

Legislative Branch Computer System Plan

2013 Biennium

**A Report to the 62nd
Legislature
From the Legislative Branch
Computer System Planning
Council
Prepared by Henry C. Trenk**

October 2010

**Published by
Montana Legislative
Branch**

**State Capitol, Room 110
PO Box 201706
Helena, MT 59620-1706
PHONE: (406) 444-3064
FAX: (406) 444-3036
<http://leg.mt.gov>**

Table of Contents

Introduction	1
Information Technology Planning in the Legislative Branch	2
Statutory Planning Requirements	2
Legislative Branch IT Planning Structure	4
Planning Council Meetings	5
The Business of the Legislative Branch	8
Organization	8
Missions	9
Functions	9
Business Goals	12
The Role and Purpose of Information Technology in the Legislature's Business	13
Current Information Technology Environment	15
Organization	15
Information Technology Equipment	17
Recent Information Technology Accomplishments	19
Information Technology Maturity	24
Risk Factors	30
Best Practices Assessment	31
In-House Resources and Outsourcing	31
Legislative Branch PC, Laptop, and Server Replacement Cycle	32
Short-Term IT Goals and Objectives	34
FY 2012-13 Central Information Technology Budget Proposal	41

Long-Term Information Technology Issues for the Legislative Branch 44

Appendices

Appendix A: Membership of Advisory Groups 48

Introduction

The Legislative Branch Computer System Planning Council is pleased to present its 2013 biennium computer system plan for managing the Legislative Branch's substantial investment in Information Technology (IT). This plan will provide direction in using IT resources to ensure the maximum return on this investment while best meeting the needs of the Legislative Branch.

The chapters that follow discuss Information Technology planning in the Legislative Branch, the business of the Legislative Branch, the Branch's current IT environment, and the short-term IT goals and objectives. In addition, the plan presents a proposed Branch IT budget for the 2013 biennium and outlines issues to be addressed in the long term. Questions about the plan may be directed to Susan Fox or Hank Trenk at 406-444-3064 or sfox@mt.gov or htrenk@mt.gov.

The computer system plan provides direction in using IT resources to ensure the maximum return on this investment while best meeting the needs of the Legislative Branch.

Information Technology Planning in the Legislative Branch

This chapter provides background information about Information Technology (IT) planning in the Legislative Branch. Topics covered include statutory planning requirements for the Legislative Branch, the IT organizational structure within the Branch, and the Branch IT planning process.

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 computer system planning encompassing broad policy needs, long-term direction for computer 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 computer system plan is:

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

The Legislature created the nine-member Legislative Branch Computer System Planning Council (Planning Council) to develop and maintain a Branch computer system plan. Members of the Planning Council include:

- the Secretary of the Senate or another representative of the Senate designated by the President;
- the Chief Clerk of the House or another representative of the House designated by the Speaker;

- the Sergeants at Arms in the two houses or another representative of each house designated by the presiding officer of that house;
- the Executive Director of the Legislative Services Division (LSD), who chairs the Planning Council;
- the Legislative Auditor;
- the Legislative Fiscal Analyst;
- the Consumer Counsel; and
- a person designated by the Director of the Department of Administration to represent the Department's IT responsibilities, who serves as a nonvoting member.

In developing and maintaining the Branch computer system plan, the Planning Council is required to:

- review existing systems that are candidates for automation;
- review existing automated systems that could be improved or integrated with new applications;
- develop and maintain a description of Branch functions or services that would, through application or improvement of computer technology, provide better service;
- develop and maintain a ranking of needs, considering effectiveness and cost of alternative systems; and
- develop and maintain recommended Branch system standards and standard or custom software and hardware solutions.

By law, the LSD is required to provide technical support to the Planning Council. Statutory duties related to this support role include:

- analyzing existing and alternative systems;
- providing technical solutions and advice;
- apprising the Planning Council on industry developments;
- maintaining a liaison with the Executive Branch; and
- assisting in purchasing of supplies and equipment.

After developing a Branch computer system 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 Planning Council must adopt, as part of the computer system plan, "adequate rules for the use of any information technology resources" and forward them to the Legislative Council for approval.

Legislative Branch IT Planning Structure

The 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 (OLIT), the Technical Planning Group, and the Web Team. A description of each group is contained in Chapter 3. The membership of each group is contained in Appendix A.

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:

- 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, consisting of state IT managers, reviews statewide IT issues, provides feedback regarding information management policies, reviews opportunities for the application of new

The Planning Council is supported by several entities involved in developing, implementing, and maintaining IT resources within the Legislative Branch.

information processing technology, and participates in statewide IT planning efforts.

Planning Council Meetings

To comply with its statutory obligations, the Planning Council met four times during the 2009-10 interim. A summary of the meetings follows:

The Planning Council discussed proposed ways to automate recording of committee votes.

- February meeting. At the organizational meeting in February 2010, members reviewed their statutory duties, adopted operating guidelines, and reviewed the current Legislative Branch IT environment. Dick Clark, the Executive Branch CIO, briefed the Planning Council on Executive Branch IT activities. Members received an update on 2009 IT legislation impacting the Legislative Branch. The discussion mainly focused on the fact that most of the proposed legislation affecting the Legislative Branch did not make it through the Legislature. Also at this meeting, the Planning Council received an update on the final IT budget adopted by the 2009 Legislature, a review of the IT projects planned for the 2011 biennium, and an update on two systems analysis projects that the branch has undertaken: 1) systems and processes used during session and post session publications, 2) Legislative Fiscal Division systems and processes.
- April meeting. At the April 2010 meeting, the Planning Council members received a report on the systems analysis of session and post session activities from XMaLpha (the contractor hired to conduct the analysis). The Planning

Council also discussed the IT replacement cycle, the use of contracted services, and declining and emerging technology in the Branch. Additionally, the Planning Council reviewed a preliminary list of IT projects and budget initiatives for the 2013 biennium and a proposed format for the 2013 Branch computer system plan.

- June meeting. The focus of the June 2010 meeting was on further refinement of the proposed IT projects and initiatives for the 2013 biennium. OLIT staff presented cost estimates for each proposal under discussion. Members provided feedback on the proposals and agreed to advance all proposals to the Legislative Council for its consideration. Also at this meeting, the Planning Council discussed: 1) the contents of the 2013 Branch computer system plan; 2) proposed ways to automate recording of committee votes; and 3) transparency in government and its possible impact on IT.

- August meeting. The Planning Council wrapped up business in August 2010 with final adoption (with some modifications) of the Branch computer system plan and budget for the 2013 biennium. Members also received an update on the two systems analysis projects.

- Legislative Council meeting. LSD staff presented the Legislative Branch computer system plan and budget to the Legislative Council at its September 9, 2010 meeting. The Legislative Council adopted the Computer System Plan (this document). However, they did not take action on the new

budget proposals to address declining/obsolete technology (explained in Chapter 5 of this document). The Legislative Council meets again in November of 2010 and may take action on these new budget proposals at that time.

Minutes of the Planning Council meetings and the Legislative Council meetings can be found on the Legislative Branch website (<http://leg.mt.gov>).

