offer services that could be leveraged by the Legislative Branch. OLIT will, through our governance processes, seek to implement solutions in a partnership with SITSD where appropriate while maintaining branch autonomy. Over the next biennium, OLIT and SITSD should refine the Inter-Agency Agreement formalizing the nature of the co-equal partnership defined in statute.

5.4 Threats

Institutional Experience

OLIT relies upon the institutional knowledge contained in the mindshare of our staff and management. Technology developments and normal staff turnover pose a threat of loss of essential knowledge. We must continue to implement policies and standards, and mature processes to capture and institutionalize the collective experience of our staff. These practices will result in the ability to protect and preserve OLIT's institutional experience and knowledge and allow new staff an accelerated time to competency.

SITSD Mandates

As part of the condition of use for State services and infrastructure, the Legislative Branch is subjected to the Executive Branch Enterprise policies and mandates which may impact the business units. This threat has affected service levels, increased costs, and reduced our flexibility to meet the business needs of the Legislature. In order to maximize efficiencies, ensure business alignment, and preserve Legislative autonomy, we must continuously evaluate the impact of each SITSD initiative.

Uncontrolled Distributed Solutions

The new generation of staff are products of an information technology culture. At the same time, the market has moved to an on-demand, services-oriented delivery model. These are positive developments that present challenges to the security of data, stability of the infrastructure, and legalities that govern the organization. The Branch must use the LEAP principles to enable the business units to take advantage of this technology proliferation without undue risk to the security, stability or legal position.

Security Posture

Information systems are increasingly targeted by hackers and criminals. The branch's security program has never fully developed but we receive the majority of our network security from SITSD. While security continues to improve each biennium, the threat is outpacing the investment. We need to mature processes in incident management, virus detection and mitigation, and system auditing capabilities.

6 OLIT IT Plan - 2019 Biennium

Strategic Goals	Key Performance Indicators	Critical Success Factors	OLIT Vision	OLIT Mission Statement
Efficient and effective enterprise data management	Improved user and stakeholder data management	Understand business needs Data strategy and modeling soundness Solution appropriateness Risk management	The vision for OLIT is to • Build and maintain alignment between business strategic vision and technology strategy;	OLIT will evaluate,
A web presence that is the primary interface for all stakeholders	Website traffic/user counts, reduced abandonment rates, and reduction in call rates	Documenting requirements, processes, and workflows Organizing data and content Applying updated web technology Security	Maintain modern up-to-date technical platforms; Conduct operations with mature processes, sophisticated tools, and efficient resource allocation;	implement and support information technology solutions to enable the legislative process and operational
Modernization of the Technical Environment	Improved business efficiencies, reduce maintenance costs, and minimize hardware footprint	Technical expertise to support associated architecture Security Meet business needs Continuous improvement	Be appropriately staffed with qualified professionals; Provide a secure environment that maintains confidentiality, integrity, and availability; and	functions in the most effective and efficient manner.
Attract and retain high-performing talent	Caliber of new employees and low staff turnover	Effective Resource Management Development plans Continuous improvement environment	Partner with the Executive Branch to maximize value respecting each branch's statutes.	

LEAP PRINCIPLES

6.1 OLIT Mission Statement

OLIT will evaluate, implement and support information technology solutions to enable the legislative process and operational functions in the most effective and efficient manner.

6.2 OLIT Vision

The vision for OLIT 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; and
- Partner with the Executive Branch to maximize value respecting each branch's statutes.

6.3 OLIT's Strategic Goals, Definitions, Objectives, Critical Success Factors, and Key Performance Indicators

Strategic Goal No. 1: Efficient and effective enterprise data management

Definition:

OLIT will store, organize, distribute, and present information to stakeholders in a meaningful and user-friendly manner.

