Information Technology
in
Colorado State Government

August 2012

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STATE AUDITOR

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The mission of the Office of the State Auditor is to improve the efficiency, effectiveness, and transparency of government for the people of Colorado by providing objective information, quality services, and solution-based recommendations.

Office of the State Auditor

Dianne E. Ray, CPA
State Auditor

August 13, 2012

Members of the Legislative Audit Committee:

This is a "leveraged report" in which we have combined information contained in other audits and assessments performed by our office with additional, publically available information to provide a comprehensive overview of the current status of Information Technology (IT) in Colorado state government. This report was prepared pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits and assessments of all departments, institutions, and agencies of state government.

The purpose of this report is to increase the level of transparency around state government IT operations and strategy and to provide decision makers and the public with the information necessary to make well-informed decisions regarding future state government IT initiatives. The report contains no recommendations or responses from state agencies.

Legislative Services Building • 200 East 14th Avenue • Denver, Colorado 80203-2211
Ph. 303.869.2800 • Fax: 303.869.3060

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Information Technology in Colorado State Government

Section 1

Background

Information technology (IT) forms the backbone of the infrastructure that enables the State of Colorado to provide a variety of services to its people and to the business community. IT has become a significant enabler for the efficient and effective delivery of government services. This report provides a compilation of information on the governance and operations of IT in state government. The purpose of this report is to increase the level of transparency around state government IT operations and strategy and to provide decision makers and the public with the information necessary to make well-informed decisions regarding future state government IT initiatives.

The report is organized into the following three sections:

- **Section 1 – Background.** This section provides basic information on the structure, organization, and governance of IT in state government.

- **Section 2 – Fiscal Year 2012 in Review.** This section provides information on the operations and accomplishments of those agencies charged with the delivery and oversight of IT services in state government for Fiscal Year 2012.

- **Section 3 – IT Initiatives, Risk Areas, and Audits Planned for Fiscal Year 2013.** This section is forward looking and lays out the major IT initiatives for the Executive Branch occurring during Fiscal Year 2013, including the Office of the State Auditor's analysis of IT risk areas and planned audits/reviews to address the risk areas that are most likely to occur or that could have the greatest impact on state operations.

IT Governance in State Government

The pervasive use of technology throughout state government has made it critical that a strong governance structure exists to ensure that IT is aligned with the mission and objectives of state agencies and the leadership within the Executive, Judicial, and Legislative Branches. According to the IT Governance Institute, an organization that conducts research on global practices and perceptions of IT governance, IT governance models enable an organization to make decisions that are in its best interest, as well as provide prescriptive methods to initiate and manage work throughout the organization. Governance is the discipline that creates both the structure and the practices to guide projects and provide executive leadership, oversight, coordination, and control. Governance establishes accountability from the strategic planning process throughout project delivery, project implementation, and service management.

IT governance focuses on the following key areas:

- **Strategic Alignment** – Ensuring alignment between agencies and IT such that the agencies are able to use IT effectively to achieve business objectives, which typically involve improved performance or better meeting customer needs.

- **Value Delivery** – Ensuring that IT delivers the promised benefits, such as improved service delivery, with an emphasis on quantifiably minimizing costs and proving the intrinsic value of IT.

- **Resource Management** – Optimizing investment in, and the proper management of, critical IT resources, including applications, infrastructure, and staff.

- **Risk Management** – Clearly understanding the organization's tolerance for risk and how decisions should be made to minimize risk.

- **Performance Measurement** – Tracking and monitoring strategy implementation, project completion, resource usage, process performance, and service delivery.

An effective governance model guides decision makers in building an organizational structure that effectively supports the entity. Governance models include formal and informal components. Formal aspects include executive or legislative mandates, memoranda of understanding, charters, and administrative directives. Informal aspects include collaboration, culture, and effective communication.

We describe the governance structure over IT in Colorado state government in the following sections.

