



**STATE OF MONTANA  
STRATEGIC PLAN  
INFORMATION TECHNOLOGY**

**NAVIGATING FOR SUCCESS  
2016**





This document is prepared under the authority of the Montana Information Technology Act of 2001.  
It is published biennially unless special interim plans become necessary.

Ron Baldwin  
Montana State Chief Information Officer  
April 1, 2016

Montana Strategic Plans for Information Technology can be found on  
Montana's Official State Website:  
MT.gov, State Information Technology Services Division at [sitsd.mt.gov](http://sitsd.mt.gov)



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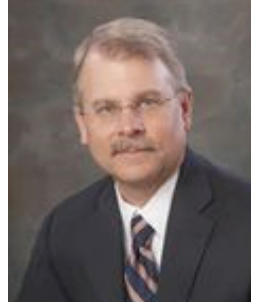




## MESSAGE FROM THE CIO

The world is experiencing exponential changes in technology in the digital age. From mobile devices and social media, to cloud computing and virtualization, information technology touches every aspect of our lives.

We are global citizens who are one tweet away from communicating instantly with our fellow citizens. The same access we have to each other is now expected in government. Online and mobile accessibility to government services and data is not only preferred, it is expected. Mobile applications and self-service web portals now allow citizens to tap into the government that serves us like never before.



This report outlines how the State of Montana is addressing these challenges and opportunities for information technology. Under Governor Bullock's leadership, transparency is just one area where the State of Montana has made strides in bringing data to the people as noted in the last Digital States Survey report. With the creation of the State's transparency portal, data portal and the business portal, citizens can access the power of data in government.

As we continue to invest in information technology that keeps pace with our global digital world, we also must invest in security to protect the data we are entrusted with safeguarding. Citizen data must be secured against the ever increasing number and sophistication of cyberthreats. Addressing cybersecurity is a national and state priority that requires a high level of collaboration and coordination.

Governor Bullock has met this challenge head on by issuing an executive order in 2015 to form the Montana Information Security Advisory Council. This is the first multi-jurisdictional forum of its kind in the State of Montana, and it is already making progress in better securing the State from cyberattacks.

Moving forward, information technology at the State of Montana must continue to serve citizens in the secure, efficient and effective manner they expect. Information technology is also a vital component in enabling the Governor's initiatives, such as the Main Street Montana project, to further educational opportunities and to create jobs. It is my honor to serve Governor Bullock and the State of Montana during this time of great opportunity.

Sincerely,

A handwritten signature in blue ink that reads "Ronald A. Baldwin".

Ron Baldwin  
State of Montana Chief Information Officer





# MISSION AND VISION

**THE MISSION OF STATE INFORMATION TECHNOLOGY IS TO PROVIDE IT SERVICES TO SUPPORT THE NEEDS OF THE STATE AND THE CITIZENS OF MONTANA.**

## VISION

State Information Technology has a vision of being an organization that focuses on:

- Customer service
- Innovation
- Technology that supports Montana citizens and businesses
- Technology that makes government more effective and efficient
- Security and data protection
- Enterprise platforms that provide advanced and affordable technology for State and local government



## VALUES

Integrity – Do what is right, legally and morally

Honesty - Communicate and act truthfully

Accountability – Take responsibility for actions

Stewardship – Properly utilize the resources of the state

Respect – Treat people with dignity and value them as individuals





# IT PRINCIPLES

IT principles govern the decisions and operations of the state’s IT community. They provide touch-points and guidelines to ensure the correct decisions are being made, decisions that will provide the greatest value to Montana’s citizens.

The majority of Montana’s IT principles have roots in Montana’s Information Technology Act.

.....

## BE ACCOUNTABLE:

Resources and funding will be allocated to the IT projects that contribute the greatest net value and benefit to Montana stakeholders.

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## MINIMIZE DUPLICATION:

Unwarranted duplication will be minimized by sharing data, IT infrastructure, systems, applications and IT services.

