Legislative Branch Computer System Plan

2007 Biennium

A Report to the 59th Legislature From the Legislative Branch Computer System Planning Council

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1. Information Technology Planning in the Legislative Branch

This chapter provides background information on Information Technology (IT) planning in the Legislative Branch. Topics covered include statutory planning requirements for the Legislative Branch, 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 the Legislative Administration Committee 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:

✳ Because of the Office of the Consumer Counsel's physical remoteness and separate and distinct mission, the Consumer Counsel has chosen not to participate in the IT planning process for the Legislative Branch.

- 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.

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

After developing a Branch computer system plan, the Planning Council must present the plan to the Legislative Council for adoption. The Legislative Council also is required to adopt rules for the use of IT resources for the Branch with concurrence of the Legislative Audit and Finance Committees.

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, the Technical Implementation Planning Group, and the Web Content Organization Group. A description of each group is contained in Chapter 3. The membership of each group is contained in Appendix A.

The Legislative Branch is not only communicating and working together internally but also externally with the Executive and Judicial Branches, the Montana University System, and local governments. Legislative representatives are active participants on the following enterprise 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 board 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 enterprise IT issues, provides feedback regarding information management policies, reviews opportunities for the application of new 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 2003-2004 interim. A summary of the meetings follows:

To obtain a better understanding of the computing needs of legislators, the Planning Council decided to conduct a survey of legislators.

- February meeting. At its organizational meeting in February 2004, members reviewed their statutory duties, adopted operating guidelines, and reviewed the current Legislative Branch IT environment, including the centralized IT budget and major technology projects. To stay informed about Executive Branch activities, the Planning Council was briefed on the state enterprise IT visioning and strategic planning efforts. Members reviewed and adopted the purpose statement originally developed by the Planning Council in January 2002. To obtain a better understanding of the computing needs of legislators, the Planning Council decided to conduct a

survey of legislators similar to the surveys conducted in 1992 and 1996. Also at this meeting, the Planning Council received an update on a House and Senate 2005 session pilot project to replace written summary minutes of committee meetings with audio recordings. These recordings would be accessible through the Internet both live and archived.

- April meeting. At the April 2004 meeting, the Planning Council reviewed and approved a proposed legislator computer use survey prepared by staff. Staff also presented research on "paperless" legislatures. The Planning Council received updates on a wireless technology initiative being conducted by the Information Technology Services Division (ITSD) and IT proposals that may have an impact on ITSD rates. Also at the April meeting, members reviewed a preliminary list of IT projects and budget initiatives for the 2007 biennium and a proposed format for the 2007 Branch IT plan.

- June meeting. The focus of the June 2004 meeting was on further refinement of the proposed IT projects and initiatives for the 2007 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 Legislature for its consideration. The Planning Council discussed moving forward with two bill draft requests. (See "Proposed Legislation" for a discussion of these bill drafts.) The Planning Council agreed to ask the Legislative Council to request that this legislation be drafted.

(At its June 25, 2004, meeting, the Legislative Council requested that the proposed legislation be drafted.) The ITSD updated the Planning Council on planned IT rate adjustments for the 2007 biennium. The Planning Council also decided to offer a high-speed Internet connection in the Capitol via the state network during the 2005 session for legislators bringing their own laptops. This would replace the purchase of a local Internet service provider account, which was a service offered during the 2001 and 2003 sessions. Furthermore, the Planning Council discussed options for use of state e-mail accounts for legislators, privacy issues regarding legislators' use of state computers, and potential modifications to the electronic boards in the House to accommodate the display of amendments.

The Planning Council decided to offer a high-speed Internet connection in the Capitol via the state network during the 2005 session for legislators bringing their own laptops.

August meeting. The Planning Council wrapped up business in August 2004 with final adoption of the Branch computer system plan and budget for the 2007 biennium. Members modified the legislator automation budget proposal to remove funding for the purchase of new laptops for legislators. Instead, they recommended that some of the laptops used by permanent legislative staff during the interim be made available for legislators' use during the 2007 session; this recycling of resources would eliminate the need to purchase new equipment for the session pilot project. They also removed funding for year-round state e-mail accounts for all legislators because there did not appear to be a pressing need for this service. In other action, the Planning Council reviewed the results of the legislator computer use survey and approved two bill drafts

that were requested at the June meeting. They were also briefed on ITSD's 2007 biennium budget requests and proposed 2005 legislation.

- Legislative Council meeting. LSD staff presented the Legislative Branch computer system plan to the Legislative Council in September 2004. The Legislative Council approved the plan as presented.

Minutes of the Computer System Planning Council meetings and the Legislative Council meetings can be found on the Legislative Branch website.

PROPOSED LEGISLATION

The Planning Council has recommended to the Legislative Council that the following legislation be considered by the 2005 Legislature:

Reserving funds for large-scale IT projects. In the future, the Legislative Branch will be faced with the replacement of obsolete equipment and information systems. For example, the Senate and House vote systems will need to be replaced at some point. Likewise, WordPerfect, the word processing software used in many of the session-related processes (e.g., LAWS), eventually may need to be replaced. Projects such as these will be expensive. The Planning Council has recommended that an account be statutorily created for the purpose of reserving funds for large-scale IT projects. The Planning Council has further recommended that:

In the future, the Legislative Branch will be faced with the replacement of obsolete equipment and information systems.