The Business of the Legislative Branch

This chapter describes the organization of the Legislative Branch and presents the mission of the Branch entities. It also discusses the functions and role played by IT in the Branch's business and the business goals of the Branch.

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

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.

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 LSD, the Legislative Fiscal Division (LFD), and the Legislative Audit Division (LAD).

Missions

The missions of the consolidated Legislative Branch entities are as follows:

- The mission of the **Legislature** is to exercise the legislative power of state government vested in the Legislature by the Montana Constitution.
- The mission of the **Legislative Services Division** is to provide research, reference, legal, technical, information technology, and management and business support services to the Senate, House, and other divisions of the Legislative Branch in support of effective and efficient operation of the Legislative Branch and to support the mission of the Legislative Council.
- The mission of the **Legislative Fiscal Division** is to provide the Legislature with objective fiscal information and analysis relevant to Montana public policy and budget determination.
- The mission of the **Legislative Audit Division** is to conduct independent audits, as provided by law, and to provide factual and objective information to the legislative and executive managers of the public trust.

Functions

Legislative responsibilities include areas such as lawmaking, appropriation, taxation, oversight of the Executive Branch, and representation of local interests. The primary function of the Legislature, however, is lawmaking, which consists of the consideration 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. A description of these functions follows.

Research

The LSD, LFD, and LAD each provide nonpartisan research services to the Legislature. The LSD staff provides draft bills for the legislators and committees. They also provide legal and policy research and analysis, research reports, and a reference library for the

Branch. The Legislative Environmental Policy Office, within the LSD, provides research and analysis of environmental issues. The LFD provides research support in matters related to state budgeting. The LAD provides research and analysis on audit issues.

Fiscal Analysis

The LFD provides an independent analysis of the Governor's budget. It also conducts research and analysis of revenue and expenditure trends and provides reports on the impact of economic changes on both enacted and proposed legislation. By performing fiscal analysis and by assisting legislators in understanding agency budgets, the LFD helps the Legislature make responsible decisions about the collection of state revenue and the subsequent investment in, and allocation to, state government programs. Also, during legislative sessions, LAD assists the Legislature by gathering and analyzing information relating to the fiscal affairs of state government.

All legislative divisions participate in the distribution of information to the Legislature and the public.

Legislation and Policy Development

The LSD, the Senate and House staff, and the LFD provide staff support to the Legislature as it proposes, debates, and makes decisions on legislation. LSD research and legal staff support standing committees and LFD supports the appropriations and finance committees. LSD staff support the data input, introduction, engrossing, enrolling, and codifying of bills. Senate and House staff provide clerical support to committees, support the flow of bills through the Senate and House, and generally support the operation of the Senate and House.

Information Distribution

All legislative divisions participate in the distribution of information to the Legislature and the public. For example, legislative audit reports are available to the public, as are budget analysis, legislative fiscal, and research and interim committee reports. During a session, the Data

Distribution Center in the LSD distributes bills, amendments, resolutions, status reports, and journals in printed format to the Legislature and the public. The Legislative Information Office provides information to the public on the legislative process, the status of legislative proceedings, and the daily calendar of events, both directly, through the Internet, and by telephone. The OLIT supports the systems that allow the creation and maintenance of electronic information and that make electronic access to bill status and text possible. The Legal Services Office, the Central Services Office, and the OLIT are responsible for preparing and distributing the MCA, legislative rules, journals, annotations, and other documents related to the proceedings of the Legislature.

Oversight

The LAD provides oversight by regularly auditing the functions of state government and gives the Legislature and the public an independent analysis of the effect of laws and rules. These reviews allow the Legislature to analyze whether the Executive Branch complies effectively and efficiently with the laws and policies of the Legislature. In addition, the LAD is required by federal and state law and bonding agents to issue independent audit opinions on the fairness of the financial statements and the results of operations of state government agencies and of state government as a whole. The LAD also investigates reports and allegations of waste, fraud, and abuse in state government. The Legislative Environmental Policy Office serves in an oversight capacity for state government on environmental issues. The LFD is statutorily charged with oversight responsibility for the appropriations process, revenue, and other fiscal policy issues. The LSD has agency monitoring responsibilities and administrative rulemaking review incorporated in support of permanent interim committees.

Business and Administrative Services

The Central Services Office of the LSD provides purchasing, personnel, and accounting services for the entire Legislative Branch. These services help to efficiently expedite daily business issues and needs of the Branch. Also included in the function is the

general administrative support role that LSD, LFD, LAD, and the House and Senate provide to the Branch.

Business Goals

The functions described above can be mapped to the following business goals for the Branch.

Business Goal # 1: Perform legislative duties in the administration of public policy. The functions supporting this goal are: Oversight and Business and Administrative Services.

Business Goal # 2: Effectively support legislative function of establishing public policy through law. The functions supporting this goal are: Research and Legislation and Policy Development.

Business Goal #3: Effectively support the Legislature in fulfilling its duties to pass a balanced budget. The function supporting this goal is: Fiscal Analysis.

Business Goal #4: Effectively provide the public with information supporting the constitutional right to know and participate. The function that supports this goal is: Information Distribution.

Additional information on the legislative process can be found in the [Legislator's Handbook](#), published by the Montana Legislative Services Division. Also, the publication provides background on the relationship of the process to constituents, the media, other government agencies, and lobbyists. The mission, goals, and objectives documents submitted as part of the biennial budget process are another valuable source of information about the Branch. The mission, goals, and objectives documents and the [Legislator's Handbook](#) can be found on the Legislative Branch website.

The Role and Purpose of Information Technology in the Legislature's Business

The Legislature works with information in order to produce information. In this information age, enhancing the ability to gather, process, and distribute legislative information more quickly and more accurately is a necessity.

Technology is the primary tool used by the Branch to collect, analyze, and disseminate information. Therefore, the Legislature 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 process. The technology planning process established by Title 5, chapter 11, part 4, MCA, helps ensure that the Legislature is making effective decisions about incorporating technology into the legislative process.

The Planning Council has adopted the following purpose statement for information technology in the Legislative Branch:

In this information age, enhancing the ability to gather, process, and distribute legislative information more quickly and more accurately is a necessity.

To support the Montana Legislature and its processes by providing appropriate and reliable tools and services for legislators and staff to effectively perform their constitutional and statutory duties. These tools and services must:

- aid in the efficient collection, analysis, and presentation of complete and accurate information;
- maintain the integrity of the information and preserve it for future use; and
- provide timely and direct access to the information to interested persons, groups, and entities.

There are extraordinary opportunities for applying technology to an organization whose main product is information. The Legislative Branch recognizes this, has invested in and applied technology, and has received significant benefits from that technology.

Current Information Technology Environment

This chapter summarizes the current organizational and technical environment that supports IT processes and initiatives in the Branch. Also included in this chapter are the recent accomplishments that have been made by IT to improve the legislative processes, an analysis of the maturity level of technology used by the Branch, a discussion of the significant IT risks that the Branch is facing, an assessment of best practices, a discussion of how the Branch uses IT outsourcing resources, and an explanation of the PC, laptop and server replacement cycle.

