

2010 INFORMATION TECHNOLOGY STRATEGIC PLAN OVERVIEW

A Report Prepared for the
Legislative Finance Committee

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Legislative Fiscal Division



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INTRODUCTION

This report is written to advise the Legislative Finance Committee (LFC) of potential impacts to fiscal policies and fiscal impacts implied within the 2010 update of the state information technology strategic plan (Appendix A). Montana state government currently operates under the direction of the fourth statewide plan developed after passage of the Montana Information Technology Act of 2001, which is titled the State of Montana Information Technology Strategic Plan 2008.

The Montana Information Technology Act of 2001 requires updates and distribution of statewide information technology plan updates to agencies by April 1 of each even-numbered year. Agencies are required to develop and have approved by the Department of Administration strategic plans for managing agency information technology resources in compliance with the statewide plan. Agency plans should provide a strategic direction for agencies to manage their information technology resources with the same strategic direction as the entire state government enterprise, but with specifics addressing the agency missions and services.

The statewide plan sets the strategic direction for the state in the use of information technology (IT) resources to provide the services and programs of the state. The goals, objectives, and action items of the statewide plan imply fiscal policies and fiscal impacts the committee may want to consider. Because the state plan is intended to provide general strategic direction for the state, it is not possible to evaluate with any certainty the fiscal impacts or whether a policy change will be proposed. Instead of identifying a specific impact, only an indication of whether the item would increase or decrease the budget pressure will be indicated, when implied. It will not be until after agencies have updated their plans and evaluated the funding options that specific fiscal impacts will be apparent and included in budget or legislation requests.

The 2010 plan update contains four goals, two of which are the same as goals contained in the 2008 update and two present items largely contained in the 2008 update but with a different strategic approach. The two revised goals are presented in the common themes of collaboration among communities of common interest and sharing business applications across governmental units. The four goals of the plan are:

- Involve communities of interest with common and/or related business objectives in information technology strategic planning
- Implement common business applications and shared services across governmental units
- Create quality jobs and a favorable business climate
- Protect individual privacy and the privacy of information contained within IT systems

THE GOALS

INVOLVE COMMUNITIES OF INTEREST WITH COMMON AND/OR RELATED BUSINESS OBJECTIVES IN INFORMATION TECHNOLOGY STRATEGIC PLANNING

Plan Objective and Action Items

The objectives and action items for this goal move items contained in previous statewide IT plans further toward collaborating across state agencies to address similar business needs and could gain economies of scale and provide opportunities for sharing of IT resources.

Implications of Plan Objective and Action Items

Economies of scale and sharing of resources to address common business needs could present opportunities to lower budget pressures compared to addressing similar business needs separately by agencies.

IMPLEMENT COMMON BUSINESS APPLICATIONS AND SHARED SERVICES ACROSS GOVERNMENTAL UNITS

Plan Objective and Action Items

The objectives and action items for this goal presents items contained in the 2008 update with an enhanced emphasis on sharing resources to address business needs. Where previous plans approached sharing of resources less directly through objectives that encouraged sharing, the 2010 update specifies sharing more directly at the goal level. Three broad categories for shared services are specified:

- Security
- Records management
- Electronic government (eGov)

Implications of Plan Objective and Action Items

As with the goal to involve communities of interest, sharing of common business applications and shared services have the potential to provide opportunities for economies of scale and may lower budget pressures compared to an approach absent of sharing.

CREATE QUALITY JOBS AND A FAVORABLE BUSINESS CLIMATE

Plan Objective and Action Items

The objective and associated action items for this goal to focus on expanding Montana's SummitNet network. An expansion of SummitNet would provide its reach into more Montana communities to improve access to public data.

Implications of Plan Objective and Action Items

Expansion of the network will entail costs to purchase and maintain new network connection and routing equipment. On the other hand, SummitNet provides an opportunity to save on travel costs by providing video conferencing sites at state, tribal colleges, and telemedicine sites in many Montana communities. Without a specific proposal it is not apparent if the expansion would result in higher fees for use of the network or added costs to the state.