Objectives:

- 1. Gather end user and stakeholder requirements
- 2. Design data strategy, data models, data dictionaries, data flows
- 3. Identify potential solutions
- 4. Develop and implement solutions

Critical Success Factors:

- Understand business needs
- Data strategy and modeling soundness
- Solution appropriateness
- Risk management

Key Performance Indicators:

Improved user and stakeholder data management

Strategic Goal No. 2: A web presence that is the primary interface for all stakeholders

Definition:

OLIT's stakeholders require a state-of-the art, accessible and user-friendly web presence. It will be comprised of a secure, knowledge-rich, intelligent environment, where all forms, transactions, scheduling, information, and communication can be efficiently obtained.

Objectives:

- 1. Collaborate with business units to identify website requirements
- 2. Architect the technical solution to fit the requirements
- 3. Design the website's structure, functions, and content
- 4. Develop Mobile-centric capabilities
- 5. Ensure dynamic content
- 6. Preserve the data integrity

Critical Success Factors:

- Documenting requirements, processes, and workflows
- Organizing data and content
- Applying updated web technology
- Security

Key Performance Indicators:

Website traffic/user counts, reduced abandonment rates, and reduction in call rates

Strategic Goal No. 3: Modernization of the Technical Environment

Definition:

OLIT and their business units recognize the need to update and modernize the IT Architecture by reexamining the current environment.

Objectives:

- 1. Audit existing applications and tools
- 2. Understand business requirements
- 3. Eliminate outdated software and applications
- 4. Introduce new technology

Critical Success Factors:

- Technical expertise to support associated architecture
- Security
- Meet business needs
- Continuous improvement

Key Performance Indicators:

Improved business efficiencies, reduce maintenance costs, and minimize hardware footprint

Strategic Goal No. 4: Attract and retain high-performing talent.

Definition:

OLIT's ability to attract, develop and retain high-performing talent.

Objectives:

- 1. Assess and align the OLIT structure to maximize organizational effectiveness
- 2. Create a participative and collaborative environment
- 3. Recruit professional staff
- 4. Conduct a skills audit and close the gap

Critical Success Factors:

- Effective Resource Management
- Development plans
- Continuous improvement environment

Key Performance Indicators:

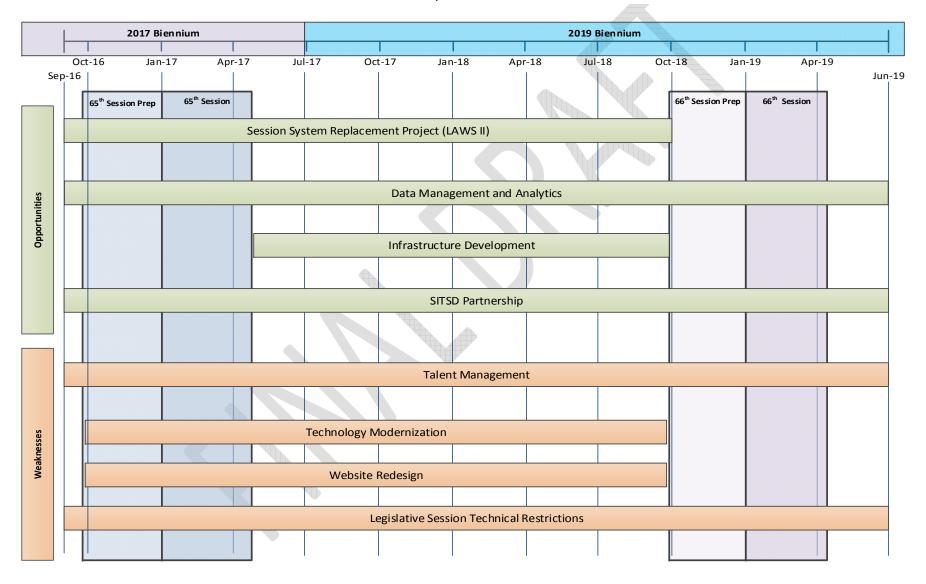
Caliber of new employees and low staff turnover

6.4 Legislative Enterprise Architecture Program (LEAP)

OLIT's LEAP principles are the foundation on which all rationale rests and assist us in ensuring that appropriate and relevant standards are met. They are critical to the success of all goals and objectives. Priorities are established, evaluations are conducted, and choices are made using the LEAP Principles as a guideline to decision—making.