Executive Branch

The Governor's Office of Information Technology (OIT) is generally responsible for the operation and delivery of information and communications technology services and innovation for the 16 Executive Branch departments with appointed Executive Directors and the Offices of the Governor. Statutorily, OIT does not directly oversee the IT operations for the Department of Law, Department of State, and Department of Treasury—all of which are led by elected officials—or the Judicial and Legislative Branches or institutions of higher education. The Executive Branch agencies that are under OIT's oversight include approximately 26,000 full-time-equivalent (FTE) staff. The 16 Executive Branch agencies that are under OIT's oversight are listed below:

- Department of Agriculture
- Department of Corrections
- Department of Education
- Department of Health Care Policy and Financing
- Department of Higher Education (excluding institutions)
- Department of Human Services
- Department of Labor and Employment
- Department of Local Affairs
- Department of Military and Veterans Affairs
- Department of Natural Resources
- Department of Personnel & Administration
- Department of Public Health and Environment
- Department of Public Safety
- Department of Regulatory Agencies
- Department of Revenue
- Department of Transportation

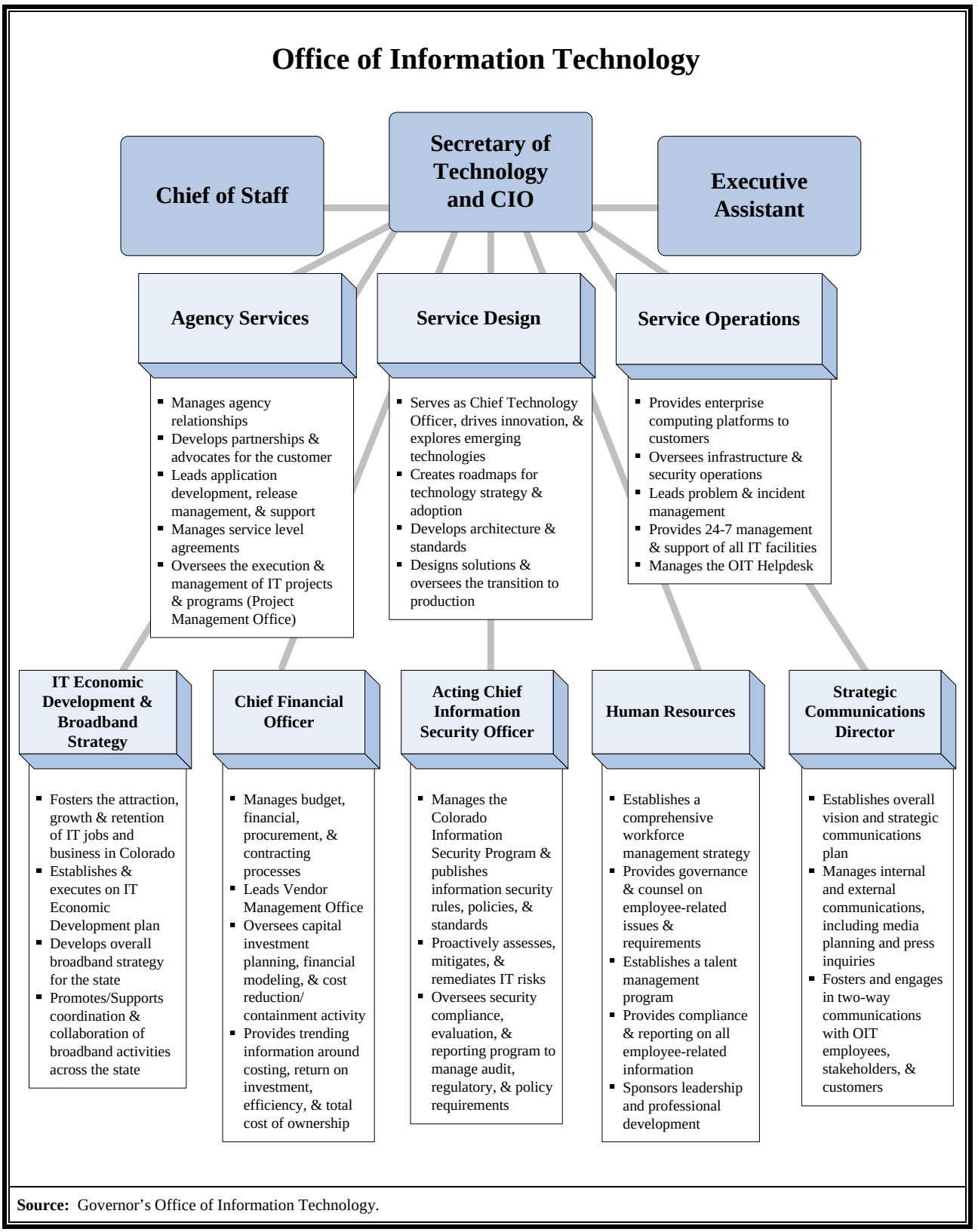
OIT's value proposition is to enable the effective, efficient and elegant delivery of government services through trusted partnerships and technology. OIT oversees technology at the state level and recommends strategies to maximize efficiencies and improve service delivery to the State's taxpayers. Encompassed in OIT's operational domain is the State's IT infrastructure, including data centers, servers, mainframe operations, personal computers, data storage, operating systems, local and wide area networks, and communications.