PROTECT INDIVIDUAL PRIVACY AND THE PRIVACY OF INFORMATION CONTAINED WITHIN IT SYSTEMS

Plan Objective and Action Items

The objectives and action items for this goal focus on adopting standards, assessing risk, and developing a security risk mitigation plan. As long as existing FTE are used to carry out the planned activities, the goal should not impose an appreciable fiscal impact beyond present law funding. The security risk mitigation plan could recommend policy changes that may need statutory changes to implement, but specific policy impacts cannot be identified until the risk mitigation plan is developed. The security risk mitigation plan has a multiphase, multiyear implementation that is tied to the state budgeting cycle and began with an implementation plan completed in 2008.

Implications of Plan Objective and Action Items

The one agency action item associated with this goal is for agencies to implement an information security program. The requirement for agencies to ensure adequate level of security for all data within the department has been in statute long before the Montana Information Technology Act of 2001 was enacted. Department heads have had the statutory responsibility to designate an information security manager to administer the department's security program. As stated, as long as existing resources are used to implement information security programs in agencies the goal included in the 2010 plan update should have minimal fiscal implications.

However, attempts to breach state data security safeguards have been increasing at an alarming rate (monitored devices generated 4.4 billion logs and identified 1,159 security events in January 2009 compared to 3.0 billion logs and 1,074 security events in January 2008). Actions by the CIO and agencies to counter the increasing attacks on state data will place increasing pressures on IT resources and could add budget pressures.

LFC IMPLICATIONS

The committee has no statutory requirement to comment on the plan, but presentation of the plan update is made early in the budget development cycle to allow the committee the opportunity to consider implied fiscal issues in its recommendations for the next legislative session. Because the 2010 update interjects no new concepts that have not been contained in previous plans, no apparent issues that have not already been considered are apparent for the committee to address.

CONCLUSION

The state information technology strategic plan provides strategic direction for state agencies to develop agency information technology strategic plans to administer their information technology resources to meet the agency specific missions but in a consistent manner across state government. Because the state plan provides broad strategic guidance with few specific requirements and contains no specific initiatives, budgetary and policy impacts of the plan are speculative. The 2010 plan update restates two goals from the 2008 plan and adds two goals that basically restructure items addressed in the 2008 plan in a new way that places emphasis on sharing of resources and providing more collaboration in the application of IT resources. Except for the enhanced emphasis on collaboration and sharing of resources across agencies with common business needs, no new policy concepts are presented from the 2008 update.

APPENDIX A

State of Montana

Strategic Plan for Information Technology

2010

Available at:

http://itsd.mt.gov/content/stratplan/statewide/Draft_MT_IT_Strategic_Plan_2010_5_Jan_10.pdf

State of Montana

Strategic Plan for Information Technology

2010

(Draft as of January 5, 2010)

This is the fifth State of Montana Strategic Plan for Information Technology prepared under the authority of the Montana Information Technology Act of 2001. It is published biennially unless special interim plans become necessary.

INFORMATION TECHNOLOGY SERVICES DIVISION

Dick Clark, Chief Information Officer

1 April 2010

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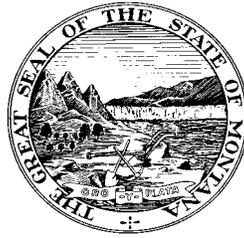
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OFFICE OF THE GOVERNOR
STATE OF MONTANA

BRIAN SCHWEITZER
GOVERNOR



JOHN BOHLINGER
LT. GOVERNOR

March 2010

Fellow Montanans:

Information Technology (IT) plays an increasingly significant role in all our lives, at home, at work, at our kids' school and as we travel for business or leisure. Our children cannot imagine life without the Internet, cell phones, and instant messaging.

Likewise, for Montana state government employees, it is impossible to envision working without our current IT services. IT is a fundamental and necessary tool for delivering essential services to Montana's citizens and for carrying out an agency's mission and daily operations.