6.5 OLIT Roadmap: 2019 Biennium

OLIT Roadmap - 2019 Biennium



6.6 FY 2018-2019 Project Portfolio

This section outlines the projects that OLIT will undertake during the 2019 biennium:

Session Systems Replacement (LAWS II)

During the 2019 Biennium, OLIT will deliver the following enhancements:

- Enterprise content management
- Chamber automation
- Committee automation
- Update the LAWS Application Programming Interfaces (APIs)
- Potential replacement of the Bill Draft Editor
- An upgrade to the PL/SQL language
- User-requested enhancements to the LAWS II deliverables

Data Management and Analytics

Information processes in the branch are driven by transparency in government through the management and presentation of information. In order to keep pace with the business need for document-oriented content, the branch's data, information, document, content, and workflow management technology capability will be improved. The Branch will be analyzing and assessing the need for enterprise-based systems for their data strategy, architecture, and governance.

Infrastructure Development

Over the 2018-2019 Biennium, OLIT will research and apply new technologies, relating to all our hardware operations and keep the Branch's infrastructure on supported and reliable systems.

Technology modernization

This project will enable the branch to customize new systems, evaluate current applications, take advantage of increasing technology demands, and standardize software versions. OLIT will concentrate our efforts on MS Access databases, and mobile and web applications.

Website Redesign

This project will be to upgrade to a current programming language in conjunction with the Session Systems Replacement (LAWS II) project. The web development environment will be modernized to improve its functionality and responsiveness for mobile-centric capabilities.

6.7 FY 2018-2019 IT Budget

In order for the Legislative Branch to maintain the operational status of the current IT environment and complete the prioritized technology projects, OLIT performed a budget analysis and has presented the budget in the IT plan. The table below describes the funding the branch will need for the operational duties as well as major projects the branch has identified for FY 2018-2019.

The IT Planning Council is requesting a present-law-centralized IT budget of \$3,020,699 for the 2019 biennium.

	OLIT IT Budget	FY 2016 - 2017 (Finalized)	FY 2018 - 2019 (Proposed)
1. H	B 2 Present Law: Budget to Maintain Current Operations		
a.	Hardware/Software Lifecycle and Maintenance	\$775,000	
b.	Hardware Maintenance and Supplies	\$99,000	\$120,000
C.	Vote System Maintenance (2 Years)	\$15,000	\$16,200
d.	ITSD Services (Fixed Cost Subject to Change)	\$977,073	\$1,113,393
e.	Staff Augmentation (Temps, Interns)	\$80,000	\$80,000
f.	OLIT Training	\$80,000	\$80,000
g.	Legislative Audit Technical Training	\$20,000	\$20,000
h.	Manage Firewalls for the Branch (SITSD)	\$10,000	\$0
i.	Contr: Network Infrastructure	\$65,740	\$0
j.	Contr: Network Engineering	\$65,740	\$0
k.	Contr: Microsoft Premier Agreement	\$0	\$142,506
I.	Contr: LAD SABHRS	\$20,000	\$20,000
m.	Contr: External Streaming Granicus Solution	\$193,600	\$193,600
n.	Contr: Programming Support	\$65,740	\$50,000
0.	Contr: Session - Legislator Systems Support	\$25,000	\$25,000
p.	National Association of Legislative Technology (NALIT) Host	\$0	\$30,000
		\$2,491,893	\$2,870,699
2. H	B2 Present Law Projects Budget		
a.	Contr: Programming	\$156,000	\$150,000
b.	Contr: Security Audit	\$60,000	\$0
	Subtotal	\$216,000	\$150,000
	Total, HB 2 Appropriations	\$2,707,893	\$3,020,699
3. L	egislative Branch IT Reserve Account		
a.	IT Proj: Responsive Website Redesign	\$175,000	\$0
b.	IT Proj: Document Management System	\$250,000	\$0
C.	Visual Basic Access Databases (Preliminary Estimate)	\$0	\$300,000
	Total, IT Reserve Account Appropriations	\$425,000	\$300,000
5. Fu	ull Time Employee (FTE)		65th Legislature
a.	Modified FTE to Full Time FTE	\$0	\$90,362
b.	Add a Full Time Employee (FTE) DevOps Programming/Engin	\$0	\$183,321
	Total FTE Appropriations	\$0	\$273,683