.....

## SHARE OUR RESOURCES:

Montana will use shared platforms and systems to minimize IT expenditures, improve service delivery and accelerate service implementation.

.....

## IMPROVE BUSINESS:

IT will be used to provide educational opportunities, create quality jobs, a favorable business climate, improve government, protect individual privacy and protect the privacy of IT information.

.....

## USE RESOURCES WISELY:

IT resources will be used in an organized, deliberative and cost-effective manner.

.....

## DELIVER SERVICES:

IT systems will provide delivery channels that allow citizens to determine when, where, and how they interact with state government.

.....

## PROTECT PRIVACY, DATA AND SYSTEMS:

Mitigation of risks is a priority for protecting individual privacy, confidential data and IT systems.





# ACCOMPLISHMENTS

Recently, the Montana Business Navigator ([business.mt.gov/navigator](http://business.mt.gov/navigator)) was unveiled by Governor Steve Bullock in partnership with the Governor’s Office of Economic Development and the Department of Administration. This was a collaborative project to create efficiencies in doing business in Montana.

The final result is an online service that guides prospective business owners through an interactive process of identifying the necessary registrations, permits and licenses needed to start a business in Montana. This also features the business checklist which allows businesses to easily identify and meet state regulations.



Since the last biennium the State of Montana has released more than 34 additional mobile applications that support Montana businesses and citizens.



The State of Montana has been recognized as a national leader in transparency in government spending by the U.S. Public Interest Research Group. Montana received high marks for being one of the most comprehensive transparency websites. In June 2014, Montana took another leap forward as a leader in transparency in government by launching the Data Portal ([data.mt.gov](http://data.mt.gov)) which provides datasets for the public.



The Montana Information Security Advisory Council (MT-ISAC) was created by an executive order to advise the governor on cyber security issues. MT-ISAC membership represents state and local government, state legislature, universities, Homeland Security as well as private industry. The mission of MT-ISAC is to ensure that Montana’s information systems are safe, secure, and resilient.



Virtualization is a recognized best practice that received a Governor’s award for excellence in 2015. Significant savings and efficiencies have been realized through infrastructure sharing that is managed in the State’s data centers. Three hundred and thirty servers and 52 terabytes of data have been migrated into this environment. This was a multi-agency collaborative effort. The Annual cost savings will exceed \$200,000. Participating agencies recognized included DOA, DLI, COR, and DPHHS.



An Enterprise IT Financial Workgroup has been formed as a multi-agency governance forum that provides input and information for decisions impacting IT service offerings, including rate setting, utilization and cost recovery.



A five-year IT infrastructure plan was developed that identifies the tactical approach for the use of technology in the state. This plan identifies the capabilities that will be needed in order to continue to be a leader in providing services to the citizens of Montana.



Finally and notably, the National Association of State Chief Information Officers (NASCIO) presented a Gold Medal Award for the Oregon-Montana Disaster Recovery Strategy, which includes the use of the State of Montana Data Center.

This provided a disaster recovery strategy for Oregon that did not rely on third party vendors and did not require any capital investments in buildings, maintenance or staffing. This has improved Oregon’s ability to meet customers business needs and provides an affordable disaster recovery solution when compared to other traditional disaster recovery options.





# STRATEGIC GOALS

Our strategic goals guide us as we evolve, providing us with a clear vision of what we will accomplish. We are continually evaluating enterprise information technology services to ensure that we implement IT in an innovative, effective, and cost-efficient manner.