(1) the Senate and House approving authorities be authorized to deposit into the account a portion of the money reverted from the legislative feed bill (i.e., House Bill No. 1);

(2) the legislative division directors be authorized to deposit a portion of the 30% reversion from their divisions' budgets into the account;

(3) the Planning Council be authorized to recommend projects to be funded from the account for consideration and approval by the Legislative Council; and

(4) expenditures from the account be statutorily appropriated.

IT systems impacting the Legislative Branch. In the past, the Executive Branch has made changes to statewide IT systems that have impacted Legislative Branch IT systems that rely on data from the statewide systems. For example, when the Statewide Accounting, Budgeting, and Human Resources System (SABHRS) has been upgraded, the Legislative Branch has been forced to rewrite portions of its systems used to audit agencies' financial records and conduct budget analysis. Rewriting these systems has been expensive and time-consuming.

The Budget Director is statutorily required to prepare a statewide summary of recommendations for major new IT projects contained in the state budget. The Planning Council has recommended that this summary include a description of the impacts of each new IT project on the Legislative, Judicial, and other Executive Branch agencies.

COMPUTER SYSTEM PLAN

The Computer System Planning Council is pleased to present its 2007 biennium computer system plan for managing the Legislative Branch's substantial investment in information technology. This plan will provide direction in using IT resources to ensure the maximum return on this investment while best meeting the needs of the Branch.

The chapters that follow discuss 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 2007 biennium and outlines issues to be addressed in the long term. Questions about the plan may be directed to Lois Menzies or Hank Trenk at 406-444-3064 or lomenzies@mt.gov or htrenk@mt.gov.

2. 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 functions and the role played by IT in the Legislature's business.

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 consolidated as provided in 5-2-503, MCA. The principal entities of the consolidated 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).

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 administrative support services to the House, Senate, 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 under supervision of the Legislative Audit Committee, as provided by law, and to provide factual and objective information to the legislative and executive managers of the public trust.

FUNCTIONS

The 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 administration. A description of these functions follows.

Research

The LSD, LAD, and LFD all provide nonpartisan research services to the Legislature. The LSD staff provides reports and prepares bills for the legislators and committees. They also provide legal research 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 budgeting. The LAD is called upon to research, analyze, and report 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 of, and allocation to, state government programs.

Legislation and Policy Development

The LSD, House and Senate staff, and the LFD provide staff support to the Legislature as it proposes, debates, and makes decisions on legislation. The Central Services Office of the LSD provides clerical support for the drafting, introduction, engrossing, enrolling, and codifying of bills. House and Senate staff provide clerical support to committees, support the flow of bills through the House and Senate, and generally support the operation of the House and Senate.

Information Distribution

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

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 interim reports. The Data Distribution Center in the LSD distributes all legislative proceedings in printed format to the Legislature and the public during the session. These include bills, amendments, resolutions, status reports, and journals. The Legislative Information Office provides information to the public on the status of legislative proceedings and the daily calendar of events , both directly and by telephone. The Office of Legislative Information Technology 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 Office of Legislative Information Technology are responsible for preparing and distributing the MCA, related 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 monitoring responsibilities incorporated in support of the seven permanent interim committees.

Administration

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.

Additional information on the legislative process can be found in A Legislator's Handbook, 2005, 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 A Legislator's Handbook, 2005 can be found on the Legislative Branch website.

THE ROLE AND PURPOSE OF INFORMATION TECHNOLOGY IN THE LEGISLATURE'S BUSINESS

The Legislature is all about information. It 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 Computer System Planning Council believes that the purpose of information technology in the Legislative Branch is as follows:

> 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 in the past invested in and applied technology, and has received significant benefits from that technology.

3. 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, significant IT risks that the Branch is facing, an assessment of best practices, and how the Branch uses IT outsourcing resources.

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 (LSD)

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 (OLIT) 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 needs are met, and that significant IT issues are addressed. It includes staff responsible for IT services from within each division.

Technical Implementation Planning Group (TIPG)

Mission: To coordinate division input on priorities regarding Branchwide strategies for implementing technological solutions while keeping employees informed of projects, issues, and developments and relaying to the TPG significant concerns and problems.

Once specific IT goals and objectives have been established, this group works out the details of implementing the technology so that it meets the needs of the Branch. For instance, when the Branch decided to consolidate on one network, this group determined the drive assignments

and directory structure for that network. This group includes IT staff and technical representatives from each legislative division.

Web Content Organization Group (WCG).

Mission: To provide guidance to the Branch Librarian in implementing the web guidelines established by the division directors.

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. These guidelines prescribe the characteristics and technical features of the Branch's website and define procedures for selecting web software tools. The directors designated the Branch librarian as the person responsible for carrying out the guidelines, determining the overall organization of information on the website, and chairing the WCG. The WCG, consisting of members from each division and an OLIT representative, provides guidance to the Branch librarian in implementing the web guidelines and continually refining the Branch website.

Office of Legislative Information Technology (OLIT)

Mission: To take the lead role in implementing the computer system plan established by the Legislative Branch Computer System Planning Council and adopted by the Legislature.

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 Application Development Section and the Network

Support Section. The Application Development Section develops and maintains computer systems, such as the Legislative Automated Workflow System (LAWS). The Network Support Section provides a computing platform for the Branch. Also, through this staff, coordination is provided for information services and relationships with outside organizations, such as the general public, lobbyists, and other agencies.

