Information Technology Strategic Plan

FY 2011-2014

OIT
Office of Information Technology

Bill Ritter, Jr.
Governor

Michael Locatis
State Chief Information Officer

Message from the State CIO

January 2010

Dear Citizens of Colorado:

The Governor's Office of Information Technology (OIT) is pleased to present the FY 2011-2014 Information Technology Strategic Plan for the State of Colorado. This plan builds on the key strategic initiatives that were selected as the focus of state information technology (IT) beginning in 2008 and were incorporated in the 2008-2011 Information Technology Strategic Plan.

The passage of SB08-0155 began the historic transformation of provisioning information technology and services statewide. While acting quickly to shore up the existing IT infrastructure, OIT has aggressively pursued new technology, business models, and public-private partnerships to modernize our infrastructure and position the state to deliver new applications and services as efficiently, cost-effectively and sustainably as possible.

I believe our vision for the State of Colorado's Information Technology function can be fully realized by closely adhering to the action plan described further in this report. Leveraging our experienced team of information technology professionals with the support of both the Executive and Legislative Branches, I am confident that we will continue to make great strides in providing improved and more secure service to the citizens of Colorado.

Sincerely,

Michael Locatis
Chief Information Officer
State of Colorado

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EXECUTIVE SUMMARY

The opportunities facing State of Colorado technology are numerous. The recession has forced rapid and repeated changes to citizen-facing services like unemployment benefits and health care. Federal recovery fund tracking requirements has changed the way we manage grants and make data transparent to citizens. Advancement in web-based and mobile communications has changed how and where Colorado workers do their jobs. Citizens are demanding more from their government. Privacy is a priority for secure exchange of education and health care records, and yet at the same time, social networking has become a vital technology for services like real time traffic information. Meanwhile, the state faces unprecedented budget reductions.

OIT is aggressively pursuing every available avenue to reduce costs while improving our service to citizens. Our aim is to modernize legacy systems, ensure the privacy of our citizens while providing timely and accurate data.

The consolidation efforts started in 2008 are well underway. We have made significant strides in shoring up at-risk systems, banding employees into a functional organization structure, leveraging statewide procurements and consolidating data centers. However, we still have much to do.

This strategic plan outlines our five major strategic objectives and their supporting actions that will help us achieve a 21st century government capable of providing excellent customer service.

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1.0 SECURE, PROTECT AND CENTRALLY MANAGE IT ASSETS

Through effective asset management, implementation of better enterprise architectural standards and coordination with the Chief Information Security Officer, we will identify and prioritize the key risks facing the state and actively mitigate them. This includes improving critical system disaster recovery plans.

2.0 OPTIMIZE SPENDING FOR IT DECISIONS, PROJECTS AND TECHNOLOGY

Reducing duplication and improving IT procurement and contracting from a centralized perspective is critical in helping the state manage fiscal resources more effectively. We will seek opportunities to consolidate existing contracts and leverage volume purchases.

3.0 EFFECTIVELY MANAGE IT PROJECTS

Improving program governance is essential to help departments realize the benefits of IT projects. We will complete an inventory of project activity and prioritize those critical projects that provide the best value to our citizens.

4.0 CONTINUE TO IMPROVE SERVICE DELIVERY

We will continue to break down departmental silos and improve delivery of enterprise services by modernizing old infrastructure and legacy systems. Modern systems are agile enough to meet changing business needs quickly without necessitating expensive replacements.

5.0 CONTINUE TO SUPPORT INNOVATION AND COLLABORATION INITIATIVES

Innovation and partnerships with private enterprise are critical elements for Colorado to develop more effective ways of leveraging technology across the enterprise. We will continue to seek collaboration opportunities and involvement from the private sector and local government entities to help facilitate the development of new ideas and concepts to meet the demands of Colorado.

MISSION

To increase the effectiveness of government through the use of shared information and technology. Information technology will be used to maximize the efficiency of service delivery and will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of the citizens of Colorado, its business communities, and its public sector agencies.