Organization

In addition to a computer system plan, an appropriate IT organizational structure is necessary to effectively implement the goals of a plan. The following IT organizational structure has been established:

Legislative Branch Computer System Planning Council

Mission: To develop and maintain a Legislative Branch Computer System Plan in accordance with 5-11-403, MCA.

Legislative Council

Mission (as it relates to IT):

To serve as the Legislature's approving authority for the Legislative Branch computer system plan in accordance with 5-11-405, MCA.

Executive Director, Legislative Services Division

Mission: To provide leadership to the Legislative Branch Computer System Planning Council and provide technical staff support to the Planning Council.

Technical Planning Group (TPG)

Mission: To assist the LSD Executive Director and the Office of Legislative Information Technology staff in providing technical planning support to the Legislative Branch Computer System Planning Council.

This group provides advice and guidance to OLIT, legislative division directors, and the Planning Council to ensure that plan goals are achievable, that everyday IT needs are met, and that significant IT issues are addressed. It includes staff responsible for IT services from within each division.

Web Team

Mission: To be responsible for overall management and oversight of the Branch website.

In response to the growing importance of the Internet as a tool for providing legislative information to the public, the division directors in December 2001 adopted Branchwide web guidelines and designated a group made up of legislative staff to oversee management of the content and the “look and feel” of the website. These guidelines were updated and adopted by the directors as internal policy in March 2008. The Legislative Web Team is made up of members from each permanent legislative division, as well as representation specifically from the Office of Legislative Information Technology and the Legislative Information Office. The chair is elected by, and serves at the pleasure of, the team. The current chair is the Legislative Information Officer.

Office of Legislative Information Technology

Mission: To implement the computer system plan established by the Legislative Branch Computer System Planning Council and adopted by the Legislative Council.

The OLIT is responsible for developing, implementing, and maintaining an IT infrastructure that meets the business needs of the Legislative Branch in accordance with the computer system plan. The OLIT is organized into two sections: the Computer Systems Section and the Network Support Section. The Computer Systems Section develops and maintains computer systems, such as the Legislative Automated Workflow System (LAWS). The Network Support Section provides day-to-day operational support and engineering support for the computing platform for the Branch. OLIT also contains an Enterprise Architect position and a Security Officer position. The Enterprise Architect is responsible for developing and maintaining an Enterprise Architecture for the Branch and the Security Officer is responsible for the security and disaster recovery functions. Also, through this staff, coordination is provided for information services and relationships with outside organizations, such as the general public, lobbyists, and other agencies.

Information Technology Equipment

The paragraphs that follow briefly describe the technology used in the Branch.

Computer Hardware

The Branch has determined that most of its internal computing needs can be met cost-effectively by using microcomputer hardware. Currently (FY 2010-11), there are approximately 380 desktop and laptop personal computers (PCs) in the Branch network. These PCs are connected to Branch file servers.

Midtier services, provided by the Department of Administration, provide access to large statewide systems, such as the Statewide Accounting, Budgeting, and Human Resource

System (SABHRS) and the Montana Budget Analysis and Reporting System (MBARS). The Department of Administration mainframe is used for a few Branch systems, such as the MCA codification and annotations processes.

The Branch also leases Oracle server services from the Department of Administration for the LAD Comprehensive Annual Financial Report System (CAFRS) and the Legislative Automated Workflow System (LAWS).

Web server services are provided to the Branch by the Department of Administration and the Office of Public Instruction. The Legislative Branch also has some of its own web servers.

Computer Software

The Branch has standardized on a defined set of software. These standards are described in the Branch's Enterprise Architecture. The Branch Enterprise Architecture is constantly evolving. Contact the LSD for a current copy.

The Branch has developed and supports the following systems: LAWS (Oracle, web, WordPerfect macros), audit reports, audit billing, office macros, publications management, Capitol group, information request, Branch website, MEPA documents, audit hotline, LAD SABHRS, Banner interface, audit management reports, CAFRS/trial balance, legislative messages, checkout board, revenue estimation, budget book development, audio/video streaming, MCA codification, and many smaller systems.

Telecommunications

The Branch uses a local area network (LAN) for internal communication and the SummitNet wide area network, which is provided by the Department of Administration for communication to the rest of State government and the Internet. These networks provide a fast, efficient pathway for data network traffic within the Branch, to other state

government agencies, and to the "outside world". The Branch makes significant use of the Internet for contact with the public through this network.

Recent Information Technology Accomplishments

The Branch has made numerous technological achievements during the current biennium. Descriptions of several of the major achievements are listed below.

Note: An * by the project name indicates that it was a project identified in the current computer system plan.

Citrix Upgrade

Citrix is software that delivers a complete Windows desktop experience to mobile workers in off-site duty locations or from their home. Currently LAD users use Citrix when they are on an audit site to access Branch data and applications, which provides them a seamless work environment.

The Branch first installed Citrix about 7 years ago. Since then, there have been significant upgrades to the Citrix software. When the servers that Citrix currently runs on began to fail, OLIT decided it was time to upgrade the Citrix software and replace the failing servers. This project was split into two phases. Phase 1 was to replace the servers and still run the current Citrix release. Phase 2 was to upgrade to the current release of Citrix. During the replacement of servers phase, OLIT staff created the new servers as virtual servers in the new blade center. This project was successfully completed and the Branch is now on the current release of Citrix.

ZENworks Configuration Management (ZCM) Upgrade

ZCM is software that provides life cycle management of a Windows workstation, from initial imaging to deploying applications, policies, asset inventory, management/reconciliation of licensing, and more. ZCM is used by the Branch to

centrally control the Branch workstations so that a technician does not have to physically visit each workstation when changes to it are necessary. This feature provides considerable time savings and consistency in the configuration of workstations.

Novell (the company that supports ZCM) came out with a significant upgrade to its previous software suite and required all users to upgrade. This upgrade required a significant amount of detailed engineering work on Branch applications to ensure they would be compatible with the new version of ZCM. This project was successfully completed with little impact on the workstation users.

Legislative Branch Firewall*

Due to increases in security vulnerabilities, the Branch purchased and installed a Firewall. A Firewall is a device that monitors incoming and outgoing network traffic and can be configured to monitor and block certain undesirable traffic. This Firewall provides a separation point from the rest of state and worldwide networks, thus improving the security posture of the Branch's network.

Disaster Recovery Environment Rebuild*

As part of the Disaster Recovery plan developed by the Branch about 6 years ago, the Branch put in a redundant file server and 12 laptops at an offsite location to be used in the event of a disaster such as a server room outage. This biennium, the disaster recovery server reached the end of its life cycle and needed to be replaced. The OLIT staff purchased, configured, and implemented a redundant (Disaster Recovery) file server with new equipment (servers and storage area network) to utilize virtualization technology, which allows OLIT to run multiple servers from a single physical device.

Help Desk Software

OLIT has had a centralized IT Help Desk (and a dedicated phone number for support calls) for about 5 years and has used in-house developed software to track those calls. The computer industry provides a variety of commercial off-the-shelf software packages

to assist the Help Desk function and OLIT decided to explore purchasing one of these. After much research OLIT chose a product called "everything Help Desk", which best suited OLIT needs and fits the current IT environment. This product not only does a good job of tracking Help Desk calls, it also provides reporting tools for management to understand trends, which can increase help desk productivity and reduce repetitive issues.

