Legislative Branch Computer System Plan

A Report to the 57th Legislature From the Legislative Branch Computer System Planning Council

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TABLE OF CONTENTS

Ι.	INTRODUCTION 1		
II.	EXECUTIVE SUMMARY		
III.	ACKNOWLEDGMENTS		
IV.	LEGISLATIVE BUSINESS FUNCTIONS7A.Research7B.Fiscal Analysis7C.Legislation and Policy Development8D.Information Distribution8E.Oversight8F.Administration9		
V.	INFORMATION TECHNOLOGY CONTRIBUTION TO THE LEGISLATURE'S BUSINESS		
VI.	CURRENT INFORMATION TECHNOLOGY ENVIRONMENT11A.Review of Legislative Branch Automation Process11B.Organization13C.Information Technology Equipment151.Computer Hardware152.Computer Software153.Telecommunications16D.Information Technology Accomplishments161.Information Collection162.Information Dissemination18		
VII.	INFORMATION TECHNOLOGY DIRECTION AND VISION		
VIII.	INFORMATION TECHNOLOGY ACTION PLAN FOR THE LEGISLATIVE BRANCH		
IX.	FY 2002-03 CENTRAL COMPUTER BUDGET PROPOSAL		
APPEN	NDICES		
APPEN	NDIX A Montana Code Annotated 1999 - Title 5, Chapter 11, Part 4 Computer System Planning		
APPEN	NDIX B 2000-01 Biennium Legislative Branch IT Accomplishments		
APPEN	IDIX C Legislative Branch Standards41		

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I. INTRODUCTION

A Legislative Branch Computer System Plan is required by Title 5, chapter 11, part 4, Montana Code Annotated (MCA). The Legislative Branch Computer System Planning Council (Planning Council) has developed a plan in accordance with the requirements of that part. In addition, the Planning Council recognizes that a plan is necessary to direct the substantial investment in technology toward providing the maximum return and to best address the information needs of the Legislative Branch (Branch).

In developing the plan, the Planning Council recognized that planning is an active process. Publius Syrus said, "It is a bad plan that admits of no modification." (Bartlett's Familiar Quotations, 1980.) The Planning Council recognizes the plan as more a process than a product. As such, the plan also provides a process for continual evaluation, communication, and review, rather than a blueprint for a specific configuration of hardware and software.

Evaluation of existing and potential applications is both technical and managerial in nature. Recognizing this, the Planning Council relied, to a great extent, on the technical staff of the Branch to review existing systems and to recommend technological directions and solutions to identified problems. The Planning Council reviews and approves the recommendations of the Technical Planning Group (TPG) before information technology (IT) resources are expended.

This plan represents the collective vision, planning, actions, and achievements of both groups as well as each division in the Branch.

It should be noted that because of the Consumer Counsel's remoteness and separate and distinct mission, it has not been incorporated into this plan.

II. EXECUTIVE SUMMARY

The mission of the Branch is to provide a consolidated administrative structure to support the mission of the Legislature. The Legislature's mission is to exercise the legislative power of state government vested in the Legislature by The Constitution of the State of Montana. In order to carry out this mission, the Legislature depends on the collection, processing, and distribution of information to and from individual citizens, businesses, and organizations within the state. IT plays an ever-increasing role in collection of information by the Branch, as well as facilitating the analysis of that information and the subsequent distribution of the legislative of the legislative process.

In the past, IT has been successfully used by the Branch primarily to allow staff to respond more quickly to requests for information, to produce more complete fiscal and operational analyses, and to expedite and reduce the cost of information processing. Examples of these types of activities include the Bill Drafting and Engrossing and Enrolling Systems, part of the Legislative Automated Workflow System (LAWS), which allows quicker and more accurate processing of new and changed bill text, and the Legislative Audit Division Statewide Accounting, Budgeting, and Human Resources System (LAD SABHRS), which has increased the efficiency of audits.

More recently, IT has begun to be used effectively to improve both the collection of information from other government agencies and the dissemination of information to the public. For example, direct access to agency systems by the Legislative Audit Division staff has improved audit efficiency; access to a wide variety of information on the Internet has improved the research process; e-mail response by agencies to fiscal notes has decreased the time needed to process a fiscal note; and direct public access to the text and status of bills via the Internet (LAWS) has allowed quick and direct access by interested citizens.

The Planning Council anticipates that in the future, substantial time, effort, and money will continue to be focused on the speed, quality, and reliability of the internal information processing systems that the Legislature relies on to conduct its business. As both technology and the processes of the Legislature change, these systems must be kept up to date to

ensure their reliability and that they will continue to meet the ever-changing and ever-growing needs for timely and accurate information analysis in the Branch. It is also expected that the level of public demand for immediate and direct access to government information will continue to grow and that this demand will consume a greater percentage of information resources than it has in the past. Finally, it is expected that the public will also request more direct input into the government process through technologies such as e-mail and interactive video conferences. These opportunities will need to be evaluated in the future based on their value and cost-effectiveness.

The Planning Council believes that the Branch is prepared to tackle these challenges in IT. An active Planning Council, supported by a well-qualified and professional technical staff, will ensure that both the processes in place and the systems that support them are reviewed and updated and that opportunities to improve public access to government are evaluated, costjustified, and implemented when feasible. The Branch is not only communicating and working together internally, but also externally with the Executive Branch and other local, state, and national government agencies to ensure coordination. The Branch plan for automation includes guidelines and established standards that have been designed to support a smooth transition to the future as technology advances.