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Strategic Objective:

1. SECURE, PROTECT AND CENTRALLY MANAGE IT ASSETS

1.1. CONDUCT ENTERPRISE ASSET MANAGEMENT INVENTORY

Departments currently manage their IT assets independently, causing an insufficient view of IT assets across the statewide enterprise. OIT will continue to work with departments and agencies to conduct an inventory of IT assets, including software licenses, license versions, and hardware. A robust asset inventory is critical to fully understanding our costs and the current technology environment. OIT will adopt new policies and standards that support asset management activities to help IT managers cope with a large number of complex systems, fragmented point solutions and a rapid pace of change.

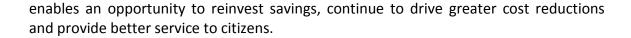———————————————————————————————

1.2. CONTINUE TO IMPROVE CYBER AND IT SECURITY

OIT's Office of Cyber Security will continue to protect IT assets from threats and remediate vulnerabilities. OIT will also track and monitor systems to drive security response plans and actions.

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1.3. CONTINUE TO STANDARDIZE ENTERPRISE ARCHITECTURE

Enterprise architecture is the roadmap of how an organization performs its work using business processes, information, people, technology and facilities. Once documented, it serves as a reference point to manage the coordination of common business processes, information flows and supporting technology investments across all state departments. OIT will leverage technology to boost the effectiveness and efficiency of service delivery (i.e., doing the right things) and to maximize the coordination of these technology investments (i.e., doing them the right way). OIT will build a statewide enterprise architecture framework and governance structure to align agency goals with our shared information technology strategy so the state can realize the return on its' IT investment.

OIT's overarching goal is to manage technology investments from a statewide approach and thus proactively capture economy-of-scale opportunities. The key result will be a reduction of the total cost of ownership for the state's existing technology which

enables an opportunity to reinvest savings, continue to drive greater cost reductions and provide better service to citizens.

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1.4. CONTINUE ENTERPRISE SERVICE CONSOLIDATION AND MODERNIZATION

OIT will continue to consolidate and modernize enterprise services across the state so that data center management, voice and data network operation, Enterprise Resource Planning (ERP), Geographic Information Systems (GIS) and other services can be utilized across multiple departments more effectively.

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1.5. EXECUTE OUR WORKFORCE TRANSFORMATION STRATEGY

OIT will complete a needs assessments and gap analysis of enterprise staffing requirements to determine and develop optimal alignment of staff for the organization's emerging and ongoing needs. Staff will be trained and re-tooled as necessary to perform new functions and fill critical needs. OIT is committed to continue working with our valued staff to promote professional growth.

> **Strategic Objective:**
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> **2. OPTIMIZE SPENDING FOR IT DECISIONS, PROJECTS AND TECHNOLOGY**

2.1. CONTINUE TO IMPROVE BUDGET PROCESSES

OIT will continue to improve budget processes by changing the way budgets are prepared and adopted while establishing mechanisms to assess government performance to align spending with priorities. In addition, OIT will continue to focus its efforts on volume pricing, leveraging vendor relationships and taking advantage of improvements in technology, purchasing and business processes.

2.2. CONTINUE TO REFORM ENTERPRISE LICENSING, PROCUREMENT AND CONTRACTING

OIT will continue to refine and reform its enterprise licensing and buying practices to ensure that IT costs are not incurred unnecessarily. The state currently has purchasing agreements in place with some vendors, but they are not universally utilized. These reforms are intended to reduce the frequency of software licenses being purchased outside of agreed upon pricing arrangements while minimizing the one-off purchases of hardware and systems which results in overspending.

2.3. FUNDING AND SUSTAINABILITY

OIT will continue to pursue creative ways to fund IT initiatives in Colorado. Federal grants, through the American Recovery and Reinvestment Act (ARRA), cross-governmental and private sector partnerships are critical to our modernization efforts and to creating a sustainable funding model.

Strategic Objective:

3. EFFECTIVELY MANAGE IT PROJECTS

3.1. MATURE THE ENTERPRISE PROJECT MANAGEMENT OFFICE (EPPMO)

The Enterprise Project Management Office (EPMO) is charged with directly supporting agency IT projects through the application of standard processes, procedures, tools and techniques and is evolving into an Enterprise Portfolio & Project Management Office (EPPMO) responsible for standardizing and coordinating project management on all IT projects. To achieve this result, the EPPMO will develop enterprise policies, procedures/methodologies, toolsets, staffing career paths, and status reporting/monitoring methods to enable effective project management at the agency/department level and effective oversight at the enterprise level.