Server Health/Status Monitoring

The Branch currently has about 50 servers. Manually monitoring the server logs and hardware status reporting on all of these servers requires a significant amount of time. OLIT staff implemented an automated server health and status monitoring software package, and is now pro-actively monitoring all systems from one central management console, moving away from a reactive stance. Server health issues are monitored 24/7 via e-mail and text messaging, allowing OLIT to quickly respond to, diagnose, and correct server issues. In addition, it also allows the collection of historical data to help better inform the OLIT staff about usage trends and capacity planning.

Session Processes Systems Analysis*

In order to continue to address declining technology in the Branch, a project was started to document the business processes and systems that are used during and after (post session publications) a legislative session. Some of the technology the Branch uses for these processes is over 10 years old, and some is over 20 years old. The Branch used the Request for Proposal process to hire a contractor to do this work. A company called XMaLpha was engaged to work on this project. When completed, the project will help the branch identify what business processes are supported by which systems and also what systems need replacement. The contractor is also responsible for making recommendations on new software products to use where existing ones are obsolete and also for laying out a schedule for replacement of these systems, including details about the resources and budget needed to accomplish the replacement.

LFD Systems Analysis*

In order to document LFD systems and processes and provide better support for LFD, the Branch asked for and received a Systems Analysis FTE from the 2009 Legislature. This FTE was filled and the incumbent has begun the analysis phase of this project. The recommendations coming out of this project are much like the Session Systems Analysis project, i.e. to make recommendations on new software products to use where existing ones are obsolete or not robust enough and also to lay out a schedule for replacement of these systems with resources and budget needed to accomplish the replacement.

Reapportionment Support*

Under its responsibility to provide support to the Districting and Apportionment Commission, the Branch has purchased and OLIT is supporting a redistricting system. The Branch purchased a product called Maptitude from Caliper Corporation.

Audio/Video (A/V) Resource Management

Since the 2001 Session the Branch has broadcast on TV and streamed on the Internet audio and video of the legislative proceedings. This project started small with only the floor sessions and a limited number of hearings being broadcast and streamed. Over the years it has grown and now all floor sessions and many hearings are broadcast and streamed. In the past, this project was mostly funded out of leftover money in Branch budgets, but during the 2009 Session this program received sufficient funding of its own. In 2010, OLIT used a vacant FTE to hire a Audio/Video resource coordinator to better manage the activities of this program.

In 2009 a Request for Proposal (RFP) was developed and released to vendors of satellite delivery services. The result was a new contract that significantly reduced the satellite distribution costs by nearly \$1 million if the contract runs 10 years. The A/V maintenance contract was renewed and a new A/V production contract was negotiated.

Audio/Video Enhancements

Much work has been accomplished to better coordinate and manage audio and video production. There were several upgrades made to the A/V infrastructure. Some of the old, failing equipment was replaced with new equipment that fits the current A/V architecture. Staff reviewed and made many process changes to enhance, simplify, and standardize A/V production and archiving. The software that staff use to operate A/V equipment and processes was significantly modified based on user feedback and other needs. Staff participated in a pilot project with the State Library to include legislative audio in a regional A/V archive located in the state of Washington.

Advanced Agenda

In order to begin to replace the paper that legislators now use during floor sessions, OLIT developed an Advanced Agenda application as part of the LAWS system. This application not only displayed (in a web browser) the list of bills on the daily agenda along with their sponsor and short title, it also displayed, on 3rd reading bills, how the legislator (who was signed on at the time) voted on that bill on second reading. The Advanced Agenda was also tied into the House and Senate vote systems agenda and when bills were moved up or down, or deleted on the vote system agenda, they would also be changed on the Advanced Agenda screen.

eDocs for Legislators Enhancements

eDocs for Legislators was a pilot project for the 2009 session. eDocs allows legislators to receive via e-mail many documents that have historically been printed and hand delivered. These include: messages from constituents, hearing notices, bill review requests, and more. During the 2009 pilot project the legislators involved received all of the included documents electronically. Based on feedback received during the pilot project, the system has been enhanced in many ways. One of the key changes is the ability for legislators to now select which documents they receive electronically and which documents they receive as paper documents.

Microsoft Office 2007 Implementation*

At the beginning of this biennium, the Branch was on the 2003 release of the Microsoft Office Suite. Microsoft changed the document format standard for its office suite and the Branch was beginning to receive a significant number of documents (especially from the Executive Branch) that were not able to be read properly with Microsoft Office 2003. The Branch began a project to upgrade to Microsoft Office 2007. This was a major upgrade because the interface to Microsoft Office 2007 was significantly changed over the older releases and thus users of the new suite would need significant training. The Branch contracted with an outside training company to provide a series of classes over a period of 3 weeks to educate users. Another factor was the document format change, which caused some conversion problems. Because of the significant planning effort that took place before this conversion, the conversion was a success and the staff adjusted to the new software very quickly.

Information Technology Maturity

This section describes the IT hardware and software in the Legislative Branch in terms of its maturity as of the publication of this plan (October 2010) and discusses issues related to the hardware and software maturity.

Maturity Table

The following table categorizes the Branch's hardware and software according to maturity level. The categories used are emerging, mature, declining, and obsolete. Emerging technology is technology that is new and typically the latest release or technology that is beginning to gain market share or to start a new trend. Mature technology is fully supported technology, typically a year old or older, but not necessarily the latest release and also is technology that has significant market share and is commonly used by most businesses. Declining technology is technology that has a sunset date (date beyond which it is no longer sold or supported), has limited support, or has a declining/small market share. Obsolete technology is technology that is past its

sunset date, is no longer supported, or for which the company that supports it is going or has gone out of business.

Category	PC*	PC OS**	Desktop Software	Mid-Tier Hardware	Network OS	Major Applications
Emerging	5%	0%	0%	5%	10%	10%
Mature	50%	0%	85%	85%	45%	70%
Declining	35%	100%	10%	5%	35%	20%
Obsolete	10%	0%	5%	5%	10%	0%

* PC – Desktop or Laptop Personal Computer

** OS – Operating System

Maturity Issues

As noted in the table above, the Branch is relatively current on supported releases of software and hardware. However, there is a certain percentage of the IT infrastructure that is in the declining or obsolete categories. Also, the Branch continues to test and in some cases implement emerging technology in the server operating system and web server software areas. Below is a description of the emerging and declining or obsolete technology in the Branch. For the declining or obsolete technology, an assessment of the risk associated with continuing to use the technology is presented.

Emerging Technology

The Branch has been investigating the following emerging technology. If the investigation proves successful, it should result in more efficiency to the Branch and possibly cost savings.

- **Server Virtualization**

In the past, one server software operating system ran on one hardware server. Virtualization is software and hardware that allows multiple server operating systems to run on one hardware server. This provides for better usage of the hardware.