Technologically, the Branch is supported by a large base of valuable microcomputer technology and a replacement plan that ensures adequate and up-to-date computer hardware in the future. Software is largely standardized and current as well. Recent upgrades to the communication wiring infrastructure in the Capitol have brought the communication capability in the Capitol up to and in some cases beyond industry standards. The centralization of the computer network support and systems development staff, servers, budget, and other resources provides a high degree of efficiency in delivery of IT services.

In order to support this information infrastructure, the Planning Council has requested one central IT biennial budget of \$3,935,307 for the Branch for computer and network needs. Based on the approval of the central budget concept by the Legislature in 1991, the Legislative Services Division has again included the central computer budget proposal as part of its budget.

Major projects and goals for the FY 2002-03 biennium include maintaining the operational status of the current computer environment, conversion from Windows 95 to Windows 2000, putting more of the Branch's data on the Internet/Intranet, SABHRS interface work, broadcasting audio and video of session activities via the Internet, implementing a Geographic Information System (GIS), and beginning the process of automating the job of the legislator.

Support for legislator-owned computers has been one of the more difficult issues to address over the past several years. The Planning Council anticipates growing difficulties and opportunities in this area. Recognizing this fact, the Legislature adopted House Joint Resolution No. 23 in 1991, directing a specific study of the question of legislator use of computers. The study document, <u>A Study on the Use of Computers by Legislators</u>, can be obtained from the Legislative Services Division. The study described a pilot project and a fully implemented system with associated costs. The study also concluded that there was a great need to work toward making data services more readily available to legislators.

Since then, the Internet has become available and the Branch has made almost all of the session proceedings available via the Internet. This satisfies the need for making data services more readily available. There is still a need for legislators to have the tools available to access this information, i.e., an Internet-ready personal computer (PC) with access to the Internet. The Planning Council recognizes that providing PCs to 150 legislators will require considerable planning. It would be difficult to accomplish this effort just before a session. The Planning Council recommends that if this effort is undertaken, it should be planned at least a session in advance. With this in mind, the Planning Council is including a budget in this plan to implement a pilot project of 18 laptop computers and associated services for legislators for the 2003 Legislative Session.

In summary, the Planning Council believes that the Montana Legislature has taken a conservative and prudent, but effective, approach to IT use in the past. Cooperation and coordination both within the Branch and with other agencies and organizations have ensured both effective and cost-effective decisions. The plans, processes, and visions of the Planning Council, as detailed in this report, should ensure that the current investments and opportunities are successfully used and form the basis for more efficient and effective

legislative processes.

III. ACKNOWLEDGMENTS

Legislative Branch Computer System Planning Council

Robert Person, Executive Director, Legislative Services Division, Chairman (ex officio) Chuckie Cramer, Senate Sergeant-at-Arms Marilyn Miller, Chief Clerk, House of Representatives Mark Noennig, State Representative, House District No. 9 Clayton Schenck, Legislative Fiscal Analyst Scott Seacat, Legislative Auditor Rosana Skelton, Secretary of the Senate Brett Boutin, Department of Administration, Information Services Division

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IV. LEGISLATIVE BUSINESS FUNCTIONS

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 Montana Legislature are prescribed by constitutional law, statutes, and legislative rules. The Branch divisions established to support the Montana Legislature and its committees are the Legislative Services Division (LSD), the Legislative Audit Division (LAD), and the Legislative Fiscal Division (LFD). 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. These are described briefly below.

A. 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.

B. 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.

C. 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.

D. 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 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 direct in-person and telephone access to the public on the status of legislative proceedings and the daily calendar of events. The Office of Legislative 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.

E. 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 or other elected officials comply 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 fraud 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 six permanent interim committees.

F. 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 <u>A Legislator's Handbook,</u> <u>2000</u>, 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.

V. INFORMATION TECHNOLOGY CONTRIBUTION TO THE LEGISLATURE'S BUSINESS

The Legislature is information. All that it works with and all that it produces are information. In this information age, enhancing the ability to gather, process, and distribute legislative information more quickly and more accurately is a necessity.

The State of Montana, through its Information Technology Advisory Council (ITAC), has adopted the view that information is critical to the functioning of government. Its view is expressed in the following observation from the <u>Information Technology Strategic Plan, July</u> 1994:

The people of the state can benefit from information made available both by state agencies and by others, including local government agencies, education, libraries, and other not-for-profit institutions, and for-profit organizations. The free flow of information between the government and the public is essential to a democratic society. Correspondingly laws reflect increasing demands that state government be responsible for providing the public and other governmental entities with access to information an agency may possess that illuminates the operation of government itself, society, and the economy--past, present, and future. Open access to information is a means to ensure the accountability of government . . .

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.

VI. CURRENT INFORMATION TECHNOLOGY ENVIRONMENT

Sections A through D below summarize the history of IT development in the Branch, the current organizational and technical environment that supports IT processes and initiatives in the Branch, and the accomplishments that have been made to improve legislative processes.

A. REVIEW OF LEGISLATIVE BRANCH AUTOMATION PROCESS

Over the past 3 decades, the Branch has become completely reliant on computer technology to administer the business processes of the Branch. From 1970 to 1985, most applications were on the state mainframe computer. The LSD, for example, used a proprietary program called Automated Legal Text Entry and Revision (ALTER) to manage MCA and bill text data. The advent of the personal computer rapidly transformed this environment. Stand-alone dedicated word processors were barely introduced when they were replaced by personal computers with multiple capabilities. Soon, those personal computers were linked to one another in networks, and the potential for improvement exceeded the ability of the Branch to keep up.