7 IT Governance and IT Plan Management

The IT Planning Council is supported by several entities involved in developing, implementing, and maintaining IT resources within the Legislative Branch. These entities include the Office of Legislative Information Technology, the Legislative Executive Review Board, and the Technical Planning Group. These groups coordinate on an ongoing basis regarding the implementation of the Legislative Branch IT Plan. They also work together to adjust and maintain the plan during the interim.

Internal External Legislative Council Legislative Services Division Information Technology Information Technology **Executive Director** Board **Planning Council** Susan Fox Chief Information Officer Legislative Executive Information Technology **Dale Gow** Review Board Managers Council

IT Governance Chart

7.1 Internal Organizations

The following bodies work together to guide and manage the IT plans, decisions, and operations.

7.1.1 Legislative Council

To serve as the Legislature's approving authority for the Legislative Branch IT Plan and budget.

Chuck Hunter, Representative, Chair Debby Barrett, Senator, Vice Chair

Bryce Bennett, Representative
Seth Berglee, Representative
Stephanie Hess, Representative
Austin Knudsen, Representative
Margaret MacDonald, Representative
Edward Buttrey, Senator
Robyn Driscoll, Senator
Tom Facey, Senator
Bab Keenan, Senator
Jon Sesso, Senator

7.1.2 Information Technology Planning Council

To develop and maintain the Legislative Branch IT Plan and budget.

Susan Byorth Fox, Executive Director, Chair
Roger Webb, State Senator, Senate District No. 24
Kirt Wagoner, State Representative, House District No. 77
Amy Carlson, Legislative Fiscal Analyst & Director Legislative Fiscal Division
Angus MacIver, Legislative Auditor & Director Legislative Audit Division
Marilyn Miller, Secretary of the Senate
Lindsey Grovom, Chief Clerk of the House
Dale Gow, Legislative CIO
Ron Baldwin, State CIO

7.1.3 Legislative Executive Review Board

To provide executive guidance and direction to the Legislative Branch regarding enterprise technology issues and investments.

Susan Byorth Fox, Executive Director, Legislative Services Division
Amy Carlson, Legislative Fiscal Analyst & Director Legislative Fiscal Division
Angus MacIver, Legislative Auditor & Director Legislative Audit Division
Dale Gow, Legislative CIO

7.2 External Organizations

The Legislative Branch also 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 IT groups:

7.2.1 Information Technology Board

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, rates and other charges for services established by the department.

7.2.2 Information Technology Managers Council

The Information Technology Managers Council, 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.

Appendix A: Legislative Enterprise Architecture Principles

LEAP Principle 1

Organize information to enable its discovery and improve its meaningfulness.

Rationale:

- Legislators, legislative staff, the public, and external agencies require the ability to locate information provided by the Legislature.
- The ability of the Legislature to produce usable information is critical to the furtherance of the role of the Legislative Branch as the provider of policy information.
- Getting the right information to the legislators at the right time enables sound policy decision making.
- The effective discovery and comprehension of information saves time and resources.
- By organizing information in proper context, the value of information can be increased.

Implication:

- Requires investment in the expertise and tools that enable the information to be searched, located, and utilized.
- Requires the branch to inventory and analyze its information to aid with its organization, indexing, and ability to be searched.
- Requires processes and effort to organize information and maintain it.

LEAP Principle 2

Protect information in accordance with its business value, sensitivity, and longevity.