Please use the Strategic Plan before you as a guide through the complex issues and challenges that are part of effectively managing IT. The ability to meet the expectations of Montana citizens for useful e-government and other time and labor saving services with reasonable investment and manageable risk is crucial to the success of state government.

The State of Montana Strategic Plan for Information Technology provides direction to state leaders and agencies to ensure IT efforts are coordinated. The plan's goals and objectives will be reached through the strong federal, state, local and private sector partnership upon which it is built.

I am grateful for the assistance of advisory groups and state staff that developed this plan and am confident you will find it informative.

Sincerely,

-DRAFT-

BRIAN SCHWEITZER
Governor

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State of Montana Strategic Plan for Information Technology

INTRODUCTION

The State of Montana Strategic Plan for Information Technology (Strategic Plan) serves as the voice of the Montana Information Technology Act (MITA), found in Title 2 Chapter 17 Part 5 MCA, and documents the strategies of the State Chief Information Officer (CIO). This Plan is reviewed every two years to identify the goals that will be emphasized. It provides the framework and guidance for state agencies to develop their individual plans for the use of information technology resources. The State IT Strategic Plan also provides accountability to the governor, the legislature, and the citizens of Montana.

This year's Strategic Plan incorporates some new goals and objectives that were not in the 2008 Plan. Goal 1 recognizes the need to involve communities of interest that have similar or related business objectives in IT strategic planning in order to develop IT resources in an effective and efficient manner, and provide stable funding for long-term, enterprise-wide IT investments. Goal 2 acknowledges the advantages of implementing common business applications and shared services across governmental units to achieve economies-of-scale and to minimize unnecessary duplication, especially in the areas of security, records management, and new eGovernment and Geographic IT (GIS) Services.

Goals 3 and 4 are from the previous plan. Those goals and objectives continue to be important to the state, and while progress has been made in these areas, we still have a ways to go before identifying them as having been completed. Goal 3 recognizes the continued need to create quality jobs and a favorable business climate through further expansion of Montana's SummitNet Network. Goal 4 acknowledges the continued importance to protect individual privacy and the privacy of information contained within IT systems.

The IT goals and objectives are valid and relevant to the future direction of IT for the state of Montana.

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Dick Clark, Montana State CIO.

MONTANA'S INFORMATION TECHNOLOGY VISION

MONTANA'S INFORMATION TECHNOLOGY VISION

The state of Montana and its partners advocate that business needs drive technology and that all partners will be included when implementing information technology solutions.

To support this vision, IT initiatives will be grouped by Communities of Interest to coalesce around business needs and:

- Be customer-focused in providing electronic and traditional access to government services and information;
- Enable its customers to prosper in the global economy through IT solutions;
- Enter into strategic relationships and encourage collaboration at all levels of government to effectively use information technology;
- Meet customers' expectations for reliable and timely delivery of quality services and information;
- Manage and use IT resources efficiently;
- Establish statewide direction for information technology through fiscally responsible and active stewardship.

MONTANA INFORMATION TECHNOLOGY ACT

The Montana Information Technology Act (MITA) defines the state of Montana's policy regarding the use of information technology, the goals of which are:

1. Improve the quality of life of Montana citizens
2. Provide educational opportunities
3. Create quality jobs and a favorable business climate
4. Improve government services
5. Protect individual privacy and the privacy of information contained within IT systems
6. Develop IT resources in an organized, deliberative and cost-effective manner

The following goals, objective, and action items were developed in conjunction with the Information Technology Board (ITB) and the Information Technology Managers Council (ITMC) to address the technology needs of the state and to achieve the goals of MITA.

GOALS, OBJECTIVES AND ACTION ITEMS

GOAL 1: INVOLVE COMMUNITIES OF INTEREST WITH COMMON AND/OR RELATED BUSINESS OBJECTIVES IN INFORMATION TECHNOLOGY STRATEGIC PLANNING.