Recognizing the need for planning, the Senate contracted with a private consultant during the 1987-89 interim to review the situation and recommend applications. Senate planning led to implementation of a network in the Senate for the 1989 Legislative Session. The process was mirrored by the House, which implemented a limited system tied closely to the LSD system. The growth of applications in the House and Senate led to recognition by legislators and staff that integration of the systems was important to the future operation of the Legislature. Central planning for the Branch was essential in order to achieve appropriate integration.

Since recognition of the need for planning grew from the increased use of information systems throughout the Branch, some evaluation of all information systems was required. An informal review of existing systems was conducted by the technical staff. This work clearly identified a predominant need to improve and further integrate office automation and

information processing functions throughout the Branch.

The primary focus on the application of technology has been on the improvement of legislative staff productivity. Use of IT has been effective, and specific cases are noted in the IT accomplishments section.

From the mid-1980s to the mid-1990s, other state government agencies and lobbyists had, on a small scale, been included in direct technological access to the legislative staff and process. For example, distribution of the MCA on CD-ROM, direct TV and radio media access to some of the proceedings in the chambers, use of the state electronic bulletin board system for information distribution, use of the Internet for public access to MCA text and session proceedings (including bill status information), and use of the state mainframe/mid-tier servers and data network to communicate directly with agencies electronically for audits and financial analysis have all expedited the flow of information to and from the Branch.

A thorough review of processes in the Branch was conducted during the FY 1996-97 biennium. This review was conducted as the first phase of consolidating the systems development function in the Branch. Other goals of this project were to determine where overlap existed in Branch processes and to determine where current technology could be applied to gain efficiency. This project began in June of 1995 and was completed in 9 months. A local contractor was hired to conduct the analysis. The results of the analysis were used to develop the project list and budget for the FY 1998-99 Legislative Branch Computer System Plan. For more information on the project, see <u>State of Montana, Legislative Branch</u>, Automation Analysis Final Report.

During the FY 1998-99 biennium, the Branch continued to invest in technology that gives the computer user more readily available and up-to-date information. Examples of this are: the Legislative Audit Division Statewide Budgeting and Accounting System (LAD SBAS), which allows the LAD to print out complete financial schedules for an agency, LAWS, which allows online access to bill status information via the Internet, and the Montana Budget Analysis and Reporting System (MBARS), which assists state agencies with budget development and tracking.

The Branch continued to make improvements to the amount of data available online and via the Internet during the FY 2000-01 biennium. A complete redesign of the Branch website was completed and procedures were put in place to allow staff to update the site with information concerning their particular area. The Branch, in conjunction with a contractor, developed several programs to retrieve information from SABHRS, the state's new financial and human resources system, to help with audit and fiscal analysis of the state's finances.

B. 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

Mission: To assist the Executive Director of the Legislative Services Division and the

Office of Legislative Information Technology staff in providing technical planning support to the Legislative Branch Computer System Planning Council.

Its input ensures the Planning Council that goals are achievable, that everyday needs are met, and that significant major issues are addressed. This group includes staff responsible for IT services from within each legislative division.

Technical Implementation Planning Group

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.

Office of Legislative Information Technology

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

> To accomplish this objective, the Office of Legislative Information Technology houses the Network Services and Application Development IT staff. This office works in cooperation with TPG, TIPG, and division leadership to implement technology 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 constant communication on state system compatibility. Participation by the Branch in the Information Technology Advisory Council (ITAC) and the Information Technology Managers Council (ITMC) 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.

C. INFORMATION TECHNOLOGY EQUIPMENT

The technological equipment implemented in the Branch puts the Branch in a good position to tackle the first part of the next decade. The paragraphs that follow briefly describe the technology used in the Branch.

1. Computer Hardware

The Branch has determined that most of its internal computing needs can be met costeffectively using microcomputer hardware. Currently, there are approximately 200 desktop and laptop PCs in the Branch network. These PCs are connected to one Branch file server.

The Branch will continue to rely on the state mid-tier services (operated by the Department of Administration) for large statewide systems, such as SABHRS. The mainframe is also being 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 the LAD SBAS, Information Request System, and LAWS. Web server services are also provided to the Branch by the Department of Administration, Office of Public Instruction, and State Library.

2. Computer Software

The Branch has standardized its microcomputer software. These standards are the same as

those used by the Executive Branch on major projects. Appendix C contains the Branch software standards. The Branch is still in the process of converting to the Microsoft Office suite. For this reason, both the old standards and the new Microsoft Office suite standards are listed.

3. Telecommunications

The Local Area Network (LAN) and the SummitNet Wide Area Network (WAN) provided by the Department of Administration 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.

With the recent renovation of the Capitol, the LAN wire infrastructure in the Capitol has been brought up to industry standards (100 megabit switched Ethernet). This new infrastructure will provide increased bandwidth and reliability.

D. INFORMATION TECHNOLOGY ACCOMPLISHMENTS

The Branch has made numerous technological achievements. Descriptions of several of the major achievements are described below. The descriptions also illustrate Branch reliance on IT resources. See Appendix B for specific FY 2000-01 biennium IT accomplishments.