3.2. CONTINUE TO REFINE PROJECT CERTIFICATION

Prior to 2008, Colorado had a history of encountering problems on large scale projects. OIT implemented a process requiring a) all major IT projects undergo a thorough certification process based on a standard set of criteria, b) monthly reports be submitted to OIT and c) frequent and on-going assessments by OIT would be conducted and action taken to mitigate risk.

Strategic Objective:

4. IMPROVE SERVICE DELIVERY

4.1. EXECUTE OUR BUSINESS AND ENTERPRISE SERVICES DELIVERY MODERNIZATION STRATEGY

Colorado has a disproportionate amount of aging legacy systems, some dating to the 1960s. OIT's goal is to align them with current business requirements, and make them more agile so they can adjust to changing demand in the future. Modernizing these systems will be time consuming and costly. OIT will implement a review and approval process for system upgrades and maintenance renewals and coordinate upgrades to like systems across the enterprise. We will also identify opportunities for consolidation and modernization by rationalizing applications within agencies by assessing the current environment. Software as a Service (SaaS) delivery models have recently become viable for government agencies and should be exploited where reasonable to reduce costs and improve service delivery.

4.2. EXECUTE OUR INFRASTRUCTURE TRANSFORMATION STRATEGY

OIT will continue to improve Colorado's fragmented technology infrastructure by consolidating and upgrading the network, virtualizing and consolidating servers, standardizing desktop and laptops, and reducing the number of data center facilities. OIT will also seek opportunities to use new technologies to reduce storage, server, software and operating costs, such as cloud or managed services for commodity services.

Strategic Objective:

5. INNOVATION & COLLABORATION INITIATIVES

5.1. CONTINUE TO IMPROVE STATEWIDE BROADBAND CONNECTIVITY

For Colorado's communities to thrive economically and socially, and to compete for jobs in the information market, it is critical that the government commit to spurring broadband deployment in all parts of the state. OIT will continue to partner with the private sector to help facilitate greater adoption of broadband internet access and ensure its availability to all Coloradans.

5.2. CONTINUE TO IMPROVE DATA INTEROPERABILITY AND TRANSPARENCY

OIT will continue to promote collaboration efforts in the arenas of data sharing, education and health, while leveraging the State Internet Portal Authority to achieve even greater economies of scale by partnering with local governmental entities.

5.2.1. CONTINUE TO LEAD THE GOVERNMENT DATA ADVISORY BOARD (GDAB)

OIT will direct and manage the GDAB to promote exchange of data across agencies and with Colorado citizens. Our mission is to make data transparent for citizens and agencies through a master data management plan.

5.2.2. CONTINUE TO SUPPORT EDUCATION INITIATIVES

OIT will continue to support education initiatives including Race to the Top and the State Longitudinal Data System (SLDS), by assisting in grant writing and with technical expertise. The American Recovery and Reinvestment Act (ARRA) has created grants for both of these projects. The Colorado Department of Education is spearheading the project to pursue the Federal grants for SLDS, while OIT is directing the management of the systems to support exchange of educational data among agencies.

5.3. CONTINUE TO SUPPORT HEALTH IT INITIATIVES

The American Recovery and Reinvestment Act (ARRA) includes a section called the Health Information Technology for Economic and Clinical Health (HITECH) Act, which authorizes the distribution of about $48.8 billion across the country to build and effectively use information technology to improve health care services. OIT will continue to support and participate in the Colorado Regional Health Information Organization (CORHIO), to promote the use of efficient technology within the health community.

5.4. EXPAND OUR PARTNERSHIP WITH THE STATEWIDE INTERNET PORTAL AUTHORITY (SIPA)

The recession has forced counties, municipalities and state government to make hard choices. Leveraging technology solutions across governmental entities is potentially a solution to these financial difficulties. OIT is committed to pursuing the creation of an IT service delivery model that can be shared across jurisdictional boundaries to reduce IT costs while increasing efficiency.

5.5 EXPAND PUBLIC-PRIVATE SECTOR PARTNERSHIPS

Working with the Office of Economic Development, OIT will continue to foster partnerships with Colorado businesses to help identify solutions that are advantageous to the state.