Rationale:

- The branch accesses, processes, and keeps sensitive data, including regulated information, and has a legal responsibility to safeguard it from unauthorized access.
- The branch has statutory, policy, and business use requirements to retain information for various amounts of time up to indefinitely.
- There is business and legal risk associated with the loss or compromise of the branch's enterprise information.

Implication:

- Requires policies for the classification of information according to its value, sensitivity, and longevity (i.e., definition of public records, historical information, and sensitive information).
- Requires protection mechanisms to be implemented to safeguard the information's confidentiality, integrity, and availability.
- Requires infrastructure for the retention of information according to the established policies.

LEAP Principle 3

Invest in automation of business processes and modernization of systems to gain efficiency, improve business performance, and/or reduce business risk.

Rationale:

- The business of the Legislature is continually challenged to provide more services and to process increasing amounts of data.
- Many of the business functions of the branch are increasingly dependent upon the processing
 of large amounts of data. At the same time, there are rising expectations for quick
 responsiveness.
- Without automation, there is a finite amount of information processing capacity due to resource constraints and the natural limitation of human information handling.
- Information processing, storage, and access are increasingly related to business risk, including ceasing of operations, loss of public trust, litigation, and the waste of resources.
- Technology must not be implemented for technology's sake.

Implication:

- Requires the creation of an enterprise systems modernization plan incorporated into the Legislative Branch Information Technology Plan.
- Requires that all technology investments be justified in terms of business efficiency, business performance, and business risk.
- Requires that the branch consider the supportability and total cost of ownership in all automation efforts.
- Requires existing operations and systems to be continually evaluated in terms of risk, efficiency, and performance.

LEAP Principle 4

Maximize flexibility in design of business and technology solutions to adjust to change in business and technology environments.

Rationale:

- The branch must continually adjust to developments in technology as constituents, the legislators, and other agencies adopt the use of new technology.
- The branch must continually adjust to changes in the business functions internally and externally (i.e., Executive Branch, federal government).

Implication:

- Requires a continuous process for the integrated participation and input of business and IT personnel in the management and maintenance of the business and technical environments.
- Requires that adaptability and flexibility be designed into business and technical solutions.

LEAP Principle 5

Foster openness and participation in the legislative process, leveraging technology and overcoming Montana's geographic challenges.

Rationale:

- Montana's size and demographics present a challenge to keep the public informed and engaged in the legislative process.
- Legislators require distributed access to information and communications in the interim.
- Appropriate technology innovation can enable open, engaged, and informed dialogue.

Implication:

- Requires distributed and mobile systems for telecommunications, interaction, and information sharing.
- Requires branch IT support for geographically distributed users.
- Requires the branch to balance access to information with the maintenance of quality of information.

LEAP Principle 6

Maximize the exchange of quality information by accommodating various media types and technology.

Rationale:

- There is a continual adoption of information-sharing media types and technology used by the public, the legislators, and the Executive Branch.
- In order to remain effective, open, and participative, the branch must sensibly support new media types and technologies.

Implication:

- Requires branch systems to support communications and information exchange via a wide variety of formats and devices.
- Requires a continuous process to evaluate new media types to determine if they would enhance the exchange of quality information.
- The branch must balance the support of media types and technology with the organization's ability to effectively manage the information so that the quality of information exchange is not degraded.
- Requires the branch to consider the phasing out of declining media types and technologies
 with the careful consideration of the wide variety of experience, preferences, and skills in the
 legislative bodies, legislative staff, and the public.

LEAP Principle 7

Promote the efficient use of resources by communicating and collaborating on policy, business operations, and information systems decisions throughout the branch as an enterprise.

Rationale:

- The business functions within the various business units of the branch are typically complementary and parallel (e.g., publication, analytics, research, facilitation, legal, and education all exist in each of the business units).
- Acting as a single enterprise offers opportunities for economies of scale.

- Collaboration fosters continuous improvement and enables centers of excellence.
- Collaboration yields standardization, which enables integration and facilitates maintenance, operations, and support.
- Improved communication improves efficiencies by reducing duplicative work and avoiding the need for rework.