Virtualization also provides the capability to quickly configure a server and place it into service. Virtualization is being used successfully by several IT organization nationwide. The Branch has already begun to implement virtualization and will continue to move forward in this area.

- Desktop Virtualization

Desktop virtualization is much like server virtualization in that instead of the software on a PC running on one hardware PC, there is a centralized server that runs the software for several PCs. This is a brand new technology and could provide a cost savings if the PC hardware replacement cycle could be extended and the cost per PC could be reduced.

- Blade Servers

Recent improvements in hardware servers have allowed the entire server (minus the hard drive) to be placed on a small circuit board (blade). Server designers have come up with a Blade Center, which is a device that has the capacity to hold about 10 blade servers. This configuration has the capability to add new servers quickly if additional capacity is needed quickly and it also reduces the amount of space needed in the server rack for new servers. Another benefit of Blade Centers/Servers is that the power needed to run the server(s) is much less than traditional servers. The Branch has already begun to implement a Blade Center and will continue to make improvements in its usage.

- Linux

Linux is an emerging PC and server operating system. It is currently very popular as a server operating system and has had major impact on the market for server operating systems. Linux's strong points are that it is typically cheaper, more stable, and more robust than other operating systems. Potential savings can be achieved in the initial

purchase price and reduced long-term maintenance. On the down side, network administrators experience a steep learning curve regarding Linux implementation.

In the long run, the benefits of Linux far outweigh the detractions, and thus the Branch sees much potential for Linux. The Branch has installed Linux in a few cases and continues to consider it for all new uses of servers.

Declining or Obsolete Technology

- Mainframe TextDBMS System

The Branch uses a mainframe system called TextDBMS to update and maintain the MCA. The Branch has extensively used the programming language for TextDBMS to enhance the process used to update and maintain the MCA. The Branch has a significant investment in this system, which it has used for the last 22 years. The system currently meets all of the needs of the Branch and requires very little maintenance. However, the original owners of TextDBMS are no longer involved in the legislative market. About 12 years ago, the original owner sold the rights to TextDBMS to a small company (two to three employees), which the Branch currently contracts with for support. Additionally, since mainframes are a declining technology, it becomes more and more difficult to hire mainframe programmers. This system is in the declining stage and is being monitored for potential replacement.

- LAWS Web Pages

The Branch has developed a system to process and track bills as they move through the legislative process. This system is called the Legislative Automated Workflow System or LAWS and was originally developed in 1997-98. LAWS has a web interface to all of its data. Since the LAWS web interface was developed in 1997, the Branch website has been redesigned and undergone major changes. Also since 1997, web technology has moved forward significantly. These two factors combined have made the LAWS web

interface not compatible (i.e. not have the same look and feel) with the rest of the Branch website. At some point in the near future, the web interface to LAWS will need redesigning to bring it up to date with current web technology and the rest of the Branch website.

- WordPerfect and WordPerfect Macros

The bills, journal, and committee minutes processing part of LAWS and also some of the Branch's office processes are written in WordPerfect macros. The word processing part of the LAWS system was developed in 1997-98 using the WordPerfect macro language. The Branch upgraded to release 12 of WordPerfect during the 2006-07 biennium and is currently on a supported release of WordPerfect. WordPerfect has a small percentage of the market share for word processors. WordPerfect was recently sold to a private investor and therefore the company that owns WordPerfect is no longer publicly traded. Thus it is difficult to determine the financial status of the company—i.e., whether or not they are on the verge of going out of business. The Branch needs to continually evaluate this product and the company's performance in order to be prepared to replace it if necessary.

- Lotus Approach

The Branch uses Lotus Approach for accessing and manipulating SABHRS data and for tracking financial aspects of fiscal notes. Lotus Approach is a low-end database package that runs on the PC. Lotus Approach has been dropped from the list of supported Executive Branch software. However, the company (IBM) that sells and supports Lotus Approach has no plans to phase it out. The Branch requires very little support for Lotus Approach. The Branch has discontinued new development in Lotus Approach but will continue to use and support the current systems that are using it. The Branch will consider converting these Lotus Approach applications to supported software sometime in the next 4 to 6 years.

- Montana Budget Analysis and Reporting System (MBARS)

MBARS is a system used by both the Executive and Legislative Branches. It is used before the legislative session to prepare the executive budget recommendations. During the session, the system is used to track budget decisions as the Legislature establishes appropriations policy. Upon completion of the session, the system is used to load the state accounting system with legislatively approved budget information. MBARS was developed for the state by a private contractor in 1997-98. It was first used for the 1999 legislative session. The vendor that supports MBARS has indicated that the software platform used to develop the system is difficult to support because the tools are no longer current technology and thus it is difficult to find people knowledgeable in their use. For this reason, both the Executive and Legislative Branches need to monitor the status of this system and determine when it is appropriate to replace it.

- Desktop Operating System

The Branch currently uses Microsoft Windows XP as its desktop operating system (OS). Windows XP is supported by Microsoft until August of 2014. Microsoft has released two versions of their Windows desktop software since Windows XP. They are Windows Vista and Windows 7. The Branch needs to replace Windows XP some time during the FY 2012-13 biennium and is planning on converting to Windows 7.

- Network Operating System

The Branch currently uses Novell Netware as its file and print network operating system. Novell has indicated that it intends to phase out Netware within the next 2 to 3 years. Novell has provided a migration path for Netware users to their new product, SuSe Linux Open Enterprise Server. The Branch plans to upgrade to SuSe Linux Open Enterprise Server during the FY 2012-13 biennium.

Risk Factors

The Branch faces two major risks in carrying out its IT strategy: 1) recruitment and retention of skilled IT personnel; and 2) security and disaster recovery preparedness.

Recruitment and Retention of Skilled IT Personnel

Over the years, the Branch has struggled with recruitment and retention of skilled IT personnel. With the recent high unemployment rates, the Branch has not had difficulty finding and retaining qualified IT staff. However once the economy recovers and unemployment goes down, the Branch could be in the same situation as before with struggling to find and keep qualified IT staff.

The Branch faces two major risks in carrying out its IT strategy: recruitment and retention of skilled IT personnel and security and disaster recovery preparedness.

Security and Disaster Recovery Preparedness

During the FY 2008 - 2009 biennium, the Branch hired a Security and Disaster Recovery officer. This employee began to help the Branch move forward with its security and disaster recovery programs, but was hired into another position. The position is currently vacant. It takes 2 to 3 years to get a security program to the point where the organization can be at a level of security that is sufficient to mitigate most risk. The Branch is in the early stages of implementing security, yet the threat of a security breach continues to increase as time goes by. Also, the Branch needs to continually practice and further develop the disaster recovery plan in order to

ensure a state of readiness exists. This has been difficult at times because of other priorities. Although the Branch is beginning to address the security and disaster recovery issues, there is still more to do.