1. Information Collection

• The Branch has installed LANs, using state and Branch standards. These networks have been attached to the state data network and can communicate with each other and with the state mainframe/mid-tier computers. Branch staff, working at various state agency sites, can attach to the Branch LANs via the state data network. This improves productivity by allowing the transfer of information easily without travel time to and from the office. A number of the achievements listed below could not have been accomplished without these networks.

- Several client/server programs and reports have been developed to help evaluate the state agency financial information maintained on SABHRS.
- The Branch has issued several Information System audit reports on state agency controls of information resources and agency use of information resources.
- The cataloging system for the LSD Library has been automated, which has improved access to library data.

2. Information Analysis

- The Branch has standardized on PCs for information analysis. This microcomputer standard (for the client processor) provides the most computer power for the lowest price. The Branch has also implemented client/server and Internet technology for many of the Branch core systems.
- Use of the analysis tools provided on the PC has resulted in increased productivity and quality of the audits completed by the LAD.
- Several improvements have been made to the bill drafting process by applying automation. The bill drafters now use PCs instead of manual methods to draft bills. This has resulted in increased staff productivity. A bill conflict check, which indicates when multiple bills are amending the same section of code, has also been implemented. A bill drafter can then check to ensure that amendments do not conflict.
- The bills process, a mainframe operation from 1973 to 1993, has been converted to run on the PC network using WordPerfect. The print formatting capabilities of WordPerfect have produced a more readable and more flexible bill format than was possible before.
- Several improvements have been made to the legislative budget analysis and tracking

process. Better analysis is being provided through use of the PC and its analysis tools, such as Lotus or Excel, Lotus Approach, MS Access, and Oracle. These improvements are also reflected in the time necessary to engross the general appropriations bill being reduced from 3 or 4 days to 1 or 2 days.

- The revenue estimating system continues to be refined. The impact of a single factor changed by the Revenue and Taxation Committee or the Legislature can be reflected throughout the revenue estimate with minimal analyst effort, allowing time for more focus on the analysis rather than on the procedural aspect of revenue forecasting.
- Flowcharting software is used by audit staff to document state agency processes.
 This helps audit staff more easily gain an understanding of the processes and allows for easy update or modification when processes change.

3. Information Dissemination

- The House and Senate voting system software has been upgraded to allow it to be run on standard PCs. This has made it easier for staff to support the system because of in-house PC expertise. Implementation of these systems has resulted in integration of the vote and agenda functions, thus requiring only one operator instead of the two that were previously required. Because both voting system PCs are attached to the Branch network, it is easy to transfer the votes to the journal, which is also input on a network PC. Both the House and Senate vote systems also print votes on the network printers in the House and Senate main offices.
- A bill status/bill tracking system has been implemented and is continually being enhanced. This system helps the House and Senate leadership and staff manage the flow of bills through the Legislature so that bill processing deadlines can be met. It also provides the public with a means of tracking the legislative process. The current bill status/bill tracking system is an Oracle database with an Internet interface for the public (LAWS).

- The entire MCA camera-ready process is now done by legislative staff using a PCbased system and laser printers. This has resulted in significant cost savings and no additional FTEs. The full text of the MCA is stored on CD-ROM. This electronic storage version provides an alternative to publishing the MCA in a printed version. Purchasers of the MCA CD-ROM can use parts of the MCA in briefs, memos, reports, etc., without having to rekey the text. In addition, the MCA CD-ROM provides a means of searching the MCA text for specific words or phrases. The statute text portion of the MCA is also available on the Internet.
- Preparation of the daily journal is now done on PCs at the rostrum. The old method required the rostrum journal staff to prepare the journal in written form for input by data entry staff. The new method has resulted in more timely preparation of the journal and a reduction in staff time needed to produce the journal. The journal is disseminated primarily in electronic form.
- Several improvements have been made to the amendments process. The amendments are now printed centrally in the amendment coordinators' offices. Special forms, and the printing costs associated with them, are no longer required. The general format of the amendment is maintained on the PC word processor. Amendments can be prepared by a bill drafter, reviewed by an editor, and sent to the amendment coordinators through the existing computer network. This has resulted in amendments being more accurate and timely.

All amendments must go through the amendment coordinators and are stored on the network. This stored copy of the amendment is used to display the text of amendments on the House and Senate display boards during second reading. The text of amendments is also used by the engrossing staff when engrossing bills. This prevents having to rekey long amendments.

• The Branch has made extensive use of the Internet to distribute information about the Legislature. As an example, all fiscal, audit, and interim committee reports are now available. Also available are meeting schedules and meeting minutes.

VII. INFORMATION TECHNOLOGY DIRECTION AND VISION

The Planning Council has a vision for the Legislature's use of IT, which consists of two parts:

- To provide for the efficient, timely, and effective operation of the business of the Branch in order to support its various functions.
- 2. To continually apply and improve IT to help minimize impediments to the collection and dissemination of public policy information to all interested parties.

The second part of this vision is consistent with the ITAC's vision for Montana, mentioned in the <u>Information Technology Strategic Plan, July 1994</u>. A task force recommended in that report:

. . . the state [of Montana] should adopt a vision . . . that would guide information technology planning and development to take advantage of current and future service delivery and/or access technologies for citizens in their homes, businesses, schools, libraries, and organizations.

In continuing to expand and change the existing IT environment to meet both of these goals, the Planning Council is seeking an integrated information system that supports the information needs of the Montana Legislature and the public.