According to statute (Section 24-37.5-106, C.R.S.), OIT is responsible for:

- Centralizing the management, coordination, and delivery of IT services within the Executive Branch of state government.
- Initiating and managing procurements of and contracts for technology resources for state agencies.
- Aggregating IT procurements for one or more state agencies.
- Directing and approving a comprehensive plan for the acquisition, management, and use of IT.
- Managing statewide technology resources.
- Preparing and submitting budget requests for IT resources to be utilized by state agencies.
- Coordinating, monitoring, and overseeing state IT projects and advising on any risks and issues.
- Coordinating statewide Geographic Information Systems.

As shown in the organizational chart below, an individual with the titles of Secretary of Technology and State Chief Information Officer (CIO) heads OIT. The Governor appoints this person who is responsible for increasing the effectiveness of government through the use of shared information and technology in addition to leading technological economic development for the State. About 85 percent of OIT's 935 employees report up through Agency Services, Service Design or Service Operations. The remaining 15 percent of OIT's employees include information security, support, and administrative personnel who report either directly to the CIO; the Chief Information Security Officer; Chief Financial Officer; or to the areas of Human Resources, Strategic Communications, or IT Economic Development & Broadband Strategy.

Agency Services is primarily responsible for maintaining agency relationships, leading application development, and overseeing the execution and management of IT projects and programs. Employees under the area of Service Operations are responsible for operating and maintaining the State's computing platforms, data centers, and network infrastructure. Finally, the CTO creates roadmaps for technology strategy and adoption, and develops statewide IT architectural standards.



Source: Governor's Office of Information Technology.

Statewide Elected Offices

The Departments of Law, State, and Treasury were not included within the consolidation of Executive Branch IT. As such, each department is responsible for its own IT operations. The Departments of Law and State maintain their own IT support staffs whereas the Department of Treasury contracts with OIT for server and desktop support.

Judicial Branch

The Chief Justice of the Supreme Court centrally administers the Colorado Judicial Branch, which has more than 300 judges and 3,500 support staff members. Each of the State's 22 judicial districts also has a District Administrator. The Judicial Branch also includes four independent agencies: the Office of the State Public Defender, the Office of Alternate Defense Counsel, the Office of the Child's Representative, and the Independent Ethics Commission.

To assist the Chief Justice, the Supreme Court appoints the State Court Administrator to oversee the administration of the Judicial Department and provide administrative and technical support to the courts and probation. The State Court Administrator's Office (SCAO) provides administrative support and services to the trial and appellate courts to assist them in providing the people of Colorado meaningful, efficient, and economical forums in which to resolve disputes. The SCAO also supports the management of probation services to enhance public protection and offender rehabilitation.

In executing its constitutional and statutory duties, the SCAO performs the following functions:

- Provides administrative and technical support to the appellate courts, trial courts, and probation.
- Provides centralized policy guidance.
- Develops and implements standards and guidelines.
- Serves as an advocate for the entire Judicial Department (within the Judicial Branch) in obtaining necessary resources from the General Assembly.
- Provides services in an accurate, timely, and equitable manner.