Communities of Interest include the following broad categories:

- **Government Services**
- **Public Safety**
- **Human Resources**
- **Environmental Issues**
- **Education**
- **Economic Development**
- **Cultural Affairs**
- **Finance**

Objective 1-1: Develop IT resources in an organized, deliberative, and cost-effective manner.

Objective 1-2: Utilize IT best practices to implement and manage information technology systems in a coordinated manner inclusive of all units of government with common or related business objectives.

Objective 1-3: Gain economies-of-scale through shared dollars and human resources.

- a. Consolidate project management and oversight where appropriate.
- b. Minimize unnecessary duplication and data errors in similar information technology systems.

Objective 1-4: Coordinate planning, development, and implementation of new information technology resources in conjunction with budget development and approval.

Objective 1-5: Provide stable funding to enable long-term, enterprise-wide investments.

Objective 1-6: Continue to encourage and promote the use of innovative technologies for delivering government services.

Objective 1-7: Implement a Workforce Development Plan to recruit and retain a skilled and properly staffed IT workforce.

Objective 1-8: Improve the quality of life of Montana citizens by improving public safety communications.

Action Items

Information Technology Services Division (ITSD) will:

1. Assist agencies in achieving successful IT projects. (1-1, 1-2, 1-3, 1-4, 1-6)
2. Research and develop statewide strategies for adopting and funding emerging technologies. (1-2, 1-3, 1-4, 1-6)
3. Identify critical enterprise-wide IT projects that require enterprise-wide funding. Integrate the highest priority projects into the alternative IT funding plan. (1-1, 1-3, 1-4, 1-5)

Agencies will:

1. Advocate for their business needs (1-1, 1-2, 1-3)
2. Use structured project management methodologies to manage a project's entire life cycle. Projects will be reviewed at completion to highlight lessons learned and archive project knowledge gained. (1-1, 1-2, 1-3, 1-4, 1-5).
3. Identify and evaluate service opportunities and data access issues from the perspective of both public and private sector costs and benefits. (1-2, 1-6)

GOAL 2: IMPLEMENT COMMON BUSINESS APPLICATIONS AND SHARED SERVICES ACROSS GOVERNMENTAL UNITS.

Shared services include the following broad categories:

- **Security**
- **Records Management**
- **eGov**

Objective 2-1: Share IT resources (including data, information, expertise, and technology) to achieve economies of scale.

Objective 2-2: Reduce unnecessary duplication of similar information technology systems and data management applications.

Objective 2-3: Continue to expand the sharing and using of geographic data in government systems.

Objective 2-4: Continue emphasis on support and maintenance of existing IT infrastructure.

Objective 2-5: Expand eGovernment services and Geographic Information Technology (GIS) services.

Objective 2-6: Expand business continuity and disaster recovery planning.

Objective 2-7: Promote transparency in government.

Action Items

ITSD will:

1. Promote sharing of IT resources (including data, information, expertise, and technology) among state agencies.
2. Require new agency IT applications and systems to consider geographic technology and data as part of the design. (2-3,2-5)

Agencies will:

1. Share geographic data across the enterprise. (2-1, 2-2, 2-3, 2-5)
2. Promote interagency cooperation in implementing new eGovernment services. (2-1, 2-2, 2-4, 2-5, 2-7)
3. Promote interagency cooperation in conducting continuity and disaster recovery planning. (2-1, 2-4, 2-6, 2-7)

GOAL 3: CREATE QUALITY JOBS AND A FAVORABLE BUSINESS CLIMATE.

Objective 3-1: Expand Montana's SummitNet Network

The state will expand its SummitNet telecommunications network. The network will provide all citizens with a service entry point for state eGovernment services, access to public data such as geospatial data and cadastral property data, and provide the education community and local and state governments access to most services available through the Internet.

The state will work with the private sector to promote expanded geographical coverage of its network backbone, including interfaces to private-sector network segments where appropriate.

Action Items

ITSD will:

1. Conduct an assessment to define minimum levels of service, and develop a list of potential users of the network service.
2. Develop a conceptual design describing the opportunities and impact of an expanded network.
3. Work with the private sector to expand the network.