The Planning Council has also developed reliable ways of coordinating with other agencies and organizations. For example, participation by the Executive Branch (Department of Administration) in the Planning Council activities ensures communication on state system compatibility. Participation by the Branch in the Information Technology Board and the Information Technology Managers Council keeps the Planning Council in touch with the directions of not only Executive agencies, but also the Judiciary, other elected officials, the University System, and the cities and counties.

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, there are approximately 380 desktop and laptop personal computers (PCs) in the Branch network. These PCs are connected to one Novell Branch file server.

The Branch will continue to rely on the state's midtier services (operated by the Department of Administration) for large statewide systems, such as the Statewide Accounting, Budgeting, and Human Resources System (SABHRS) and the Montana Budget and Revenue System (MBARS). The mainframe is used for a few Branch

systems, such as the MCA codification process. The Branch also leases Oracle server services from the Department of Administration for LAD CAFRS and LAWS. Web server services are also provided to the Branch by the Department of Administration and the Office of Public Instruction. The Branch is planning to deploy its own web servers during the FY 2006-2007 biennium.

Computer Software

The Branch has standardized its microcomputer software. These standards are the same as those used by the Executive Branch with a few exceptions. Appendix B contains the Branch software standards.

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, CAFR/trial balance, legislative messages, checkout board, revenue estimation, budget book development, MCA codification, and many smaller systems.

Telecommunications

The Branch uses a local area network (LAN) and the SummitNet wide area network (WAN), which are provided by the Department of Administration. This network provides 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. Descriptions of several of the major achievements are listed below.

Storage Area Network (SAN)

Over time, the disk storage requirements for the Branch have substantially increased. In order to manage disk storage more efficiently, the Branch has installed a SAN. A SAN allows several file servers to be connected to one disk storage unit, instead of each file server having its own disk storage. The use of a SAN eliminates the need to buy more disk space for individual file servers or move data to a new server whenever an individual file server runs out of space. With a SAN, all disk space is managed as one unit, and more disk space can be added quite easily. Backups of a SAN can also be completed much faster than individual file server backup.

CITRIX

The Branch has implemented a CITRIX environment. CITRIX is a software package that allows applications (such as the Microsoft Office Suite) to run from a server instead of from a PC. This can result in significant savings in staff support and hardware purchases (See also "INFORMATION TECHNOLOGY MATURITY" below). The Branch has implemented only a small part of the possible uses of CITRIX. For example, the WordPerfect portion of LAWS has been converted to CITRIX. In addition to the saving in support costs, staff can now use this application from their home PC as needed. Also, several applications for LFD have been implemented allowing LFD staff to conduct business without traveling to the office. LAD also uses CITRIX to access information on the Branch file servers while employees are offsite on audits.

Increased Demand for PCs and Printers for 2003 Session

Because of increased demand during the 2003 session, the Branch installed and maintained 39 more PCs and 8 more printers for the House and Senate staff over the numbers provided for the 2001 session. Approximately 165 PCs and printers were installed and maintained for the 2003 session.

Managing IT With Reduced Budget

State revenues have declined in recent years and, as a result, state budgets have been reduced. As a result of 2003 session budget reductions, the Branch IT budget was reduced by approximately $1,000,000. The Branch has had to readjust IT priorities, yet has still managed to keep IT systems running effectively.

Internet Connections for Legislators' Laptops During 2003 Session

The Branch IT staff supported connecting legislators' personal laptop computers to a local Internet service provider through a telephone connection in the Capitol for the 2003 session. Approximately 45 legislators used this service.

Paperless Legislature Study

In response to a legislative request, the OLIT staff examined the issues surrounding a "paperless" legislature. Acknowledging that the Legislature could not go entirely without paper because not all users of legislative information would be able to access the information electronically, the research was mainly focused on making the job of the individual legislator paperless. To conduct this study, four states were surveyed on "paperless" issues and the responses were compiled and analyzed. An analysis was also conducted on the current environment in the Montana Legislature with regard to this issue.

Survey of Legislator Computing Needs

The Computer Systems Planning Council surveyed all 150 legislators in the summer of 2004. The survey asked several questions about the needs of legislators with regard to computers. The Planning Council will use this information to better meet the demand for providing IT services to legislators.

University System Banner Interface

For the second biennium in a row, the Branch continued to work with the University System to get access to and develop user interfaces to financial and human resource data (Banner System). This biennium the focus was on data and report needs of the LFD staff.

Pilot Project of Linux Web server - Apache, PHP

The Branch is conducting a pilot project of Linux and Apache web server technology. Linux is a robust and mature operating system that has become very popular for web servers. Apache is the web server software that is used to run under Linux. Apache is used on approximately 65% of the Internet web servers worldwide. Linux and Apache offer the most secure web server environment available today. PHP is a programming language used with Apache. PHP is also a very popular technology and Branch programming staff has found it to be very robust. By implementing this new technology and by having control over its own web servers, the Branch will be able to continue to improve the services and information offered on the Branch website.

LAD SABHRS Upgrade to New Release of PeopleSoft Software

PeopleSoft is the software that the state uses to manage its financial and human resources functions. PeopleSoft software went though a major upgrade this biennium. The LAD SABHRS system is used to audit the state financial and human resources functions and thus interfaces tightly with PeopleSoft. Therefore, as a result of the PeopleSoft upgrade, the LAD SABHRS system required a major rewrite. The Branch accomplished this rewrite and the LAD SABHRS system is functioning as expected.

Upgrades and Maintenance of 25 Internal Computer Systems

The Branch has approximately 25 small to medium-sized computer systems (software applications) that it uses in the everyday operation of the Legislature. These systems

require constant maintenance and upgrades. The Branch has continued to keep these systems functioning as expected.

