



Montana Secretary of State's Office

2016 IT Strategic Plan

Contents

INTRODUCTION3

1. EXECUTIVE SUMMARY4

2. ENVIRONMENT, SUCCESS, AND CAPABILITIES.....4

3. IT CONTRIBUTIONS AND STRATEGIES5

4. IT PRINCIPLES5

5. IT GOVERNANCE6

6. IT FINANCIAL MANAGEMENT.....6

7. IT METRICS.....ERROR! BOOKMARK NOT DEFINED.

8. IT SERVICES AND PROCESSES6

9. IT INFRASTRUCTURE, STAFFING AND RESOURCES7

10. RISKS AND ISSUES.....7

11. IT GOALS AND OBJECTIVES7

12. IT PROJECTS8

13. SECURITY AND BUSINESS CONTINUITY PROGRAMS.....9

14. PLANNED IT EXPENDITURES11

15. ADMINISTRATIVE INFORMATION.....ERROR! BOOKMARK NOT DEFINED.

Introduction

The Montana Information Technology Act (MITA) requires each State agency to develop and maintain an agency information technology plan that establishes agency mission, goals and objectives for the development and use of information technology, and provides a description about how each agency intends to participate in meeting the goals of the 2016 State of Montana Strategic Plan for IT. MITA defines an agency as any entity of the executive branch, including the university system.

Each Agency IT Plan belongs to the individual agency that develops the plan, but MITA does require some specific content and format. MITA also requires that new investments in information technology can only be included in the governor's budget if the proposed investment is included in an approved agency plan. Section 11 of the Template instructions and your agency IT plan are based on this requirement.

Agency IT Plans are also related the State's Biennial IT Report. Every two years DOA must produce a performance report based on agencies' evaluation of their progress in implementing their IT plans from the previous biennium. This report provides an analysis of the State's IT infrastructure (value, condition, and capacity), an evaluation of the performance of the State's IT capabilities, and an assessment of progress made toward implementing the State Strategic Plan for IT during the previous biennium. Because strategic planning and reporting are closely related, and because each Agency IT Plan and biennial report are updates to existing plans and activities, agencies will provide detailed information on their IT environment in this planning cycle.

1. Executive Summary

The overall goal of the Secretary of State's Office is to improve government services. The office has identified the following objectives that cross nearly every division:

1. Replace an aging and outdated legacy mainframe application, and several smaller applications and databases that support SOS lines of business and customer service
2. Deliver mobile access to state services for citizens, businesses and state employees
3. Leverage standards and technical innovations and systems from other government entities
4. Share systems, components and functionality across MT agencies, MT political subdivisions and other states
5. Utilize cloud, open source and existing systems; deploying custom built systems only when absolutely necessary

Implementation of the identified objectives will enhance the services provided to customers and result in a more efficient government operation. The office looks forward to pursuing these opportunities to better meet customer demands, and to deliver IT services in a more deliberate and cost-effective manner.

2. Environment, Success, and Capabilities

The Secretary of State is one of five elected executive-branch officers originally designated by the Montana Constitution. The Secretary of State serves as Montana's chief election official, and the office is charged with the oversight and administration of a diverse set of laws. The related duties include the administration of elections, commissioning notaries public, registering businesses, maintaining private-sector documents directly related to business, publishing administrative rules, filing commercial and agricultural liens, and the preservation of public documents.

The Secretary of State's Office has 57 FTE. The office is funded through the collection of fees, which are among the lowest in the nation. No general fund dollars are spent on the operational costs of the office.

The Secretary of State's Office has established business goals that demonstrate a commitment to better positioning Montana for the future by embracing innovative ideas and technology. The office strives to identify best practices and emerging technologies that address ongoing technology issues, effectively meet business requirements, and deliver the type of services today's customers expect at a level of quality they deserve.

Information technology initiatives implemented in the last few years and planned for the future have focused on meeting customer demands by providing convenient access to a larger array of online services and public information, and retiring outdated systems. Challenges include limited staff and resources, ongoing reliance on outdated applications and manual processes, and competing priorities. The customer base is varied and there are growing expectations related to accessing services or public information online and via mobile devices.