The Judicial Business Integrated with Technology Services (JBITS) group, administratively located within the SCAO, is generally responsible for the IT operations of the Judicial Branch, except for the operations of the four independent agencies discussed earlier. The Judicial Department's CIO, who reports to the State Court Administrator, oversees JBITS.

The Offices of the State Public Defender, the Alternate Defense Counsel, and the Child's Representative and the Independent Ethics Commission are responsible for their own IT operations. The Independent Ethics Commission contracts with JBITS for its IT support.

Legislative Branch

The Colorado Constitution places the power to make laws with the Colorado General Assembly. The power to make laws is exercised through the process of considering and adopting bills, including the State's appropriation legislation which is known as the Long Bill. The following legislative bodies are directly involved in the governance of IT in Colorado state government:

- The **Joint Budget Committee** is part of the General Assembly's permanent fiscal and budget review agency that writes the Long Bill to fund the operations of state government, including funding OIT's operations and other IT expenditures included within agency operating budgets.

- The **Capital Development Committee** is a statutory committee responsible for reviewing funding requests for capital projects from all state agencies and making prioritized recommendations to the Joint Budget Committee. The Committee is responsible for reviewing and approving major IT projects undertaken by the State, such as the modernization of the State's financial reporting system.

- The **Office of the State Auditor (OSA)** is a constitutionally created, independent government agency that was established to promote operational efficiency and to ensure accountability of government agencies. The OSA reports to the Legislative Audit Committee and maintains an IT Audit Division composed of four highly trained IT auditors and overseen by the IT Deputy State Auditor. The IT Audit Division performs independent audits and assessments of the Judicial and Executive Branches' IT operations and projects.

Institutions of Higher Education

Colorado has 28 two- and four-year public higher education institutions, including community colleges within the Colorado Community College System. Each institution maintains its own IT department, which supports the IT needs of the campus, staff, and students. The Department of Higher Education coordinates policies and state resources for the State's higher education system.

Information Security Management and Oversight

The governance structure over information security operations in Colorado state government is slightly different and more expansive than the structure in place for other types of IT funding and operations. Specifically, the General Assembly enacted House Bill 06-1157 during the 2006 Legislative Session. That legislation, better known as the Colorado Cyber Security Program, was signed into law by Governor Ritter in June 2006 and codified in Part 4 of Article 37.5, Title 24 of the Colorado Revised Statutes. The law also created the position of State Chief Information Security Officer (CISO) to oversee the Colorado Cyber Security Program. Most of the law's requirements apply to public agencies that are defined in the law as "every state office, whether executive or judicial, and all of its respective offices, departments, divisions, commissions, boards, bureaus, and institutions." In addition to Executive and Judicial Branch agencies, institutions of higher education, although not directly accountable to the State CISO, have specific reporting and coordination requirements.

The goal of the Colorado Cyber Security Program is to improve Colorado's information security posture by establishing a statewide information security framework and governance model. The program forms the foundation of the State's security control structure and reflects the General Assembly's commitment to address the security risks facing public agencies with a coordinated and risk-based approach.

Governance Over Large IT Projects

OIT's project management governance structure for the Executive Branch revolves around the Enterprise Portfolio Project Management Office and eight Executive Governance Committees. The Enterprise Portfolio Project Management Office provides project management best practices, standardized reporting, templates, tools, and training to state agencies. To improve the effective delivery of these services, the Enterprise Portfolio Project Management Office established the following goals to initiate its vision:

- Provide an enterprise view of all OIT projects to ensure alignment with the State's strategic initiatives
- Facilitate cross-departmental information sharing and understanding of work-in-progress
- Provide consistent monitoring and reporting of OIT initiatives
- Provide Colorado with a uniform approach to managing projects

- Promote project management best practices and improve skills through training and coaching.

The Executive Governance Committees serve as advisory boards that make recommendations to OIT regarding changes with project funding, scheduling, release plans, staffing, and other issues that could impact a project. Each Executive Governance Committee oversees a designated group of state departments, includes members designated by the departmental Executive Directors, and is chaired by the Director of the Enterprise Portfolio Project Management Office.