Replacement of Obsolete Mainframe Process for Generating Appropriation Bill Numbers

The Branch has automated the process for producing the general appropriation bill (House Bill No. 2). This automated process uses a mainframe COBOL program to format a set of numbers that are eventually merged into the appropriation bill. These numbers are originally generated by MBARS. This COBOL program was written in the early 1990s and still functions adequately. However, it was becoming increasingly difficult to keep it functional because of lack of support staff in the Legislative Branch with COBOL/mainframe knowledge. This COBOL process was replaced with up-to-date MBARS technology. This was a potential obsolescence issue that was identified in the 2002 computer system plan.

INFORMATION TECHNOLOGY MATURITY

This section describes the IT architecture in the Legislative Branch in terms of its maturity and discusses issues related to the architecture's 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 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 set, 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 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	15%	1%	1%	20%	10%	10%
Mature	48%	2%	89%	80%	90%	70%
Declining	36%	96%	10%	0%	0%	20%
Obsolete	1%	1%	0%	0%	0%	0%

* PC – 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 is piloting some emerging technology in the PC and server operating system 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.

- Linux

Linux is an emerging PC and server operating system. It is currently very popular on the server side and within the next few years it is predicted that it will dominate 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 initial purchase price and reduced long-term maintenance. Another strong point of Linux is that it does not require upgrading as often as other operating systems. 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 is currently testing Linux as a web server, an audio streaming server, and a PC operating system.

- Open Office

Open Office is a office suite similar to Microsoft Office. It offers a word processor, spreadsheet, and presentation package. It reads and writes Microsoft Office documents. It can be downloaded and used free of charge. It can perform 90% of what Microsoft Office can do. The Branch is investigating this software to determine if it can be used to replace Microsoft Office and thus reduce the upgrade costs associated with that product.

- CITRIX/Thin Client

CITRIX is a software package that allows the execution of applications (such as the Microsoft Office Suite) from a server instead of from a PC. The Branch has been experimenting with CITRIX for about the last year and a half. If this technology proves successful in the Branch environment, savings could be achieved in three areas. First, the Branch would be able to buy less expensive PCs than it has in the past. Potential

savings are between $400 and $500 per PC. Second, the Branch would see a savings in the amount of support that is necessary for each PC. Since most of the computing work would now be done on the server, any changes or upgrades that are necessary only need to be done in one place, on the server instead of on each PC. Third, the current life cycle of a PC is 4 years. With CITRIX, a standard PC is not needed. Instead, a "thin client", which is a slimmed down PC, may be purchased. A thin client costs less than a standard PC and does not become obsolete every 4 years. Savings is achieved by extending the normal 4-year replacement cycle to 6 or more years.

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. The Branch has a significant investment in this system, which it has used for the last 14 years. The system currently meets all of the needs of the Branch and requires very little maintenance. However, the original owners of TextDBMS no longer want to be involved in the legislative market. About 6 years ago, the original owner sold the rights to TextDBMS to a smaller company (two to three employees), which the Branch currently contracts with for support. This system is in the declining stage and will need to be replaced some time in the next 4 to 6 years. The estimated cost for replacement is approximately $500,000 to $1,000,000 in current dollars.

- House and Senate Voting Systems

Both the House and Senate use electronic voting systems to record their votes. The House originally purchased its voting system in the 1970s. Upgraded in 1986, a PC was integrated into the House system to provide the main computing power for the system.

The House voting system software was written in 1986 to run under the DOS environment. The Senate voting system was totally replaced in 1994. It also uses a PC as the main computing power for the system. The voting software for the Senate vote PC was written to run under Windows 3.1. It is becoming increasingly difficult to make these systems run under the current PC operating systems (i.e., Windows 2000). The company that supplied the House and Senate voting systems (Daktronics) has indicated that neither the House nor the Senate voting system software will run under Windows 2000 or Windows XP without a major rewrite.

The voting stations on the Senate voting system have from time to time been susceptible to static electricity. During particularly dry periods, when there is significant static, one of the Senate voting stations can be inactivated every 2 to 3 days. To reactivate the voting station, it is necessary to call a maintenance person. Daktronics has indicated that they have newer voting station technology that will fix this problem.

The House voting system still contains parts that were originally installed in the 1970s. Although this system runs effectively and is still supported, this technology will eventually need replacement.

Both the House and Senate voting systems will operate effectively for the next two to three sessions; however at that point, the Branch should consider upgrading or replacing them.

- LAWS

The Branch has developed a system to process and track bills as they move through the Legislature. This system is called the Legislative Automated Workflow System or LAWS. This system was originally developed in 1997-1998. The LAWS has a web interface to all of its data. Since this LAWS web interface was developed in 1997, the Branch website has been redesigned and improved significantly. Also since 1997, web

technology has moved forward significantly. These two factors combined have made the LAWS web interface somewhat obsolete and not compatible with the rest of the Branch website. At some point in the next 4 to 6 years, 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 the 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 1997-1998 using the WordPerfect 8 macro language. Since then four new versions of WordPerfect have been released. The latest release of WordPerfect is release 12. The Branch upgraded to WordPerfect 10 during the FY 2002-2003 biennium. The Branch is currently on an unsupported release of WordPerfect. The Branch IT Plan for FY 2006-2007 calls for upgrading WordPerfect to a supported release. Additionally, over the last several years, WordPerfect has continued to lose market share. Although the company that owns WordPerfect is not on the verge of going out of business, the Branch needs to continually evaluate this product and the company performance in order to be prepared to replace it if necessary. Replacing all of the WordPerfect macros in the Branch and retraining staff on a new word processing package is estimated to be approximately $500,000 to $900,000.