Best Practices Assessment

The Legislative Branch is a member of the National Association of Legislative Information Technology (NALIT), a group consisting of IT professionals from each state legislature. NALIT's purpose is to share knowledge on how best to apply IT to the legislative process. Based on information collected by NALIT on the structure and operation of IT agencies in state legislatures, Montana has achieved a significant degree of centralization of IT systems and functions. Compared to other states that have separate systems and staff for each chamber, the Montana Legislature has an integrated bills processing and status system; one data network supported by centralized staff; and a centralized systems development staff. Not only is this level of centralization best practice, but it also enables the Branch to make best use of its limited resources, provides a high degree of efficiency in delivery of services, and ensures that systems are developed and maintained from a Branch perspective.

In-House Resources and Outsourcing

The Legislative Branch uses internal IT staff for daily operations and maintenance and for minor enhancements to IT systems and infrastructure. 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. This outsourcing strategy fits well with the Branch 2-year business cycle, which allows a 1½-year window between regular sessions to make major enhancements. 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.

Legislative Branch PC, Laptop, and Server Replacement Cycle

All computer hardware has a life cycle, i.e., it eventually needs replacement because of worn out parts, it is no longer supported by the vendor, currently supported software does not operate on it, or it has, for many other reasons, become inefficient. The computer industry standard for the desktop PC life cycle (replacement cycle) is 3 - 4 years. Laptops typically have a shorter life cycle than desktop PC because they have more wear and tear due to their mobile nature. Servers also typically have a shorter life cycle than PCs because server technology is moving faster than PC technology and because organizations are highly dependent on servers staying up so they are more likely to keep servers on the most current technology.

The Branch has a 2-year business cycle, i.e., it has a legislative session every 2 years and conducts interim activities between sessions. From a computer up-time perspective, the Branch has to have all computers running and on currently supported releases in order to effectively support the legislative session. Session is the most critical time for computers and outages must be kept to a minimum. Therefore, the Branch strategy for making upgrades/replacement of computer hardware has always been to make these changes between sessions and to ensure that the equipment is installed and tested several months before session starts. Also, no major changes are made to the IT environment (unless absolutely necessary) during a legislative session because major changes can cause outages.

Because the Branch has a 1½-year window every 2 years to make changes to its IT environment, computer hardware replacement needs to take place in this window. This makes it difficult, but not impossible, for the Branch to accommodate an odd number of years for the replacement cycle, such as 3 or 5. The Branch in the past typically has replaced half of its PCs every 2 years. This turns out to be about a 4-year replacement cycle. Although at times, due to budget cuts, the Branch has skipped a biennium when doing PC replacements. As it turns out, the Branch will be using 5-year-old desktops for

some of the staff during the 2011 session. The Branch plans and has budgeted for replacing half of its PCs/laptops during FY 2012-13. The Branch currently plans to skip the PC/laptop replacement cycle for the current (FY 2010-2011) biennium.

Short-Term IT Goals and Objectives

The IT goals for the Legislative Branch for the 2013 biennium are listed below. Following each IT goal is a list of Branch functions and business goals that are supported by the IT goal. (See Chapter 2 for a description of Branch functions and business goals.) Also, after each IT goal is a list of objectives that must be met to achieve the IT goal.

IT Goal # 1: Maintain the Operational Status of the Current IT Environment Within the Legislative Branch		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Business and Administrative Services		
Supported Branch Business Goal(s): #1, #2, #3, and #4.		
Objective(s)	Timeframe	Measure
Objective # 1 Replace PCs, servers, and other peripherals on a regular basis to keep current with technology.	Ongoing.	Printers, PCs, and servers are supported by the latest and/or supported releases of software and are not failing excessively because of age.
Objective # 2 Purchase maintenance contracts (or ensure that warranties are in place) on printers, PCs, and servers.	Beginning of each FY and ongoing throughout the FY.	Maintenance contracts or warranties are in place.
Objective # 3 Keep IT staff trained and up to date on latest releases of supported technology.	Ongoing.	IT employees receive at least 5 days of training each year.
Objective # 4 Contract with Information Technology Services Division (ITSD) for network infrastructure.	Beginning of each FY and ongoing throughout the FY.	Branch workstations are able to communicate with servers (for which they are allowed access) located anywhere on SummitNet and the Internet.
Objective # 5 Contract with ITSD and OPI for web services for part of the biennium (the Branch plans to continue to move web services off of the ITSD and OPI servers and onto its own internal web servers).	Beginning of the first FY and ongoing throughout the FY.	The public, state agencies, and Branch personnel are able to access data from the Branch website.

IT Goal # 1: Maintain the Operational Status of the Current IT Environment Within the Legislative Branch		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Business and Administrative Services		
Supported Branch Business Goal(s): #1, #2, #3, and #4.		
Objective # 6 Contract with ITSD for Oracle database services.	Beginning of each FY and ongoing through the FY.	The public, state agencies, and Branch personnel are able to access data from the Branch Oracle database.
Objective # 7 Upgrade to supported releases of off-the-shelf software.	Ongoing throughout each FY.	Printers, PCs, and servers are on currently supported software.
Objective # 8 Supplement IT staff by contracting with outside vendors for LAWS support, network support, and LAD SABHRS support.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 9 Supplement IT staff by hiring interns from local colleges and temporary staff where necessary.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 10 Convert the Branch to Windows 7 desktop OS.	Beginning of the first FY and completed by the 2013 session.	Window 7 is running properly on all desktops in the Branch.
Objective # 11 Ensure that currently supported applications continue to function adequately and add minor enhancements if necessary.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 12 Support connection of legislators' personally owned laptops to a high-speed Internet connection and to wireless for the 2013 session. Provide limited support for legislator laptop technology needs for the 2013 session.	2013 legislative session.	All legislators who bring or purchase a laptop (through the legislator technology allowance) meeting certain requirements are given adequate access to the Internet in the Capitol building. Legislators have adequate support for their laptops for the 2013 session.
Objective # 13 Contract with ITSD for support of the PeopleSoft portion of LAD SABHRS.	Ongoing throughout each FY.	LAD is able to use LAD SABHRS to perform effective audits.

IT Goal # 1: Maintain the Operational Status of the Current IT Environment Within the Legislative Branch		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Business and Administrative Services		
Supported Branch Business Goal(s): #1, #2, #3, and #4.		
Objective # 14 Provide IT support for the FY 2012-13 reapportionment project.	Ongoing throughout each FY.	Adequate hardware and software is purchased and adequate IT support is provided to accomplish the reapportionment project.
Objective # 15 Contract with ITSD for management of the Branch firewalls.	Ongoing throughout each FY.	Branch firewalls are managed well enough to prevent security breaches, which are preventable through proper firewall management.
Objective # 16 Contract with vendor to maintain House and Senate vote/agenda systems.	Ongoing throughout each FY.	Vote/agenda systems remain operational 99% of the time.
Objective # 17 Convert from Netware to SuSe Linux Open Enterprise Server.	Beginning of the first FY and completed by the 2013 session.	All file and print functions are running properly under SuSe Linux Open Enterprise Server.
Objective # 18 Continue to work on documenting an AS-IS IT Architecture and defining a TO-BE IT Architecture.	Ongoing throughout each FY.	IT Architecture is documented and used to make appropriate decisions.
Objective # 19 Continue to phase out declining or obsolete network infrastructure technology and phase in mature/emerging technology.	Ongoing throughout each FY.	The Branch doesn't get too far ahead (i.e bleeding edge) or too far behind (i.e. unsupported releases) on network infrastructure technology.