As the system is developed, constant additions of online viewing, reports, and data maintained for download are foreseen. A migration toward a single graphic system interface that will present appropriate information and services to the different user groups is envisioned. The internal technical infrastructure of the Branch system will also be integrated to the extent that the greatest efficiency is achieved.

Ultimately, there will be one common system look and feel for all system users for text, video, graphics, etc. Users will be able to sign on to the system and work their way through a series of choices or go directly to a predetermined choice quickly and easily.

VIII. INFORMATION TECHNOLOGY ACTION PLAN FOR THE LEGISLATIVE BRANCH

There are several important tenets to any successful plan. First, it must seek to move toward a long-term vision. That IT vision for the Legislature has been identified above. Second, it must consist of relatively long-range goals or milestones. Third, it must accomplish shortrange tasks to move the organization toward its long-range goals and, ultimately, its vision. Finally, the plan must provide a continual process of reviewing the findings of the short-term tasks in light of changes in the needs and opportunities of the organization. This process is provided for by the charters of the Planning Council, the TPG, the TIPG, and the Office of Legislative Information Technology, as well as the legislative review of this plan. The shortterm tasks that have been identified are listed below.

SHORT-TERM (BIENNIAL) PLAN

The following is a brief description of the tasks identified for the FY 2002-03 biennium and their benefits. Additional information can be obtained from the Office of Legislative Information Technology staff.

A. MAINTAIN THE OPERATIONAL STATUS OF THE CURRENT COMPUTER ENVIRONMENT

- Continue to upgrade software packages (MS Access, Oracle Browser, WordPerfect, etc.) to keep them on currently supported releases. Continue to fix and maintain PCs, servers, printers, etc. Continue to attach Branch PCs, servers, printers, etc., to the state data network.
- Continue to phase out old and technically obsolete hardware. The Branch has established a 4-year life span for PCs. In the planning, purchasing, and budgeting process, the Branch will replace PCs and PC peripheral equipment after 4 years of use. With a 4-year life cycle, 25% of the PCs in the Branch must be replaced every year.

The Branch has also established a replacement cycle of 4 years for network file servers. A replacement cycle of 4 years has also been established for printers. Printers are largely mechanical devices and as such are subject to breakdown after long usage. They also become technically superseded by newer printers after about 4 years.

- Convert the Branch to Windows 2000 on the desktop PCs. The Branch is currently using Windows 95. Windows 2000 has been adopted as a state standard operating system for the desktop PC. Windows 95 is over 5 years old, and support for it is waning.
- Convert LAWS from WordPerfect 8 to WordPerfect 9. The WordPerfect portion of LAWS consists of about 100 WordPerfect Macros. Although Corel states that WordPerfect 8 Macros will run in WordPerfect 9, this effort consists of testing each macro to ensure that it runs correctly.
- Maintain current application systems. The Branch has used Oracle (and other software development tools) to develop several customized systems. Examples are the Information Request System, the Audit Billing System, LAWS, and LAD SABHRS. Customized systems require periodic maintenance, i.e., programmers must periodically adjust the programs to make them run properly. Full-time staff or contracted services, or both, will be used to maintain the operational status of the Branch application systems. Additionally, the Branch leases Oracle server services from the Department of Administration's Information Services Division for several Branch Oracle systems. This lease is also necessary to maintain operational status.
- Continue development of Information Request System. During the last biennium, the Branch rewrote the Information Request System using an Access Database and an Internet interface. There were not enough resources available during the biennium to complete certain parts of the system. This effort will consist of finishing the development of this system.

• Continue to support the centralization of IT staff and ensure the development of staff capabilities to effectively use the ever-changing technology and to understand and provide IT solutions to meet the needs of the Branch.

B. STREAMLINING THE WEB PUBLICATION PROCESS

• The Branch currently contracts for all of its Web server services. This initiative would bring this service in-house. The Branch would then have better control of its Web servers and have the ability to better streamline the process needed to keep the information up to date and relevant.

C. INTERFACE TO ENTERPRISE SYSTEMS

• This initiative is to help the Branch obtain the data that it needs from the new administrative, financial, and revenue systems recently put in place by the Executive Branch and the University System. The Branch needs this data to perform its functions of audit and fiscal analysis. The key systems that the Branch needs data from are SABHRS, POINTS, and the Banner System.

D. GEOGRAPHIC INFORMATION SYSTEM (GIS)

• The Branch plans to implement a GIS to begin to enhance the Branch's ability to analyze geographical (spatially related) data and present the analysis in map form. For example, instead of presenting a table of average income by county or legislative district, a map of each county or each legislative district could be produced showing this information. The data could also be analyzed spatially. For instance, the GIS could be used to answer a question such as, What is the average income of people living within 100 miles of a major city compared to that of the people living in the city?

E. CONTINGENCY FUND

• With the fast pace of technology and the 2-year budget cycle of state government, it is difficult to anticipate in advance all of the costs and needs for technology. For instance, the Branch has had difficulty reacting to the changes brought on by the new Executive Branch and University System accounting and related systems. To begin to solve this problem, the Branch is planning a contingency fund in its IT budget. This fund will be used only if: (1) an unanticipated requirement is identified with a planned project in which it would be cost-beneficial or otherwise advantageous to the state to implement the new requirement at that point; or (2) an unanticipated need for new technology arises. If neither of these conditions is met, the money in the contingency fund will be reverted.