- 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 recently been dropped from the list of supported state 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.

- Microsoft Office Suite (MS Office)

The MS Office Suite is a word processing, spreadsheet, presentation, and database package that runs on the PC. MS Office is the current state standard in these areas. The Branch uses MS Office extensively for both word processing and spreadsheet applications. The Branch currently is on the MS Office 2000 release of MS Office. This is two releases behind the current release of MS Office. MS Office 2000 is supported by Microsoft until June 2006. Recently, Microsoft has raised the price for purchasing the newest release of MS Office. State government can purchase the current release of MS Office (MS Office 2003) for about $240 per PC. Since there are about 10,000 PCs in state government, the total cost would be about $2.4 million. The Department of Administration, under the guidance of the Chief Information Officer, formed a committee to investigate whether to upgrade to MS Office 2003. The committee decided that there was not enough additional functionality to warrant paying $2.4 million to upgrade. The committee decided that the issue needed further study and alternatives investigated. The Branch, in its current plan for the FY 2006-2007 biennium, has requested a budget to upgrade to MS Office XP. This is the version of MS Office after MS Office 2000 and before MS Office 2003. MS Office XP is supported by Microsoft through August 2008. The Branch will pay about $131,000 for this upgrade and also questions whether the lack of a significant increase in functionality in MS Office XP is worth paying that much for an upgrade. The Branch also intends to investigate alternatives to this situation and will conduct an investigation before any upgrade is done.

- 4-Year-Old PCs and Windows 2000

During the 2003 session, the Branch took a significant cut to its FY 2004-2005 IT budget. In order to make this budget work, the Branch decided to forego the standard PC replacement cycle. The normal (and industry standard) replacement cycle for PCs is 4 years. This means that the Branch needs to replace half of its PCs every 2 years.

Normally, the Branch would buy half of its PCs in July before a legislative session and use these new PCs for the House and Senate and other session-related activities during that legislative session. After the legislative session was over, the PCs would be moved downstairs, replacing the old PCs that the full-time legislative staff were using. The full-time legislative staff would then use these new PCs throughout the interim, and this replacement cycle would start over with the next legislative session. This process works because there is about an even number of session-related staff as there are full-time staff.

For the current biennium (FY 2004-2005), the PCs purchased before the 2003 session and used by session staff during the 2003 session were moved downstairs for the full-time staff to use throughout the rest of the biennium. The PCs that the full-time staff were using, instead of being surplused, will be used for the session staff for the 2005 session. Because the Branch decided to stay with Windows 2000 as the PC operating system, these about-to-be-surplused PCs will still operate in the Branch network environment. However, these PCs are 4 years old, and some of them may experience hardware failure. The Branch will purchase backup PCs to replace the ones that fail.

This is just a stop-gap measure to get though the FY 2004-2005 biennium. The normal PC replacement cycle will need to be restarted for next biennium (FY 2006-2007) or the Branch will be in danger of significant failure of the IT environment.

As mentioned above, the Branch is currently using Windows 2000 as its PC operating system. Windows 2000 is fully supported by Microsoft through June 2005. However next biennium, the Branch needs to upgrade to a supported release of Windows.

The Branch has asked for the budget to restart the PC replacement cycle and upgrade to Windows XP in the FY 2006-2007 IT budget.

RISK FACTORS

The Branch faces three major risks in carrying out its IT strategy: the ability to obtain adequate IT funding, recruitment and retention of skilled IT personnel, and lack of a documented disaster recovery plan and a documented security plan.

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Adequate IT Funding

As noted earlier, the Branch IT budget was significantly reduced during the 2003 session. Although the Branch has been able to manage the IT budget in a way that has not resulted in a significant reduction in IT services, the Computer System Planning Council is concerned that the long-term trend is continued budget cuts. If this downward budget trend continues, IT services will likely suffer and IT systems might fail. Since the Branch is highly dependent on technology to accomplish its mission, goals, and objectives, the Planning Council hopes that adequate funding can be obtained in the future.

Recruitment and Retention of Skilled IT Personnel

The Branch has made a significant effort to retain IT staff by granting pay exceptions based on market surveys. Twice during the last 6 years, the Branch has adjusted IT salaries to better align pay with the internal and external markets. Before these adjustments were made, there was significant turnover among IT staff. Since the adjustments, the turnover rate has slowed considerably.

The recruitment problem now seems to be centered around the lack of interest in the IT profession. Enrollment in IT curriculum at colleges is down nationwide. If this trend continues, the Branch could once again face a recruitment problem.

Disaster Recovery Plan and Security Plan

The Branch does not have a documented IT disaster recovery plan or a documented IT security plan. Without an IT disaster recovery plan, the Branch risks having to spend more time and money than necessary to recover from a disaster and in some cases may not be able to totally recover. A security plan will ensure that the Branch has maximized its efforts to prevent security breaches. Examples of security breaches are: 1) a computer virus that attacks each computer in the Branch and takes the entire computing environment in the Branch down for 3 to 4 days; 2) confidential data is compromised; or 3) someone changes the text of a bill without staff knowing about it and the bill becomes law.