IT Goal # 2: Expand and Improve Electronic Access to Information About the Branch and Information Produced by the Branch		
Supported Branch Function(s): Information Distribution		
Supported Branch Business Goal(s): #4.		
Objective(s)	Timeframe	Measure
Objective # 1 Make improvements to the live and archived recordings/streams so that the public and staff can more easily find the recording they are looking for. Develop a long-term archiving strategy. Offer more live streaming video of the House and Senate session proceedings.	2012-13 interim and 2013 legislative session.	The web pages are improved. A long-term archiving strategy is put in place. More video streams are offered.
Objective # 2 Bring more web server services in-house for better control and customization.	2013 biennium.	Branch web environment is entirely controlled by Branch staff.
Objective # 3 Continue to keep staff trained on the latest ways to use web technology to the advantage of the Branch.	Ongoing.	Each employee whose job duties involve web technology receives at least 3 days of web training each year.
Objective # 4 Continue to identify information within the Branch that would be of value to the public, and make every effort to put that information on the Branch website.	Ongoing.	Document results.
Objective # 5 Continue to organize and make improvements to the Branch website so that the public can more easily find the information they are looking for.	Ongoing	Surveys of the public indicate that information on the website is available and generally where they would look for it to be.

IT Goal # 3: Ensure That the Mission-Critical Applications Are Protected and Recoverable		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Business and Administrative Services		
Supported Branch Business Goal(s): #1, #2, #3, and #4.		
Objective(s)	Timeframe	Measure
Objective # 1 Test the IT disaster recovery plan at least once during the interim.	2013 Biennium.	Testing is completed and adjustments are made to the disaster recovery environment that are identified in the testing.
Objective # 2 Continue to work on improvements to the security and disaster recovery programs.	2013 Biennium.	Disaster recovery plan is tested at least once. Adequate security policy is implemented and/or reviewed. Security and disaster recovery education and awareness training is conducted. A penetration test is performed.
Objective # 3 Participate on statewide disaster recovery, business continuity, and security committees.	Ongoing.	Meeting attendance.
Objective # 4 Continue to make improvements to server room to make it more secure and environmentally sound and/or move to the state of Montana data center.	Ongoing.	Server room is secure and environmentally sound.

IT Goal # 4: Provide Efficient Interfaces to Enterprise Systems to Allow for Branch Oversight and Analysis		
Supported Branch Function(s): Oversight and Fiscal Analysis		
Supported Branch Business Goal(s): #1 and #3.		
Objective(s)	Timeframe	Measure
Objective # 1 Continue to work with Executive Branch agencies to gain access to revenue, HR, and other data necessary to perform the fiscal and auditing oversight functions of the Branch.	Ongoing throughout FY 2012-13.	Executive Branch data is made available to the Legislative Branch.

IT Goal # 4: Provide Efficient Interfaces to Enterprise Systems to Allow for Branch Oversight and Analysis		
Supported Branch Function(s): Oversight and Fiscal Analysis		
Supported Branch Business Goal(s): #1 and #3.		
Objective # 2 Integrate the various Branch calendar and notification systems.	Ongoing throughout FY 2012-13.	Calendars and notification systems are more easily updated and kept up to date.

IT Goal # 5: Continue to help legislators be more effective at their job by applying automation.		
Supported Branch Function(s): Legislation and Policy Development		
Supported Branch Business Goal(s): #2.		
Objective(s)	Timeframe	Measure
Objective # 1 Continue with a technology reimbursement program for legislators for the 2013 session.	2013 legislative session.	Program is in place, and legislators are using it.
Objective # 2 Continue to make improvements in the area of reducing the paper used by legislators during a daily legislative floor session and moving the information online (chamber automation).	2013 legislative session.	Legislators are using less paper and accessing data more online. Legislators are trained to properly use the technology provided.

IT Goal # 6: Replace Aging/Obsolete IT Systems		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Business and Administrative Services		
Supported Branch Business Goal(s): #1, #2, #3, and #4.		
Objective(s)	Timeframe	Measure
Objective # 1 Take steps toward replacing the current bill drafting, enrolling, engrossing, committee minutes, journal, session laws, MCA update (and other publications systems), and LFD systems, with newer technology.	Ongoing throughout FY 2012, 2013, 2014, and 2015.	New systems are in place in the timeframes set for them, are operational, and meet the needs.

By accomplishing these goals and objectives, the Branch will make major headway in making IT processes more dependable and efficient. The Branch will also make important contributions to the legislative process by increasing public access to, and participation in, government.

FY 2012-13 Central Information Technology Budget Proposal

In order to meet the Legislative Branch's short-term IT goals and objectives, the necessary resources must be clearly identified and funded. As noted in Chapter 4, the Planning Council's top goal for the upcoming biennium is to maintain the operational status of the Legislative Branch's current computer environment. Maintaining the operational status requires procurement of certain equipment and services and completion of several projects, including but not limited to:

- replacing computer hardware (i.e., printers, personal computers, servers, and other peripherals) in accordance with the Branch's replacement cycle;
- purchasing maintenance contracts or ensuring that warranties are in place on printers, personal computers, and servers;
- IT training for IT staff, LAD information systems audit staff, and all Branch staff;
- purchasing network infrastructure, web server, and database services;
- converting to supported releases of off-the-shelf software;
- purchasing contracted services for conversion projects, network support, session support, and application support; and
- hiring interns from local colleges and hiring temporary staff.

The Planning Council is requesting a present law centralized IT budget of \$2,502,232 for the 2013 biennium. The table below provides more detail of this present law biennial budget.

Legislative Branch FY 2012-13 IT Budget

Central IT Budget (Org 2042) - Existing Law	
Maintain the Operational Status of the Current Computer Environment	Biennial Budget
Hardware and Software for Life Cycle Costs - Replacement Cycle	\$805,300
Hardware Maintenance and Supplies	90,000
House and Senate Vote System Maintenance (2 Years)	13,000
ITSD Services	*920,667
Interns and Temporary help	80,000
Training	40,000
Audit IT Training	40,000
Manage Firewalls for the Branch	10,000
Reapportionment System Hardware, Software, and Maintenance	16,000
External Streaming Server	25,000
Web Server Lease from OPI	14,000
Server Room Improvements	15,000
Contr: LAWS Support (Session) - 4 months @\$95/hr	65,740
Contr: Network Support for Session Buildup - 4 months @ \$95/hr	65,740
Contr: Network Engineering Support - 5 months @\$95/hr	82,175
Contr: LAD SABHRS/Banner Support	10,000
Contr: Integrate Calendars and Notification Systems - 2 months @95/hr	32,870
Contr: Enterprise Architect Program - 4 months @\$125/hr	86,500
Contr: Windows 7 Conversion - 4 months @\$95/hr	65,740
Part-time session help for Legislator laptop support - 5 Temp help for 4 weeks @\$25/hr	20,000
Cleaning infected legislator systems - 15 computers @\$300 each	4,500
Existing Law - Central IT Budget Total	\$2,502,232

* Subject to Fixed Cost Change

In addition, the Planning Council is forwarding a recommendation to continue to work on replacement of declining and obsolete systems as described below.