Projects under the oversight of an Executive Governance Committee are the State's largest IT investments. Projects with an estimated cost of $5 million or more, regardless of funding source, are automatically designated as projects that must be overseen by an Executive Governance Committee. The Governor, State Chief Information Officer, or Enterprise Portfolio Project Management Director can also designate projects that need oversight by an Executive Governance Committee. Other projects are reviewed for consideration as an Executive Governance Committee project if they meet at least one of the established criteria such as (1) the project development or acquisition timeline exceeds 1 year, (2) the project spans state agencies or government jurisdictions or is considered an "enterprise-level" project, or (3) the project has high visibility or the project is a recovery from a failed project.

OIT may also apply a standard risk assessment to determine if the project represents a risk not fully identified in the assessment process. Any project with a sufficiently high-risk profile will be designated as needing Executive Governance Committee oversight. A comprehensive certification process is executed on each Executive Governance Committee project to ensure that proper structure and processes are in place to execute the project. In addition, Executive Governance Committee projects are required to have a Certified Project Manager and a Certified Assistant Project Manager and require an Independent Validation and Verification review.

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Fiscal Year 2012 in Review

Section 2

This section reviews the State's IT landscape during Fiscal Year 2012. Specifically, we discuss trends in IT funding and expenditures, IT strategic planning, new state legislation that was enacted that will affect IT in the future, and new state IT projects that will be pursued during Fiscal Year 2013.

IT Funding and Expenditures

As part of their annual budget requests, state agencies must request a funding appropriation to support their IT needs, which can include IT personnel services, multiuse network payments, management and administration of OIT's services, communication expenses, and the building of new applications. The State's July 2010 IT consolidation initiative transferred oversight of Executive Branch IT staff and initiatives to OIT. Under the consolidated model, OIT receives appropriations for all Executive Branch IT staff salaries and benefits, and all of those staff report to managers within OIT. Although individual agencies still receive their own separate appropriations to fund IT initiatives, agencies are required to work with OIT to administer those projects. For Fiscal Year 2012, the authorized IT budgets for the Executive Branch, excluding the Department of Transportation, Judicial, and Legislative Branches and for the offices of the three statewide elected officials totaled $249 million, ranging from about $130,000 to more than $55 million at individual departments.

Fiscal Year 2012 IT Expenditures

We analyzed the total amounts actually spent by Colorado state agencies on IT operations and initiatives during Fiscal Years 2009 through 2012. Because of how IT spending is tracked in the State, we were unable to easily determine the IT expenditures for the Department of Transportation or for each institution of higher education. These agencies utilize separate financial accounting systems and only record summarized on the Colorado Financial Reporting System (COFRS), the State's financial accounting system. As such, the IT expenditure data contained in the rest of this section are limited to the Executive (excluding the Department of Transportation), Judicial, and Legislative Branches and statewide elected offices.

During Fiscal Year 2012, Colorado state agencies, excluding the Department of Transportation, expended a total of $210 million on IT operations and initiatives.

This amount includes an 11 percent increase from Fiscal Year 2011 and is less than 1 percent of all state expenditures.

During Fiscal Year 2012, the following five departments were the largest consumers of IT in the State (ordered from largest to smallest):

- Department of Human Services ($55,272,279)
- Department of Health Care Policy and Financing ($43,822,219)
- Department of Revenue ($22,385,237)
- Department of Natural Resources ($17,834,355)
- Department of Public Safety ($17,966,504)