3. IT Contributions and Strategies

The state’s strategic goals and objectives lead directly to several state business requirements; requirements that must be met if Montana is to succeed. Since SOS is primarily a government services organization, the state business requirement of efficient and effective government is the focal points around which the SOS IT strategy is built.

Effective Government - Effectiveness is the ability to produce better quality outcomes or higher value. IT can support this goal in two ways – first by delivering value to state employees and programs. Second, the state IT organizations can reduce their own internal IT costs; reducing them to minimum levels while maintaining high quality service. The Secretary of State’s objective is more effective government through both paths.

State Goal	State Objective	SOS Objective	SOS IT Strategy
GOAL 4: UTILIZE CLOUD, OPEN DATA AND EXISTING APPLICATIONS TO MAXIMIZE VALUE AND MINIMIZE COST OF INFORMATION TECHNOLOGY	Objective 4.1: Take advantage of opportunities to save time and money by deploying Software as a Service (SaaS) and other existing solutions over custom-built systems when possible Objective 4.2: Enable IT to quickly allocate the proper resources to meet fluctuating and unpredictable business needs	- Minimize vendor support contracts - Minimize system development and deployment time	- Provide internal application support - Utilize cloud services whenever possible
GOAL 2: DELIVER MOBILE CAPABILITY THAT SERVES CITIZENS, BUSINESSES AND EDUCATION	Objective 2.2: Improve government efficiency by making government services available anytime, anywhere	- Enable businesses to register quickly and easily with the Secretary of State’s Office	- Enable more online and mobile services for the public, voters, notaries, and business customers
GOAL 5: MANAGE CYBERSECURITY RISK TO SYSTEMS, ASSETS AND DATA	Objective 5.2: Develop and implement a standardized information security program assessment and measures for departments and the state	- Improve data security	- Implement IT security plan

4. IT Principles

IT principles govern the decisions and operations of the Secretary of State’s IT resources. They provide guidelines that ensure the correct decisions are being made; decisions that will provide the greatest value to Montana’s citizens.

- Resources will be allocated to the IT projects that contribute the greatest net value and benefit to Montana stakeholders.
- Unwarranted duplication will be minimized by sharing data, IT infrastructure, systems, applications and IT services with other agencies, whenever possible.
- IT resources will be used in an organized, deliberative and cost-effective manner.

- IT systems will provide delivery channels that allow citizens to determine when, where, and how they interact with SOS.
- Mitigation of risks

5. IT Governance

The state has established in law, by Executive order and by Agency Executive Order, governance structures such as the Information Technology Board, the Statewide Interoperability Governance Board, and the Information Technology Managers Council. The purpose of these governance structures is to ensure that the state’s IT investments supporting the business needs of the agencies are done in a cost effective manner.

SOS and the state CIO will work in a cooperative manner to strengthen these governance structures so they provide the framework for a deliberative approach to making IT investments that support the services the state provides to its citizens.

Within SOS, the IT Manager meets with executive staff and management to determine IT priorities on a regular basis. The Secretary of State has the final say on what projects are approved, and what resources can be allocated to the project.

6. IT Financial Management

SOS IT funding source comes from proprietary funds. House Bill 10 provides supplemental capital funding for major IT projects. IT line items in HB10 are managed by the Office of Budget and Program Planning (OBPP) with approval by the CIO.

SOS will document and provide adequate justification for their major IT spending proposals to OBPP and the Department of Administration.

7. IT Services and Processes

SOS has several unique applications and services available to the public, specific business partners, and county election administrators. Among those are:

Application/Service Description	Audience/User Group
Statewide elections management system (MT Votes)	Montana county election administrators
Secretary of State Information Management System (SIMS)	Montana citizens, businesses, and lending institutions
My Voter Page	Montana voters
Election Night Reporting and Canvass (eSERS)	County Election Administrators and public
Administrative Rules of Montana (ARM)	Montana citizens and State agencies

8. IT Infrastructure, Staffing and Resources

Montana has two primary data centers: the State of Montana Data Center (SMDC) in Helena and the Miles City Data Center (MCDC). MCDC operates as a backup and recovery site. The majority of SOS applications and servers are hosted in the SMDC. SOS has 6 FTE in IT positions.