F. INTERNET BROADCAST OF SESSION ACTIVITIES

• With the addition of cameras in the House and Senate Chambers and certain committee rooms, the Branch needs some way to get this audio and video out to the public. Under this initiative, the Internet would be used to broadcast this data live and also to offer the ability to view previously recorded floor sessions.

G. LEGISLATOR AUTOMATION

• The Branch plans to conduct a pilot project that takes a step toward automating the job of the individual legislator. The state will purchase 18 laptops (12 in the House and 6 in the Senate) for legislators to use during the 2003 Legislative Session. This project will help determine if this technology can help the legislators in performing their jobs. Another feature of this project will be to determine if chamber automation would be of benefit. Chamber automation is the ability to hook every laptop in the House and Senate Chambers into a system that will automatically bring up a copy of the bill or amendment that is currently being considered. This project will also be used to determine the cost and effort necessary for full implementation of this environment for all 150 legislators.

By accomplishing these tasks, 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.

IX. FY 2002-03 CENTRAL COMPUTER BUDGET PROPOSAL

In order to implement any action plan, the necessary IT resources must be clearly identified. This budget proposal identifies the hardware, software, supplies, and contracted services necessary to achieve the Branch goals outlined in the plan. The following pages contain the details of the budget. The Branch is requesting that this budget be a biennial appropriation.

LEGISLATIVE BRANCH FY 2002-03 Computer System Plan

	<u>FY 02</u>	<u>FY 03</u>	
. Maintain the Operational Status of the Current Computer Environment			
Hardware and Software for Life Cycle Costs - Replacement Cycle	\$304,803	\$261,577	
Hardware Maintenance and Supplies	10,000	15,000	
Network Connect Fees - @ \$73.50 per Connection per Month	164,052	239,904	
Interns (4 Interns Year-round)	45,000	45,000	
Training	20,000	20,000	
Audit IT Training	19,924	20,483	
Support Costs for Existing Oracle Systems (LAD SBAS, LAWS, etc.)			
LAD SBAS Server (ISD)	59,000	59,000	
LAWS Server Costs (ISD) (Prior, Present, SS, & Test Instances)	86,400	86,400	
LAWS Support (1/4 Contractor, Nonsession Yr., 3/4 Contractor, Session Yr. @ \$80)	41,600	124,800	
Lease of Document Management Services from ISD	10,800	10,800	
Convert Desktop to Windows 2000 (This is Contracted Services; Hardware & Software for			
this are in the H/S Budget, 1 Contractor, 2080 hrs @ \$68/72)	70,720	74,880	
Network Support (1 Contractor, 2 yrs, 2080 hrs @ \$68/72) 14		149,760	
Additional Network Support (1 Contractor, 2 yrs, 2080 hrs @ \$68/72) 141,440		149,760	
LAD SABHRS/Banner Support (640 hrs @ \$225/hr) 72,000		72,000	
Reapportionment System Maintenance (\$2,000/yr Standard Support,5,000\$1,500/month for 2 months)5,000		5,000	
Web Server Lease from OPI	7,000	0	
Remote Dial Up (ISD \$5/month for 70 connections)	4,200	4,200	
TOTAL	1,203,379	1,338,564	

2. Streamlining the Web Publication Process

Web Server			
Hardware (Main, Backup and Tape Backup PC)	29,000	0	
Windows 2000, IIS, Tape Backup Utility	10,000	0	
Web Administrator (1 Contractor, 1/3 time, 2 yrs, 646 hrs @ \$75)	48,450	48,450	
TOTAL 87,450		48,450	

3. Interface to Enterprise Systems

LAD SABHRS Interface	125,000	125,000
LAD Interface to Banner	100,000	100,000
LFD Interface to Banner (1 Contractor, 3 months @ \$225/hr)	58,388	58,388
LFD Interface to POINTS, Medstat, etc. (1 Contractor, 6 months @ \$75/hr)	38,925	38,925
TOTAL	322,313	322,313

ArcView Software for 4 Users @ \$1,200	4,800	
ArcView Software Upgrade for Library PC	300	
Training - 2 Days for 7 people @ \$500/day	7,000	
TOTAL	12,100	
Contingency Fund		
Contingency Fund	50,000	50,00
TOTAL	50,000	50,00
Internet Broadcast of Session Activities		
Hardware, Software, and Supplies	0	110,80
Contracted Services	0	89,60
Internet Connection	0	52,50
TOTAL	0	252,90
Legislator Automation		
Laptop PCs - 20 @ \$3100 - Includes Software, Modem/NIC & Maintenance	0	62,00
Wireless Card - 20 @ \$249	0	4,98
Printers with IP Connection		
Medium Speed Printers - 2 @ \$1,472	0	2,94
ISP Accounts - 20 @ \$22 for 6 months 0		2,64
Network Connection		
Laptop Wired Connection - 20 @ \$73.50/month for 6 months	0	8,82
Laptop Wired Office Connection - S - 6, H - 12 @ \$73.50/month for 6 months	0	7,93
Laptop Wireless Connection - 20 @ \$73.50/month for 6 months	0	8,82
Printer Wired Connections - 2 @ \$73.50/month for 6 months	0	88
Access Points - 6 @ \$1,299	0	7,79
Support Staff		
1 Contracted Services Staff for 5 months	0	62,28
Training		
1.5 days of State Training - 20 @ \$100/day	0	3,00
Chamber Automation		
Trigger Software		20,37
Contracted Services - Development (1 Contractor, 4 months @ \$80/hr)	0	55,36
TOTAL	0	247,83
taff Operations Total (Items 1, 2, 3, 4, & 5)	\$3,434,568	
utomating the Legislature Total (Items 6 & 7)	\$500,739	