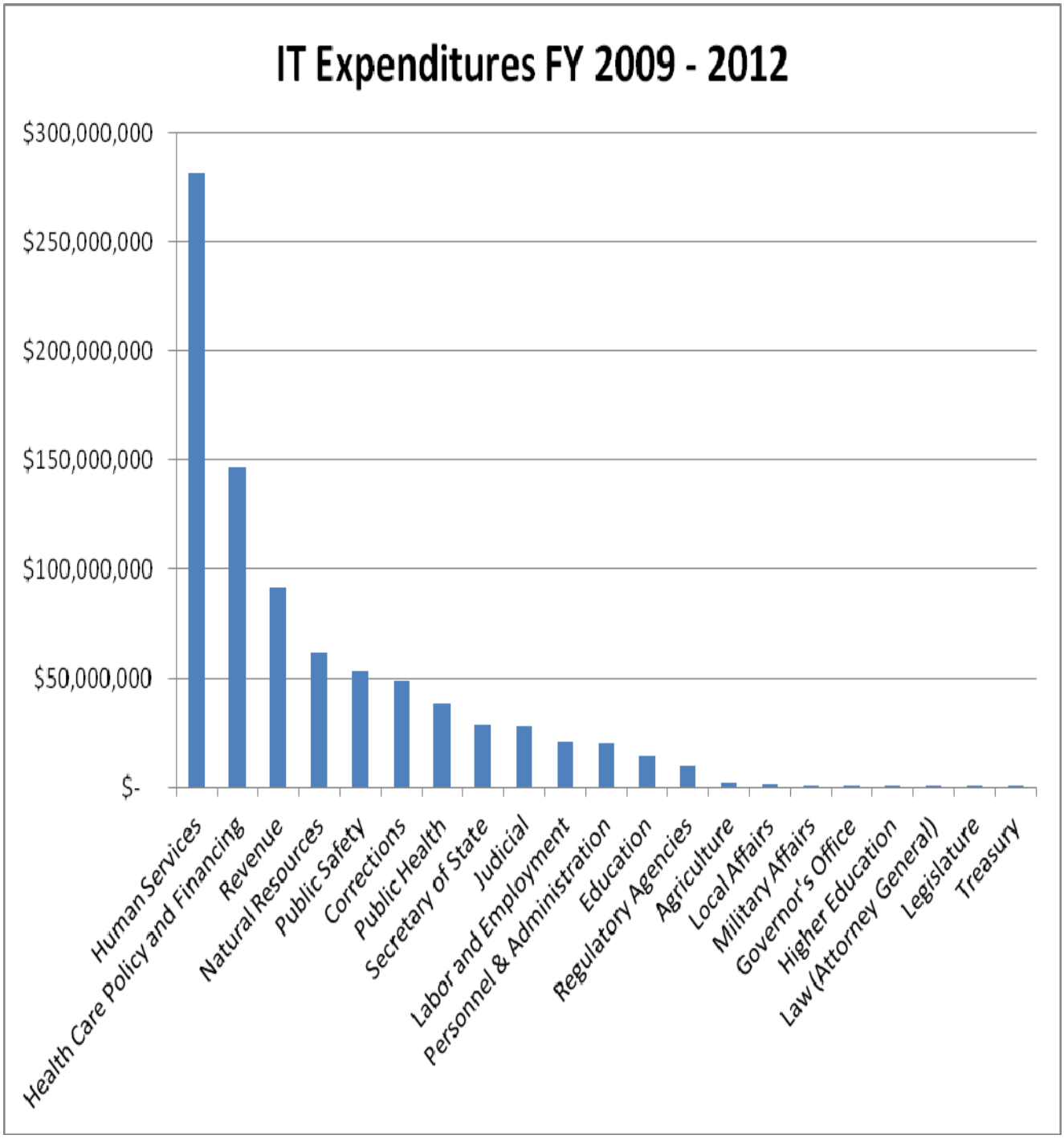
During Fiscal Year 2012, these five departments were responsible for 73 percent of the State's total IT expenditures. In fact, the Department of Human Services alone expended 26 percent ($55.3 million) of the State's entire IT expenditures during this period.

Trends in State IT Expenditures

In addition to Fiscal Year 2012 data, we obtained and analyzed state government IT expenditures for Fiscal Years 2009, 2010 and 2011. Again, these expenditure data do not include IT expenditures for either the Department of Transportation or institutions of higher education. Over the 4-year period, agencies spent a total of $850 million on IT services and initiatives.

The recent national economic downturn has had a major impact on IT spending in Colorado state government and was apparent in the expenditure data. Between Fiscal Years 2009 and 2010, the State experienced a 30 percent decrease in total IT expenditures. Since 2010, however, IT expenditures have increased by 19 percent but are still 16 percent below Fiscal Year 2009 levels.