SOS will utilize cloud, open source, and COTS solutions, deploying custom built systems only when absolutely necessary. SIMS and eSERS are both cloud-hosted. SIMS is hosted in AWS, and eSERS in the State’s Microsoft Azure G-Tenant environment.

9. IT Risks and Issues

Primary Risk	Probability	Impact	Mitigation Strategy
Staff retirements	Medium	Medium	SOS will develop a succession planning program that creates a list of staff eligible to retire and forecast an estimated retirement date and replacement plan when possible. Positions/skills rated as critical will have individual plans for skills transfer, replacement, documented procedures, etc. for mitigating the impact.
Security breach	Medium	High	Our agency has an active security program including, but not limited to, staff training and awareness, data encryption, and security policies.
Difficulty of hiring qualified technical staff	Medium	High	IT unit is fully staffed, so mitigation geared toward retention. For example, SOS is piloting a remote work program with one IT staff member.

10. IT Goals and Objectives

SOS Business Strategy	SOS IT Objective
1. Enable all customers to register, file, and access their information quickly and easily	1. Enable more online and mobile services for Montana voters, businesses, notaries public, and citizens
2. Keep business registration fees low	2. Ensure online services are automated
3. Minimize vendor support contracts	3. Provide internal application support

4. Minimize system development and deployment time	4. Utilize cloud services whenever possible
5. Improve data security	5. Implement IT security plan

11. IT Projects

Item	Description
Project name	Secretary of State Information Management System Phase 2
Project/program purpose and objectives	Business Services System replacement (extended from the 2014 plan). Replace an aging and outdated legacy mainframe application that contains information on every registered business in Montana, and several smaller applications and databases that support office accounting and other filings. This project meets the following IT objectives: <ol style="list-style-type: none"> 1. The system will expand online services to all filings required by statute. 2. Online filings will be fully automated, with only the exception processing requiring human intervention. 3. The system will transition to internal support within two years of implementation. 4. Hosted in the cloud, this system will not require a large cash outlay for equipment or a 5-year replacement cost for that equipment. 5. The system will be compliant with SOS security policy.
Estimated start date	April, 2015
Estimated cost	\$4,078,385
Funding source - 1	HB10 (2013)
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	\$200,000

Item	Description
Project name	Administrative Rules of Montana (ARM) Replacement
Project/program purpose and objectives	Historically, the MAR and ARM were published in hard-copy (paper) form only. With the goal of moving towards a paperless publishing process, in 2007 an automated ARM System was implemented allowing for the MAR and ARM to be published electronically. That ARM System, which is currently used by SOS, was never completed as originally designed and envisioned, however. Consequently, the System has never met all of SOS's business needs. Additionally, the System has proven to be

	<p>unreliable from a functioning standpoint.</p> <p>SOS desires to replace the existing ARM System for a number of reasons, including:</p> <ol style="list-style-type: none"> 1. The database platform is outdated and extended support expires in 2016. 2. The programming language and platform are outdated and not web-oriented. 3. The System is very difficult to maintain from an IT perspective. 4. The software is unstable and prone to often unexplainable errors. 5. The System's key word search function is expected to stop working when the System is moved to a new database platform in the near future. 6. The System is incapable of readily producing either the electronic copies or the hard copies referenced in MCA §2-4-312(2) and MCA §2-4-313(1). 7. The system will transition to internal support after the one-year warranty period. 8. Hosted in the cloud, this system will not require a large cash outlay for equipment or a 5-year replacement cost for that equipment. 9. The system will be compliant with SOS security policy.
Estimated start date	February, 2016
Estimated cost	\$1,200,000
Funding source - 1	Proprietary
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	\$50,000

Item	Description
Project name	MT Votes Upgrades and Enhancements
Project/program purpose and objectives	<p>The MT Votes statewide election management and voter registration system was implemented in 2006, and was moved to the shared state environment in two phases from 2011-2013.</p> <p>SOS will be updating the system due to the age of the system and age of the infrastructure, and will be making major enhancements to the system, including but not limited to:</p> <ol style="list-style-type: none"> 1. Online Voter Registration 2. Electronic Voter Registration via Motor Vehicle Driver License System (eMotor Voter) 3. Data exchange with multi-state voter cross-check system (ERIC)
Estimated start date	1/2019

Estimated cost	\$500,000
Funding source - 1	HB10 (2017)
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	

12. Security and Business Continuity Programs

Information Security Management (ISM) Program General Description

Secretary of State Linda McCulloch appointed Mark Van Alstyne, SOS IT Manager, as the SOS Information Security Manager on July 19, 2012.