FY 02/03 Biennium Total

\$3,935,307

The following assumptions were made for the Internet Broadcast of Session Activities budget item:

It is assumed that a feed of the floor sessions will be provided. Costs included in this budget are for picking up that feed and broadcasting it via the Internet. Other assumptions include:

- The House and Senate floor sessions each average 2 hours a day. There will be 90 daily floor sessions. Committee hearings will average 6 hours a day for the 90 days of session.
- Floor sessions can be viewed live, or previous floor sessions can be viewed from the archives. Committee hearings can also be viewed live or from the archives. The maximum number of live broadcasts occurring simultaneously is three.
- 3. The website for viewing these broadcasts will be available year-round. The maximum number of connections for viewing during the session will be 300. The maximum number of connections for viewing during nonsession will be 50.
- 4. The website will broadcast a maximum of 80kbps streams.
- 5. The website will first be available September 1, 2002 (for broadcasting interim activities), and continue to be available throughout the 2003 Legislative Session.

The following assumptions were made for the Legislator Automation budget item:

- Twelve Representatives and six Senators will be provided with state-purchased laptops. The laptops will be available during session only. Two additional laptops will be provided for support staff. At the end of session, the laptops will be returned to the LSD. The LSD will use the laptops within the Branch.
- 2. The legislator laptops will:

- a. Be connected to the Internet via wireless and wired communications in the Capitol.
- b. Not be attached to the Branch server(s) (Novell, etc.) or any other state agency servers (SABHRS, MBARS, etc.).
- c. Have access to Branch data available on the Internet, i.e., bills, bill status, journals, etc.
- d. Have access to Executive Branch and Judicial Branch data available on the Internet.
- e. Be loaded with a Windows operating system and the Microsoft Office suite.
- f. Have access to e-mail through any of the following options: (1) a State of Montana Exchange server or an ISP account purchased by the Branch; or (2) free Internet e-mail.
- g. Have access to printers located in various locations throughout the Capitol.
- h. Have modem dial-up capability for access to the Internet outside the Capitol via an ISP account purchased by the Branch. (This ISP account will only be accessible via a local call from within Helena. If a legislator takes the laptop home and wishes to dial the ISP, it will probably be a long-distance call at the legislator's expense.)
- 3. Printing services will not be provided outside of the Capitol; i.e., there will be no portable take-home printers provided.
- 4. Training on use of the laptop will be provided. All legislators must attend training before a laptop will be issued.
- 5. Laptops are primarily to be used for access to state data via the Internet, access to other Internet data for research purposes, communication via e-mail, appointment scheduling, and document/spreadsheet preparation. Legislative staff will not provide any system development or programming services such as Word/Excel macro development. Also, there will not be any constituent tracking capabilities provided.
- 6. Each legislator using a laptop must sign a policy statement that will describe proper

usage of the laptop and the legislator's responsibility to care for the laptop.

- 7. Legislators will not be allowed to load any software on the laptops.
- 8. Support staff will be available from 7 a.m. to 6 p.m., Monday through Friday and as needed on Saturday, for the 90 days of session to fix problems and answer questions.
- 9. A chamber automation feature will be provided. The main function of this feature is to bring up the text of a bill or text of an amendment on every laptop in the chamber when that bill or amendment comes up on the agenda display board.

APPENDIX A

Montana Code Annotated 1999 Title 5, chapter 11, part 4 Computer System Planning

5-11-401. Purpose. It is the purpose of this part 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. It is the purpose of the plan to assure coordination of information system decisions so that the overall effectiveness of the senate, the house of representatives, and legislative agencies may be improved. It is the further purpose of the plan to enhance the coordination of legislative branch systems with executive branch systems wherever possible.

5-11-402. Legislative branch computer system planning council. There is a legislative branch computer system planning council composed of:

(1) the secretary of the senate or another representative of the senate designated by the president;

(2) the chief clerk of the house of representatives or another representative of the house designated by the speaker;

(3) 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;

(4) the executive director of the legislative services division, who shall chair the planning council;

(5) the legislative auditor;

- (6) the legislative fiscal analyst;
- (7) the consumer counsel; and

(8) a person designated by the director of the department of administration to represent the data processing policy and planning functions of the department, who shall serve as a nonvoting member of the planning council.

5-11-403. Duties of legislative branch computer system planning council. (1) The legislative branch computer system planning council shall develop and maintain a legislative

branch computer system plan. In developing and maintaining this plan, the planning council shall:

 (a) continuously review or have reviewed existing information systems that are candidates for automation or enhancement, as well as review existing automated systems that may be improved or integrated with new applications;

(b) develop and maintain a description of functions or services in the legislative branch and its agencies that would, through application or improvement of computer technology, provide better service to members of the legislature, legislative agencies, and the public;

(c) develop and maintain a ranking of needs, taking into consideration the relative effectiveness and probable cost of alternative systems; and

(d) develop and maintain recommended system standards for the legislative branch and standard or custom software and hardware solutions appropriate to the needs and environment of the legislative branch and its agencies.

(2) To the extent possible:

(a) future applications should be explicitly identified in the plan;

(b) current applications should allow a high degree of flexibility so that future applications are not limited; and

(c) both current and future applications should be coordinated and compatible with the standards and goals of the executive branch established under 2-17-501 through 2-17-503, as well as the legislative branch standards developed in accordance with the requirement in subsection (1)(d).