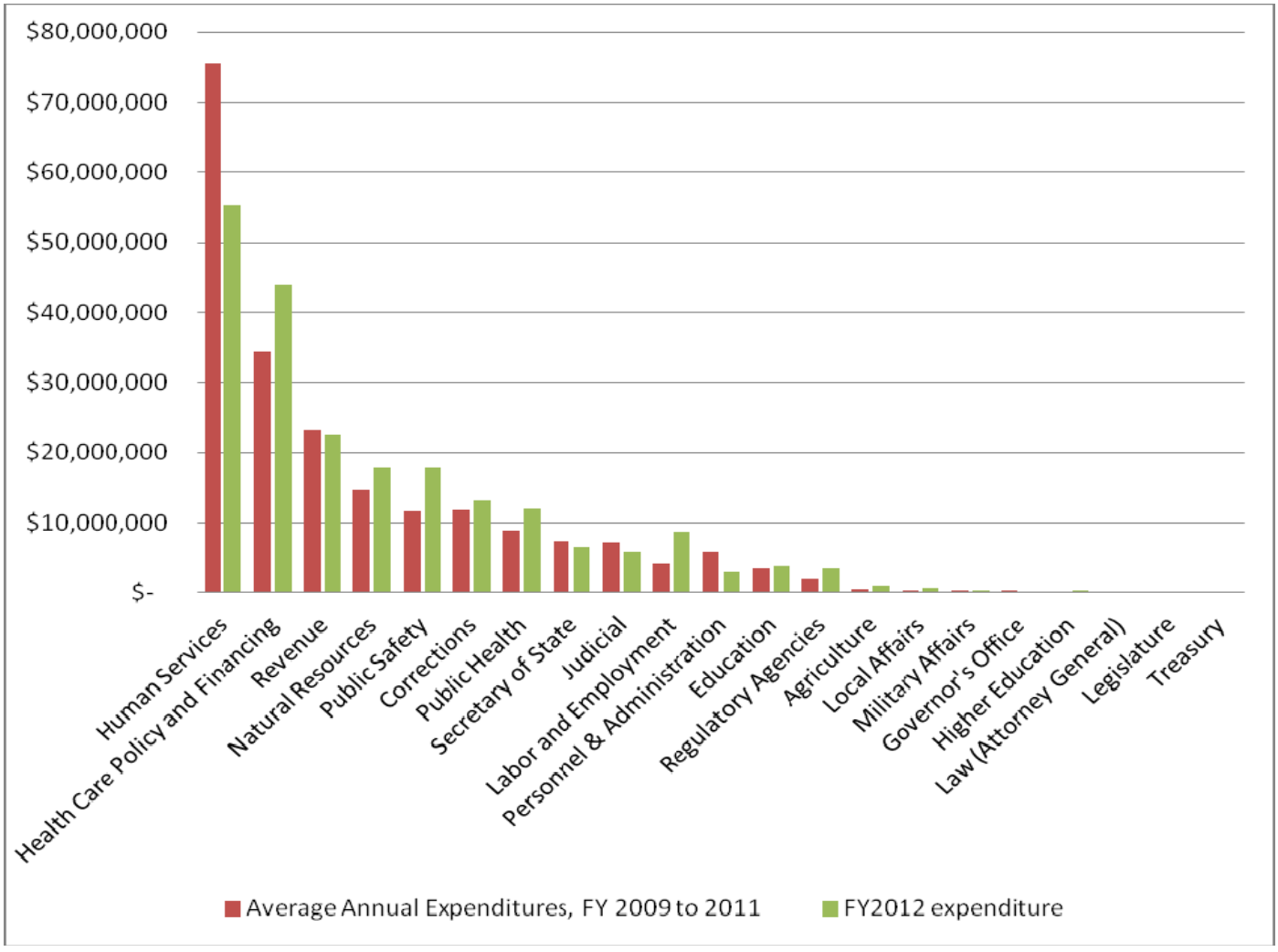
The chart below shows the total expenditures for Fiscal Years 2009 through 2012 by state agency and the Judicial and Legislative Branches.