Other Factors

Other factors impacting the Branch in implementing its IT strategy include:

- 2-year budget cycle. Given the rapid pace of change in the IT arena, state government's 2-year budget cycle puts IT managers at a significant disadvantage. To accommodate the budget cycle, managers often must predict technological solutions and costs up to 2.5 years before implementation. Significant IT changes may occur during this period resulting in managers implementing entirely different solutions at entirely different costs.

- Leadership turnover. Legislative leaders (e.g., Senate President, House Speaker) are elected less than 2 months before a regular legislative session convenes. A change in leadership from one session to the next (which is likely because of term limits) may result in the hiring of new House and Senate staff, including appointment of a new Secretary of the Senate and Chief Clerk of the House. This creates a significant challenge for centralized IT staff to train new Senate and House staff on the Branch's IT infrastructure. Additionally, Senate and House staff may request modifications or enhancements that cannot be implemented in the short period of time before the session begins.

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. This level of centralization 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.

Over the next two bienniums, the Branch seeks to continue to develop systems and apply IT resources from a Branch perspective. Cooperation and coordination within the Branch will result in efficient and cost-effective decisions. Having an active Legislative Branch Computer System Planning Council will ensure that this goal is achieved.

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 Legislature's 2-year business cycle, which allows a 1-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.

4. Short-Term IT Goals and Objectives

The following are the IT goals for the Legislative Branch for the FY 2006-2007 biennium. Following each goal is a list of branch functions that are supported by the goal. (See Chapter 2 for a description of Branch functions.) Also after each goal is a list of objectives that must be met to achieve the goal.

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, Administration		
Objective(s)	**Time frame**	**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 releases of software and are not failing excessively due to age. The Branch currently has a 4-year replacement cycle for printers, PCs, and servers.
Objective # 2 Purchase maintenance contracts (or ensure that warranties are in place) on PCs, printers, and servers.	Beginning of each FY, 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 ITSD for network infrastructure.	Beginning of each FY, 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.

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, Administration		
Objective # 5 Contract with ITSD and OPI for web services for part of the biennium (the Branch intends to bring up its own web servers during the biennium).	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.
Objective # 6 Contract with ITSD for Oracle database services.	Beginning of each FY, ongoing through the FY.	The public, state agencies, and Branch personnel are able to access data from the Branch Oracle database.
Objective # 7 Continue to convert to supported off-the-shelf software. Convert to latest release of WordPerfect. Convert to Windows XP.	Ongoing throughout each FY.	PCs, servers, and printers are on currently supported software.
Objective # 8 Supplement IT staff by contracting with management information system (MIS) services vendors for LAWS support, Windows XP conversion support, Banner interface support, LAD SABHRS support, and network support.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 9 Supplement IT staff by contracting with local colleges for intern services.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 10 Ensure that currently supported applications continue to function adequately and add minor enhancements to them.	Ongoing throughout each FY.	Current IT staff is not accruing excessive overtime, and customer service is adequate.
Objective # 11 Train in-house staff on PeopleSoft so that supporting the LAD SABHRS function can be done in-house.	Ongoing.	Appropriate IT staff receive at least 5 days of Peoplesoft training each FY.

Goal # 2: Expand and Improve Electronic Access to Information About the Branch and Information Produced by the Branch		
Supported Branch Function(s): Information Distribution		
Objective(s)	**Time frame**	**Measure**
Objective # 1 Expand the number of committee hearings that are recorded and broadcast live (and archived) via the Internet.	2007 Legislative Session.	More live feeds and archive data of committee hearings are made available to the public.
Objective # 2 Bring web server services inhouse for better control and customization.	2006 - 2007 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 Make a decision on using PHP software as the web programming language and if the decision is positive, begin to use it.	Ongoing.	Appropriate decisionmaking process is used and if PHP is selected, new web development is done in PHP.
Objective # 5 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.

Goal # 3: Ensure the Mission-Critical Applications Are Protected and Recoverable		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Administration		
Objective(s)	**Time frame**	**Measure**
Objective # 1 Contract for development of a disaster recovery plan for the Branch.	FY 2006.	Contractor is selected and contract is executed.
Objective # 2 Contract for development of a security plan.	FY 2006.	Contractor is selected and contract is executed.

Goal # 3: Ensure the Mission-Critical Applications Are Protected and Recoverable		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Administration		
Objective # 3 Implement as much of the disaster recovery and security plans as time and budget allows.	Ongoing.	Staff has spent at least 100 hours implementing disaster recovery and security plans.
Objective # 4 Identify future resources needed to fully comply with the disaster recovery and security plans and include in FY 2008-2009 IT plan and budget.	January - May 2006.	Document results.
Objective # 5 Participate on statewide disaster recovery and business continuity committees.	Ongoing.	Meeting attendance.

Goal # 4: Provide Efficient Interfaces to Enterprise Systems to Allow for Branch Oversight and Analysis		
Supported Branch Function(s): Oversight and Fiscal Analysis		
Objective(s)	**Time frame**	**Measure**
Objective # 1 Continue to work with the University System to gain access to accounting and HR data.	Ongoing throughout FY 2006-2007.	University System data is made available to the Branch.
Objective # 2 Develop user-friendly interfaces to University System data.	Ongoing throughout FY 2006-2007.	Successful test of user interface.
Objective # 3 Continue to work with ITSD to support and maintain the LAD interface to SABHRS.	Ongoing throughout FY 2006-2007.	LAD SABHRS system is functioning and meets the original and any additional requirements.
Objective # 4 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 2006-2007.	Executive Branch data is made available to the Legislative Branch.