The Secretary of State’s Office is working toward implementing an agency-wide information security management program plan, beginning with the continuity of operations (COOP) capability program planning process. That process has an initial focus of continuity planning – identifying critical business processes, business impact analysis, and business process analysis. That information will then be folded into the information security planning process.

The resulting program plan will be compliant with §2-15-114, MCA and State Information Technology Systems Division *Information Security Programs* policy with adoption of the National Institute of Standards and Technology (NIST) Special Publication 800 series as guides for establishing appropriate security procedures. This is in alignment with the State of Information Technology Service’s direction for an enterprise approach to protect sensitive and critical information being housed and shared on State and/or external/commercial information assets or systems.

As described in NIST SP 800-39, the Secretary of State’s Office is working toward developing the Information Risk Management Strategy to guide the agency through information security lifecycle architecture with application of risk management. This structure provides a programmatic approach to reducing the level of risk to an acceptable level, while ensuring legal and regulatory mandates are met in accordance with MCA §2-15-114.

The agency’s program will have four components, which interact with each other in a continuous improvement cycle. They are as follows:

- Risk Frame – Establishes the context for making risk-based decisions
- Risk Assessment – Addresses how the agency will assess risk within the context of the risk frame; identifying threats, harm, impact, vulnerabilities and likelihood of occurrence
- Risk Response – Addresses how the agency responds to risk once the level of risk is determined based on the results of the risk assessment; e.g., avoid, mitigate, accept risk, share or transfer

- Risk Monitoring – Addresses how the agency monitors risk over time; “Are we achieving desired outcomes?”

The Secretary of State’s Office information security management program is challenged with limited resources; people and funding. While alternatives are reviewed and mitigation efforts are implemented the level of acceptable risk is constantly challenged by the ever changing technology and associated risks from growing attacks and social structure changes.

Continuity of Operations (COOP) Capability Program General Description

Secretary of State Linda McCulloch appointed Patti Borsberry, Records and Information Management (RIM) Deputy, as the SOS Continuity Coordinator on July 19, 2012. After leaving RIM, her successor, Joe DeFilippis, now has those duties.

The Secretary of State’s Office has begun work with the Department of Administration *Continuity Services* on the development of our agency’s Continuity of Operations Capabilities, which will provide the plans and structure to facilitate response and recovery capabilities to ensure the continued performance of the State Essential Functions of Government. This program will involve two Blocks of focus; the first is to complete the Business Continuity Plans (BCP) involving two phases, the second Block works on the specific business processes or activity plans such as Emergency Action Plans (EAP), Information System Contingency Plan (ISCP), Communications Plans, Incident Management Plans, and more.

The Department of Administration has committed resources in security and continuity to assist the ISM and Continuity Coordinator with these ongoing efforts, and has processes, templates, and standards clearly defined. Also, they have assisted a number of larger agencies through the process, so SOS won’t be helping define the processes as we go.

Starting with the Continuity of Government/Operations Plans will provide the business ownership required to successfully implement all these plans, and provide a sound basis for starting the Information Security Plan.

13. Planned IT Expenditures

	FY2016	FY2017	FY2018	FY2019
IT personal services	\$691,076.46	\$694,716.46	\$698,356.46	\$560,489.46
IT operating expenses	\$1,066,416.99	\$1,130,402.02	\$1,198,226.14	\$1,270,119.70
IT initiatives	\$754,865.00	\$1,111,536.00	\$1,308,688.00	\$500,000.00
Other				
Total	\$2,512,358.45	\$2,936,654.48	\$3,205,270.60	\$2,330,609.16

14. Administrative Information

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