The Planning Council received information on upgrading the current bill drafting, enrolling, engrossing, committee minutes, journal, session laws, code update (and other publications systems) to newer technology. Some of these systems are about 10 years old. The code update system is about 20 years old. While they are not obsolete, they are toward the end of their life cycle and may become obsolete in the near future. (See the Declining or Obsolete Technology section in Chapter 3.) Another reason for replacing these systems is the pending large number of potential staff retirements. Several of the

staff that are or will shortly become eligible for retirement have key knowledge of how these systems work. Replacing these systems now will allow the capture of some of this key knowledge. Additionally, several important improvements could be made to these business processes that would be of great benefit to the Branch. For instance, many state legislatures are moving toward automatic engrossing. The current estimate for replacement of these system is \$5,975,000.

Additionally, the Planning Council also received a report on an analysis that was conducted on LFD IT systems. The results of this project was a series of recommendations on new software products to use where existing ones are obsolete or not robust enough and also a schedule for replacement of these systems with resources and budget needed to accomplish the replacement. The estimate for this project for the first biennium is between \$550,000 and \$900,000.

Reports on these two analysis project can be obtained by contacting the Legislative Services Division.

Long-Term Information Technology Issues for the Legislative Branch

Looking down the road 4 to 10 years, the Planning Council sees continual growth in the application of technology and benefits to be derived from the following additional areas.

- Automation for Legislators

Legislators' demand for IT resources has continually increased from session to session. The Planning Council believes that this trend will continue and that new technology will continue to come along that can help legislators be more effective at their jobs.

The Planning Council also believes that lawmakers must take an active role in defining their needs, identifying potential approaches for addressing those needs, and supporting adequate funding to purchase and support those needs. Both the Planning Council and legislators must actively pursue and apply new technology to the benefit of the Legislature.

- Smart Phones

Smart phones such as the iPhone, Blackberry, and the Android phone are becoming very popular. These phones have a computer chip in them and are able to do much of the work that a laptop PC can. In particular they can send and receive e-mail, keep track of appointments, and browse the web. Combine these functions with the mobility of the smart phone and you begin to have a device that could be of benefit to legislators and staff.

- Internet Broadcasting of Session Activities (Including Video)

The Legislature has taken several steps toward making session proceedings available to the public via Internet broadcasting. During the 2007 session, almost all session proceedings were broadcast live through the Internet and archived in audio format. During the 2009 session, video broadcasting of the House and Senate floor sessions was added, and all committees were audio recorded. To this point the major focus has been on the accurate and timely production of audio and video recordings. There is a recognized need for better archiving and access to that content. Some of the significant tasks remaining are:

- 1) A long-term archiving plan. The best media format(s) and the storage strategies have to be determined and implemented. To date there has been preliminary study and analysis, and an archiving pilot project is underway. The long-term strategies and solutions are not yet finalized.

- 2) Better access to audio and video. Currently all recorded audio and video are made available to the public, but the research and navigation needed to find particular "slices" of a clip are cumbersome. Other state legislatures have implemented methods that make this much easier by linking to clips from multiple locations, including links to recordings on the appropriate bill status action for a bill. There are a number of other navigational aids that can be deployed to help users find what they are after more easily.

- 3) Americans With Disabilities (ADA) compliance. There is a need for additional research to determine the best methods for making digital content available to people with disabilities. Other states and private organizations have made headway in this area, and the Branch needs to determine how best to comply with requirements.

- **Geographic Information Systems (GIS)**

The Branch has a partially unmet need for analyzing geographic (spatial related) data and presenting the analysis in map form. Large amounts of the data that the Branch deals with can be presented better in map form rather than in tables. Once presented in map form, the viewer can better grasp what the data is saying. GIS systems can meet this need. The Branch currently uses GIS in its support of redistricting, interim committee work, and auditing, but has not tapped into its full potential as yet.

- **Interface to Executive Branch and University System Data**

The Executive Branch and University System are continually upgrading and adding functionality to their IT systems. The Legislature needs access to this data for fiscal analysis and audit purposes. The Branch will continually be adjusting and refining its IT systems that interface to Executive Branch and University System systems to stay current with the additions and changes made to these IT systems.

- **Continued Improvement to the Branch Website**

In general, the more information that the Branch can deliver directly to the public, the more accurate and complete is the portrait of the Legislature. The Internet is an ideal tool for providing this information to the public. The Branch already makes significant use of the Internet. There are still several opportunities for improvement, and with the constant improvement of Internet technology, more opportunities will become available in the future.

- **Continued Exploration of Open Source Software**

Open source software is software in which the source code is made available with the software. This is in contrast to proprietary software in which only the run-time version of the software is made available. Unlike proprietary software, open source software is mainly developed over the Internet through an open environment. Because of these

differences, open source software is typically cheaper, more reliable, more robust, and easier to support than traditional proprietary software. The Branch needs to keep an eye on these new developments and apply open source software to the Branch environment whenever cost-effective and appropriate.

- Continued Exploration of Ways to Reduce the Technology Replacement Cycle Costs

The Branch spends about \$1 million in replacement cycle technology (printers, PCs, servers, etc.) every biennium. Any action that the Branch can take to extend the current replacement cycle will help reduce these costs. The challenge is to choose technology that has the potential to last more than the current replacement cycle of 4 years, can perform the same functions as current technology, and does not require an extensive conversion effort. Support of open standards can help make significant improvements in this area.

Appendix A: Membership of Advisory Groups

Legislative Branch Computer System Planning Council

Susan Fox, Executive Director, Legislative Services Division, Chair (ex officio)
Dave Hunter, Chief Clerk of the House
Marilyn Miller, Secretary of the Senate
Dave Lewis, State Senator, Senate District No. 42
Bill Beck, State Representative, House District No. 6
Amy Carlson, Legislative Fiscal Analyst
Tori Hunthausen, Legislative Auditor
Dick Clark, Executive Branch CIO, Information Technology Services Division,
Department of Administration

Technical Planning Group (TPG)

Mike Allen, Legislative Services Division
Karen Berger, Legislative Services Division
Steve Eller, Legislative Services Division
Dale Gow, Legislative Services Division
Terry Johnson, Legislative Fiscal Division
Dale Matheson, Legislative Services Division
Darrin McLean, Legislative Services Division
Kent Rice, Legislative Audit Division
Henry Trenk, Legislative Services Division

Web Team

Gayle Shirley, Branch Public Information Officer, Legislative Services Division (Chair)
Steve Eller, Legislative Services Division
Alysa Semans, Legislative Services Division
Sonia Gavin, Legislative Services Division
Mike Allen, Legislative Services Division
Diane McDuffie, Legislative Fiscal Division
Angie Lang, Legislative Audit Division
Lisa Mecklenberg Jackson, Legislative Services Division
Sonja Nowakowski, Legislative Services Division
Sue O'Connell, Legislative Services Division
Mandi Shulund Hinman, Legislative Consumer Counsel