Goal # 4: Provide Efficient Interfaces to Enterprise Systems to Allow for Branch Oversight and Analysis		
Supported Branch Function(s): Oversight and Fiscal Analysis		
Objective # 5 Develop user-friendly interfaces to Executive Branch data as necessary.	Ongoing throughout FY 2006-2007.	Successful test of user interface.

Goal # 5: Conduct a Pilot Project for Providing State Laptop Computers to Legislators for the 2007 Session		
Supported Branch Function(s): Legislation and Policy Development		
Objective(s)	**Time frame**	**Measure**
Objective # 1 Provide 24 laptops for 16 Representatives and 8 Senators.	2007 Legislative Session.	24 legislators are signed up to use state-provided laptops for the 2007 Legislative Session.
Objective # 2 Provide training and support for the laptops.	2007 Legislative Session.	Legislators are trained to properly use the technology provided.
Objective # 3 Gather feedback at the end of session to determine if the pilot was a success and what the next step should be.	End of 2007 Legislative Session.	Use surveys or meetings to gather feedback.

Goal # 6: Explore Ways to Use New Technology to the Advantage of the Branch		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Administration		
Objective(s)	**Time frame**	**Measure**
Objective # 1 Continue to deploy CITRIX applications to see if this can extend the normal 4-year PC replacement cycle.	Ongoing throughout FY 2006-2007.	Document results and use them in the future IT planning processes.
Objective # 2 Continue to explore the use of thin clients as a means of reducing the cost of PCs.	Ongoing throughout FY 2006-2007.	Document results and use them in the future IT planning processes.

Goal # 6: Explore Ways to Use New Technology to the Advantage of the Branch		
Supported Branch Function(s): Research, Fiscal Analysis, Legislation and Policy Development, Information Distribution, Oversight, Administration		
Objective # 3 Continue to explore the use of Linux and other open source software as a means of reducing the software budget and increasing the functionality offered.	Ongoing throughout FY 2006-2007.	Document results and use them in the future IT planning processes.
Objective # 4 Explore replacement for Microsoft Word and WordPerfect.	Ongoing throughout FY 2006-2007.	Document results and use them in the future IT planning processes.

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.

5. FY 2006-07 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 Computer System 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:

- replacing computer hardware (i.e., personal computers, servers, printers, and other peripherals) in accordance with the Branch's replacement cycle;
- purchasing maintenance contracts or ensuring that warranties are in place on personal computers, servers, and printers;
- training for IT staff and for Legislative Audit Division staff involved in information system audits;
- purchasing network infrastructure, web server, and database services;
- converting to supported releases for off-the-shelf software;
- purchasing contracted services for conversion projects, network support, and application support; and
- contracting with a local college for internship services.

In addition to maintaining the operational status of the current computer environment, the Planning Council is seeking funds to develop security and disaster recovery plans for the Branch IT environment, expand the audio recording of committee hearings (which will be piloted during the 2005 session), and conduct a pilot project for providing state-owned laptops for use by legislators during the 2007 session.

The Planning Council is requesting a centralized IT budget of $2,838,314 for the FY 2006-2007 biennium. The following page contains the detail of the biennial budget.

Legislative Branch FY 2006-2007
IT Budget

	Biennial Budget
1. Maintain the Operational Status of the Current Computer Environment	
Hardware and Software for Life Cycle Costs - Replacement Cycle	$997,690
Upgrade Novell Servers	100,000
Hardware Maintenance and Supplies	90,000
Network Connect Fees - @ $72.60 per Connection per Month	439,956
Interns (4 Interns Year Round)	90,000
Training	40,000
Audit IT Training	40,397
Support Costs for Existing Oracle Systems (ITSD Midtier Service)	
LAD CAFRS	3,000
LAWS Server Costs (99, 01, 03, 05, 07, SS & Test Instances)	87,500
Reapportionment System Maintenance	1,500
Web Server Lease from OPI	14,000
Web Server Lease from ITSD	7,200
Remote Dial-Up	400
Library Databases to the Internet (pay State Library to host catalog)	2,000
LAWS Support (Contracted Services)	63,000
Convert Desktop to Windows XP (Contracted Services)	60,000
LAD SABHRS/Banner Support (Contracted Services)	80,000
Banner I Support (Contracted Services)	16,000
Banner II Phase II Development (Contracted Services)	220,000
LAD Enterprise System Work (Contracted Services)	75,000
LFD Enterprise System Work (Contracted Services)	75,000
Wireless Cards for Laptops for Legislators for 2007 Session 24@$99	2,376
MS Office Suite for Laptops for Legislators for 2007 Session 24@$375	9,000
Dial-Up ISP Accounts for Laptops for Legislators for 2007 Session 24@$20/5 months	2,400
Network Connections (Wireless) for Laptops for Legislators for 2007 Session 24@$120 /5 months	14,400
Support Staff - Laptops for Legislators for 2007 Session - 1 contractor 1/3 time for 6 mo - 347 hrs @ 85/hr	29,495
Biennial Total	**2,560,314**
2. Security and Disaster Recovery	
Security Plan (Contracted Services)	60,000
Disaster Recovery Plan (Contracted Services)	60,000
Biennial Total	**120,000**
3. Audio Recording of Committee Minutes (Expansion)	
Storage Expansion (Real Audio)	35,000
Real Networks Software Licenses	20,000
Bandwidth to Internet	20,000
Sound System for 4 rooms - 4 @ $9,500	38,000
Additional Switching and Signal Cleaning Equipment for Head End Room	45,000
Biennial Total	**158,000**
Biennial Grand Total	**$2,838,314**

6. Long-Term Information Technology Issues for the Legislative Branch

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

- Laptops for Legislators

Legislators' demand for IT resources has continually increased from session to session. To date, two options have been available for meeting the computing needs of legislators. The first option has been for the legislators to bring their own laptops. Using this option, the Legislature has purchased access to a local Internet service provider for use by the legislators when they are in Helena during a session. The second option has been to provide a limited number of state-owned desktop computers for legislator use.