Implication:

- Requires the development and maintenance of consistent branch wide policies.
- Requires a process for the communication, vetting, and consideration of collaboration and coordination of initiatives.
- Requires the consideration of the whole enterprise when deciding solutions for business needs
- Requires the creation and maintenance of enterprise process, information, and technology models.
- Requires the adherence to a strategic modernization plan that captures the future direction of the enterprise.

LEAP Principle 8

Guide the implementation, use, and management of technology in alignment with the business by setting policy and establishing processes.

Rationale:

- In order to maintain a balance between business integrity and keeping up with technology, the branch must be proactive and controlled in its adoption of technology.
- In order to effectively manage its operations given the complexity, diversity, and dynamism of
 its governance, the branch must act deliberately through the judicious application of policy
 implemented through defined processes.

Implication:

- Requires the development and maintenance of consistent, business-driven branch wide policies.
- Requires processes for the communication and training policies.
- Requires the creation and maintenance of enterprise process, information, and technology models.
- Requires the adherence to defined governance processes.
- Requires the development and adoption of standardized processes in the following areas:
 - Planning
 - Project management
 - Requirements management
 - Procurement
 - System implementation/development
 - Testing
 - Configuration management

- Change management
- Organizational change management
- Requires staff development in best practice application.

LEAP Principle 9

Foster education, learning, and comprehension of information through innovations and information presentation.

Rationale:

- The increase in complexity and scope of public policy requires the public and their policymakers to be informed on an expanding variety of issues.
- Legislative information can be highly complex, voluminous, and detailed. The branch strives to
 present information in a manner that makes it comprehensible and usable by both internal
 and external consumers.
- The rising reliance on and availability of large amounts of information used for evidence-based policymaking is driving the need for more sophistication in the public and their policymakers.
- Term limits result in loss of institutional knowledge and a lower average experience level in the legislative bodies, increasing the need for process and policy education.
- The branch employs a largely professional staff that requires ongoing training and certification.

Implication:

- Requires the investment in e-learning, knowledge-base, and learning management technology in the branch's educational and training functions.
- Requires examination of and further investment in e-learning, learning management, instructional design technologies, and related expertise.

LEAP Principle 10

Design, implement, and manage information systems with rigor appropriate to the business value of the information.

Rationale:

- The core functions of the branch are dependent upon the collection, processing, analysis, presentation, and communication of enterprise information.
- The systems used to process information must be chosen, designed, operated, and maintained in accordance with the value and scope of the related business functions.

Implication:

- Requires the classification and valuation of branch enterprise information and functions.
- Requires the investment in appropriately rigorous methods, technologies, and tools.
- Requires the branch to budget for appropriate levels of maintenance and operations resources when implementing new systems.

LEAP Principle 11

Maintain branch independence in core business functions.

Rationale:

• To ensure the integrity of the legislative process and the oversight responsibilities of the branch, the core business functions and their related systems must remain independent from the other branches of government.

Implication:

• Requires the branch to consider its constitutional charter as a co-equal and independent branch in its business and information systems decisions.

LEAP Principle 12

Guard the integrity of all Legislative Branch functions by producing objective, nonpartisan information.

Rationale:

• To ensure the integrity of the legislative process, the branch's analysis and presentation of information must remain impartial and evidence-based.

Implication:

• Requires the branch to authenticate sources, validate objectivity, and ensure the integrity of information it uses and produces.

Appendix B: OLIT's Accomplishments

- 1. Google Appliance Upgrade
- 2. Lexmark Printer replacement
- 3. Laptop Systems Replacement
- 4. LAWS II Infrastructure implementation
- 5. Mobile Device Management
- 6. Office 2013 Upgrade
- 7. Adobe ETLA implementation
- 8. Session Systems
 - a. Case Notes
 - b. Annotations
 - c. Codification
 - d. Bill Drafting Workflow
 - e. In-Design Printing
- 9. Montana Code Annotated Mainframe migration to xml database
- 10. Implementation of Oxygen Editor for xhtml editing
- 11. Training