5-11-404. Technical support. (1) The executive director of the legislative services division shall provide technical staff support to the legislative branch computer system planning council. In performing this duty, the legislative services division shall assist the planning council by:

(a) developing or having developed analyses of existing and alternate systems;

(b) providing technical solutions and advice related to the standards set by the planning council;

(c) assisting in assessing benefits and costs of optional solutions;

- (d) apprising the planning council of developments and directions in the industry;
- (e) maintaining a liaison with and informing the planning council of plans and

directions within the executive branch; assisting in the selection and purchasing of supplies and equipment; and

(f) providing other assistance as may be requested.

(2) The executive director shall encourage participation of appropriate personnel of the senate, the house of representatives, and other legislative entities in the provision of technical support.

5-11-405. Legislative branch computer system plan -- adoption. The legislative branch computer system plan must be approved and adopted by the legislative council.

5-11-406. Legislative branch systems -- conformity to standards. Computer hardware and software systems installed by the senate, the house of representatives, and legislative branch agencies must conform to standards established in the legislative branch computer system plan in effect at the time the purchasing decision is made.

APPENDIX B

2000-01 Biennium Legislative Branch IT Accomplishments

The projects and tasks described below have been accomplished during the 2000-01 biennium. Some of these tasks are the result of initiatives taken 4 to 5 years ago. Other tasks were started more recently, but all have taken significant effort and resulted in significant achievement in the 2000-01 biennium.

2000-01 IT Achievements

- The Branch has successfully supported the Branch IT environment during the move out of and back into the Capitol because of Capitol renovation. Increased IT support was required to move all of the computers, printers, and servers to their new location and set them up. These moves typically occurred over a weekend. The IT staff worked on the weekend to ensure that systems were up and available the following Monday. Typically 80% to 90% of the systems were up and available by the Monday following the move and 100% of the systems were up and available by the Wednesday following the move. An additional problem to be dealt with during the move back to the Capitol was the conversion from Token-Ring to Ethernet.
- The Branch staff is responsible for providing support to the Districting and Apportionment Commission. As part of providing this support, the Branch has purchased and installed the AutoBound GIS system. This system is specifically designed for the redistricting process.
- The Branch is responsible for fiscal analysis and audit of state and University System administrative, financial, and revenue systems. With the recent upgrades to these systems, the Branch has had to rewrite the related reporting interfaces. The Branch has had to gain back the functionality that it had with the old versions of these systems.

- The Branch put a significant amount of time and effort into ensuring that all computer systems were Year 2000 compliant. An inventory of all equipment and software was completed. Each item on the inventory was then checked to determine if it was compliant. If the item was not compliant, it was fixed or replaced. A contingency plan was put in place to help the management and staff react more quickly if certain disasters occurred during the rollover to the Year 2000. The Branch has experienced no significant Year 2000 problems since the rollover occurred.
- Last biennium, the Branch implemented the LAWS system. The 1999 Legislative Session was the first time that this system was used. There were a few minor bugs identified, and several enhancements were proposed by the users. The Branch has implemented the most requested fixes and enhancements. Among these were access to votes by clicking on the bill status motion for the vote, ability to print out a bill with line numbers for the purpose of writing or interpreting an amendment, streamlining the process of signing up for a preference list, and improvements in assignment of bills to a preference list.
- Because of inefficiencies in the user interface to the current Information Request System, the Branch has rewritten this system to use a web browser interface. Another key enhancement added during this rewrite was the ability to automatically e-mail a staff person once that person has been assigned a request on the system.
- The Branch has completed the conversion of its network operating system from NetWare 4.1 to NetWare 5. The main feature of NetWare 5 is its ability to use Internet Protocol instead of Internetworking Packet Exchange protocol. Internet Protocol is the industry standard protocol. Another feature of NetWare 5 is the ability to more easily support the network through enhanced network administrative tools.
- The Branch has completed some preliminary planning for the conversion of the PC operating system to Windows 2000. A few pilot studies were conducted to

determine the resources and effort necessary for this conversion.

- Last biennium, the Branch worked in conjunction with the Office of Budget and Program Planning (OBPP) to develop and implement a statewide budgeting system that could be used by both the Executive and Legislative Branches. This system is called the Montana Budget Analysis and Reporting System (MBARS). This biennium, the Branch and OBPP have worked together on several enhancements to the system. These enhancements include speeding up the time that it takes the system to update narrative data, changing the interface from SBAS to SABHRS, and improving the reporting capabilities.
- The Branch has implemented a major redesign of its website. The same look and feel were implemented across all parts of the site. A major effort was made to keep the website updated with all the information necessary to track interim committee activities.

APPENDIX C

Legislative Branch 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.

<u>Application</u>	<u>Standard</u>
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; Lotus Approach for
	low-end user development and data analysis
Desktop Publishing	Ventura Publisher
Presentation	Microsoft PowerPoint
Desktop OS	DOS/Windows 3.1; Windows 95/Windows NT/Windows
	2000
3270 Emulation	Attachmate EXTRA!
E-Mail	Outlook/Exchange
Internet Browser	Internet Explorer/Netscape
Modem Hardware	Hayes compatible
Dialup Software	MetaFrame/PC Anywhere
LAN Operating System	Novell NetWare
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.

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