The Planning Council believes that the long-term solution to meeting legislator computing needs would be to provide legislators with state-purchased laptop computers to be used both during session and during the interim when the legislator is at home. Several other state legislatures have provided this service to their legislators. Also, in the long term, wireless technology (in the Capitol) for the legislator laptop computers could be a benefit.

The Planning Council also believes that lawmakers must take an active role in defining their needs and identifying potential approaches for addressing those needs.

- Internet Broadcasting of Session Activities (Including Video)

The Legislature has taken some small steps toward making session proceedings available to the public via Internet broadcasting. The Planning Council believes in the not-too-distant future that all session proceedings should be available through the Internet both live and archived and in both audio and video format. In addition, the audio and video recordings could be linked to the appropriate bill status action for each bill.

- 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 better be presented in map form rather than in tables. Once presented in map form, the viewer can better grasp what the data is saying. ("A picture is worth a thousand words.") GIS systems can meet this need. The Branch currently uses GIS 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 systems. The Legislature needs access to this data for fiscal analysis and audit purposes. The Branch will continually be adjusting and refining its systems that interface to these Executive Branch and University System systems to stay current with the additions and changes made to these systems.

- Continued Improvement of the Branch Website

In general, the more information the Branch can deliver directly to the public without it being filtered through the press, 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 is the new trend in 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 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 (PCs, servers, printers, 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 a huge conversion effort.

As part of this replacement cycle effort, the Branch faces a challenge in what to do with the desktop operating system in the FY 2008-2009 biennium. The current desktop operating system used by the Branch is Windows. During the coming biennium, the Branch intends to convert to Windows XP. However, mainstream support for Windows XP runs out December 31, 2006, and extended support runs out December 31, 2008.

The next release of Windows, after XP, is currently called Longhorn. It is due out sometime in 2006. Longhorn is a significant upgrade to Windows and will require a lot of conversion effort. As long as the Branch is required to make a significant conversion, this brings into play other options for a desktop operating system. These options include Linux and CITRIX. The Branch needs to investigate each of these other options along with Longhorn to determine the best long-term solution.

Appendix A: Membership of Advisory Groups

Legislative Branch Computer System Planning Council

Lois Menzies, Executive Director, Legislative Services Division, Chair (ex officio)
Marilyn Miller, House Chief Clerk
John Brueggeman, State Representative, House District No. 74
Chuckie Cramer, Senate Sergeant-at-Arms
Rosana Skelton, Secretary of the Senate
Jeff Brandt, Deputy CIO, Information Technology Services Division, Department of Administration
Clayton Schenck, Legislative Fiscal Analyst
Scott Seacat, Legislative Auditor

Technical Planning Group (TPG)

Tori Hunthausen, Legislative Audit Division
Terry Johnson, Legislative Fiscal Division
Karen Berger, Legislative Services Division
Henry Trenk, Legislative Services Division

Technical Implementation Planning Group (TIPG)

Mike Allen, Legislative Fiscal Division
Alysa Eaton, Legislative Services Division
Steve Eller, Legislative Services Division
Jim Gordon, Legislative Services Division
Lisa Mecklenberg Jackson, Legislative Services Division
Jeanette Nordahl, Legislative Services Division
Jan Orsello, Legislative Audit Division

Rick Peaslee, Legislative Services Division
Margie Peterson, Legislative Services Division
Dustin Temple, Legislative Services Division
Jeff Thomas, Legislative Services Division

Web Content Organization Group (WCG)

Lisa Mecklenberg Jackson, Branch Librarian, Legislative Services Division (Chair)
Mike Allen, Legislative Fiscal Division
Jan Orsello, Legislative Audit Division
Steve Eller, Legislative Services Division
Alysa Eaton, Legislative Services Division

Appendix B: Legislative Branch IT Standards

The following standards have been adopted for the Branch. All legislative divisions are required to follow these standards for new purchases or to convert to these standards when it is most cost-effective. These standards are periodically reviewed and updated as Branch needs or state and computer industry standards change.

Application	Standard
Word Processing	Microsoft Word and WordPerfect
Spreadsheet	Microsoft Excel and Lotus 1-2-3
Database	Oracle for large development projects; Microsoft Access for midlevel development projects
Desktop Publishing	Ventura Publisher
Presentation	Microsoft PowerPoint
Desktop OS	DOS/Windows 3., Windows 95/2000/XP, Linux
3270 Emulation	Attachmate EXTRA!
E-Mail	Outlook/Exchange
Internet Browser	Internet Explorer
Modem Hardware	Hayes compatible

Dial-Up Software	MetaFrame
Server Operating System	Novell NetWare, CITRIX, Windows, Linux
Web Server	Apache
Computer Hardware	State Term Contract PCs

All legislative divisions are to maintain, when feasible, the same release level for each software standard. Transition from older software applications to current standards is provided for in the plan.