Agencies will:

1. Identify opportunities to improve delivery of public services over a network that meets minimum standards throughout the state.
2. Expand citizen access to public non-confidential data that has economic value.

GOAL 4: PROTECT INDIVIDUAL PRIVACY AND THE PRIVACY OF INFORMATION CONTAINED WITHIN IT SYSTEMS.

Objective 4-1: Improve Enterprise Security and Identity Management

The state will improve interdepartmental coordination, conduct rigorous security assessments, participate in wide ranging security exercises and evaluations, adopt secure architectures, and mitigate security and privacy risks to its systems, infrastructure, and data.

Natural disasters and catastrophic events, as well as attacks against our technology infrastructure and systems, can have a severe impact on the state's operations. The state must work to ensure systems are sufficiently protected and robust to maintain business continuity of state government.

The state possesses significant amounts of personal and confidential information. The risk of disclosure or inappropriate use of that information makes privacy protection a paramount concern. The state's legal obligation to protect the confidential information about its citizens and businesses must be balanced against the public's legal right-to-know, as guaranteed in Montana's Constitution. A primary obligation of the state's IT community is the protection of confidential data from accidental disclosure, theft, and destruction.

An enterprise-wide approach is needed to fund and implement major security projects. The IT security implementation plan will center on IT components: network, servers, applications, and the main data center.

Identity authentication is important when state citizens, businesses, and other customers access state government services and information. The state will establish a common plan for identity authentication solutions to provide secure and authorized access to information for state employees, business partners, and citizens.

Action Items

ITSD will:

1. Implement statewide security policies, standards, and identification tools to help eliminate structural vulnerabilities from the state's IT architecture and systems.
2. Conduct a rigorous administrative review and evaluation of state IT security and recovery programs.
3. Develop a statewide security risk mitigation plan after analyzing available operational recovery readiness information and IT security risks throughout the state.

Agencies will:

1. Implement an Information Security Program.

GLOSSARY

Best Practices	An implemented practice that has been shown to perform optimally through time. As processes and procedures are defined and implemented, patterns can be seen that show the best process and procedure for a business unit, functional area, or type of functionality.
Business Continuity	The sustaining of normal business operations during both expected and unexpected events that would otherwise impair the normal functioning of the state. This involves around-the-clock ability to recover from both manmade and natural disasters and includes assets beyond information technology such as facilities, personnel, critical knowledge, and physical information.
Customer	Citizens, businesses, federal, local, and tribal governments, and other organizations and stakeholders that utilize Montana state services.
eGovernment	The provision of government services via computer or Internet-based technology.
Enterprise	All agencies of the state, including the University system and participating local government and educational entities, working collaboratively to use, share, and leverage the investments made in information technology. To this end, agencies of the state and participating entities share systems and networks, use standard software and hardware, and train employees in common techniques.
Information Technology	Technology, typically in the form of computers, software, networks, telecommunications, electronic storage, etc., that enables the storage, communication, manipulation, and access to information.
Infrastructure	All information technology hardware and software that cumulatively provides a common foundation of equipment and applications that is shared among all entities of the enterprise. Examples: network hardware/software, LAN/WAN, mainframe and mid-tier computer equipment, storage devices, security hardware/software, etc.
Privacy	The right of individuals to keep information pertaining to themselves from being given out to other individuals and businesses.
Project Management	The application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
Security	Measures taken to guard against unauthorized access or use of information and equipment.
Service(s)	A function that provides access to public information, enables business activity, and addresses the needs of state customers.

Stewardship	The careful management of something placed in one's care.
Strategies	Measurable activities to be performed for the purpose of attaining the goals defined in the Integrated Information Technology Strategic Plan.
SummitNet	The state of Montana's high-speed digital data communications network. The next generation of SummitNet will completely integrate voice, video, and data transmission services around the state.
Workforce Development	The recruitment, succession planning, and training plans that focus on ensuring the state has an adequately skilled IT workforce.

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