## GOAL 1 DELIVER ENTERPRISE IT SERVICES TO STATE AND LOCAL GOVERNMENT, AND THE UNIVERSITY SYSTEM

**Objective 1.1:**  
Identify and deploy networking technology that provides greater security and flexibility at lower costs

**Objective 1.2:**  
Support business needs by utilizing an agile and responsive service delivery model

**Objective 1.3:**  
Actively engage state agencies, local governments, and university systems in the process of developing solutions for improving services

### MEET ENTERPRISE DEMANDS FROM DIVERSE ENTITIES

THE STATE'S ONLINE SERVICES HAVE GROWN TREMENDOUSLY SINCE ITS FIRST WEB-BASED PRESENCE WAS LAUNCHED IN 2001.

TODAY, CITIZENS CAN ACCESS MORE THAN 300 EGOVERNMENT SERVICES AVAILABLE FROM 23 DIFFERENT STATE DEPARTMENTS AND AGENCIES THAT PROCESS MORE THAN 10 MILLION ONLINE TRANSACTIONS ANNUALLY.







## GOAL 2

### DELIVER MOBILE CAPABILITY THAT SERVES CITIZENS, BUSINESSES AND EDUCATION

#### Objective 2.1:

Identify additional mission-critical business functions that will benefit from mobile support

#### Objective 2.2:

Improve government efficiency by making government services available anytime, anywhere

#### Objective 2.3:

Continue to improve the management of state data and applications on mobile devices.



Governor Bullock and the State of Montana continue to strive for government accessibility and enhanced mobile solutions.

Native applications (apps) that are available in the App Store and Google Play include My Voter Page, which allows users to find out if they are registered to vote and find their polling place. Another popular app is MDT Mobile which provides traveler information, road conditions and construction updates.

Additionally, responsive mobile apps can also be found at [mt.gov/services](http://mt.gov/services) and include options like the Made in Montana app for businesses and Income Tax Express, which allows users to pay state individual income taxes and estimated taxes.

Since the last biennium more than 34 mobile apps have been launched.

**OPTIMIZE MOBILE SOLUTIONS**

**NEARLY 2/3 OF AMERICANS ARE NOW SMARTPHONE OWNERS, AND FOR MANY THESE DEVICES ARE A KEY ENTRY POINT TO THE ONLINE WORLD.**

**64% OF AMERICAN ADULTS NOW OWN A SMARTPHONE OF SOME KIND, UP FROM 35% IN THE SPRING OF 2011.**

PEW RESEARCH CENTER, "US-SMARTPHONE USE IN 2015," JANUARY 2015

**The "Smartphone-Dependent" Population: 7% of Americans Rely Heavily on a Smartphone for Online Access**

*% of U.S. adults who have a smartphone, but lack other broadband internet service at home, and/or have limited options for going online other than their cell phone*

ALL ADULTS

64% own a smartphone

15% have limited options for online access other than cell phone

10% have no broadband service at home other than smartphone data plan

7% overlap have limited options for online access and no broadband service at home

Pew Research Center American Trends Panel survey, October 3-27 2014.





### GOAL 3

## BUILD AND OPERATE ENTERPRISE SYSTEMS THAT ARE SHARED ACROSS STATE AND LOCAL GOVERNMENT

#### Objective 3.1:

Make technology more cost effective by leveraging economies of scale

#### Objective 3.2:

Actively engage state agencies and local governments in the process of identifying opportunities to share resources

#### Objective 3.3:

Leverage the data center for local governments, school districts, and the university system

#### Objective 3.4:

Utilize existing resources to support or enhance enterprise electronic content management services

### STREAMLINE ENTERPRISE SYSTEMS AND OPERATIONS

While the utilization of Enterprise hosted services yielded the expected benefits, I also



received an unanticipated benefit. When the need arises for a new solution I get a team from SITSD working alongside of my staff to come up with the best options.

*-John Daugherty,  
Department of Corrections  
IT Administrator*



*DOA Director Sheila Hogan, State CIO Ron Baldwin and Bureau Chief Audrey Hinman joined Governor Steve Bullock (and the owner of Red Ants Pants, Sarah Calhoun) for the Business Navigator unveiling.*

*The Navigator is a one-stop-shop for new Montana businesses to find licenses, checklists and valuable resources.*





## GOAL 4

# UTILIZE CLOUD, OPEN DATA AND EXISTING APPLICATIONS TO MAXIMIZE VALUE AND MINIMIZE COST OF INFORMATION TECHNOLOGY

### MAXIMIZE CLOUD APPLICATIONS

The ability for agencies to utilize enterprise cloud applications has compounding benefits. In addition to cost reductions, it also helps save time and secure data.

The Department of Administration has found great value in utilizing cloud services for the State of Montana Recruiting System (SOMRS) and for the Montana Acquisition and Contracting System (eMACS).

The ease of use and high level of security provide additional advantages.

-Sheila Hogan,  
Department of Administration  
Director



The State of Montana will continue to invest in both its private cloud and public cloud based offerings. As cloud-based applications are requested, they will be reviewed and approved by the State CIO and the State Budget Director to ensure that they are compliant with the overall IT strategy.

### 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 unpredictable and fluctuating business needs

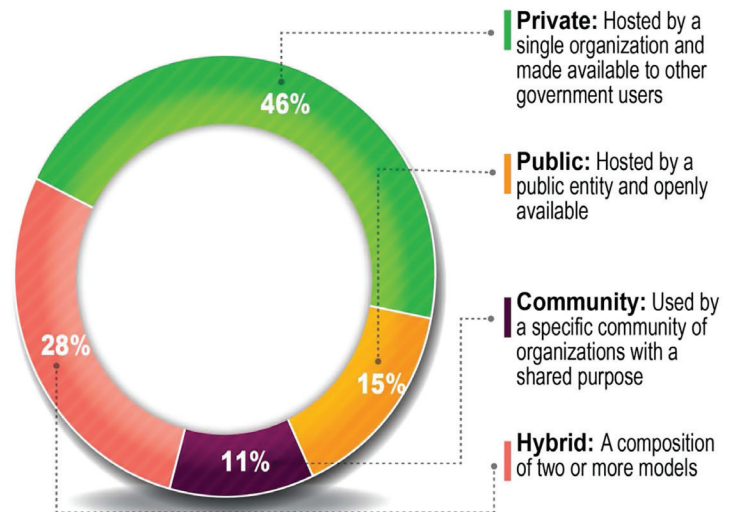
### Objective 4.3:

Increase technology infrastructure efficiencies

### Objective 4.4:

Increase transparency and access to valuable government data

Where applications have been migrated to the Cloud, what percentage of the applications are hosted in each of the following models?



Source: The Value Equation, 2015 State CIO Survey



Grant Thornton





## GOAL 5 MANAGE CYBERSECURITY RISK TO SYSTEMS, ASSETS AND DATA

### Objective 5.1:

Develop Best Practices for common security controls for all agencies to use

### Objective 5.2:

Develop and implement a standardized information security program assessment and measures for departments and the state

### Objective 5.3:

Provide a yearly State information security assessment to the Governor showing program successes and a plan to address shortcomings

### Objective 5.4:

Develop a governor's information security dashboard



### State CIO Priorities Top 10 Final Ranking

1. Security and Risk Management
2. Cloud Services
3. Consolidation/Optimization
4. Business Intelligence and Data Analytics
5. Legacy Modernization
6. Enterprise Vision and Roadmap for IT
7. Budget and Cost Control
8. Human Resources/Talent Management
9. Agile and Incremental Software Delivery
10. Disaster Recovery/Business Continuity

### SECURITY

#### SITSD IS A RECOGNIZED NATIONAL CYBER SECURITY AWARENESS MONTH CHAMPION ORGANIZATION

"Cybersecurity remains a top issue for State CIOs and their staff. We applaud the states for their commitment to cyber awareness and for bringing attention to the importance of online safety and security by hosting and highlighting their own state programs and resources throughout the month of October."



-Doug Robinson, NASCIO Executive director



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