Source: Office of the State Auditor's analysis of IT expenditure data from the Colorado Financial Reporting System for Fiscal Years 2009 through 2012.

Finally, we compared state agencies' Fiscal Year 2012 IT expenditures with the agencies' average annual IT expenditures for the three prior years, Fiscal Years 2009 through 2011. Comparing current expenditures with the average for the previous 3 years normalizes the data to account for large, one-time investments. As shown in the chart below, more than half of the agencies' (14 of 21) Fiscal Year 2012 expenditures exceeded the average expenditure per year from Fiscal Years 2009 through 2011.

IT Expenditures in Fiscal Year 2012 and Average Annual IT Expenditures for Fiscal Year 2009 through 2011 for 16 Executive Branch Agencies, the Legislative and Judicial Branches, and the Statewide Elected Offices



Source: Office of the State Auditor's analysis of Fiscal Years 2009 through 2012 data from the Colorado Financial Reporting System.

IT Strategic Planning

The strategic planning process is one of the fundamental ways in which an organization creates its unique sense of identity and purpose. By defining their missions, goals, and methods of measuring success, agencies develop the foundation for making policy decisions and prioritizing the use of limited resources. Performance-based goals are broad policy-oriented goals that indicate to the public and members of the General Assembly the intended purposes of an agency and its programs and services. Agencies should develop corresponding performance measures, either quantitative or qualitative, that can be used to assess their progress toward achieving their goals. Performance measures typically focus on the following five types of measurement: (1) the amount of funds, staff, time, or other resources expended; (2) the amount of services provided, units produced, or products created; (3) progress toward achieving the intended result; (4) the cost, time, or other resources expended to achieve each unit of output or outcome; and (5) whether an agency complied with a required standard or achieved a required level of performance.

In the following section, we discuss OIT's strategic plan to guide IT operations and resources at Executive Branch agencies. Strategic plans related to IT operations for the Judicial and Legislative Branches and for the statewide elected offices were unavailable and are therefore not included in this report.

Governor's Office of Information Technology Strategic Plan

Annually, OIT develops a strategic plan for the Executive Branch, known as the "OIT Playbook," that defines OIT's value proposition, top strategic priorities, and key initiatives and that shows an assessment of the current status of each of its state priorities, as well as its future goals. Below we provide the results of OIT's Fiscal Year 2012 efforts to meet its performance measures.

Governor's Office of Information Technology
Key Operational Performance Measures
Fiscal Year 2012

Performance Measure	FY 2012 Target	FY 2012 Actual	Description
Cost Savings / Cost Avoidance	$3.25 million	$3.29 million	Tracks savings and cost avoidance achieved as a result of IT consolidation and other initiatives and seeks to identify and define measurable outcomes related to the benefits of consolidation. The data reported are focused on professional services and operating expenses and do not consider the impact of ongoing base personal services reductions. Data are tracked on a monthly basis.
Procurement (Days to Process a Purchase Order)	< 10 Business Days	3.8 Business Days	Measures the average number of business days from the initiation of an internal IT procurement request to final purchase order issuance date. The metric is tracked on a monthly basis.
Contracting (Days to Complete Contract)	< 45 Business Days	48 Business Days	Measures the average number of business days from the solicitation award or internal procurement request to final contract execution. The metric is tracked on a monthly basis.
Participation at Quarterly Staff and Managers Meetings	80%	89%	Measures the frequency of regular and effective communication, improves collective performance, strengthens brand awareness, increases staff morale and motivation, develops key skills, and creates a forum for open dialogue. Data are based on the total percentage of staff who participates in the meetings.
First Contact Resolution	60%	64%	Assesses the percentage of customers' issues that are resolved within the first point of contact. Data are tracked on a monthly basis.
Mean Time to Total Resolution	90%	91%	Measures the percent of customer requests resolved within the assigned priority. Data are currently being captured for all agencies except the Departments of Public Safety and Military and Veteran Affairs with priority 1 targeted at 4 hours or less, priority 2 at 72 hours or less, and priority 3 at 2 weeks or less. Data are tracked on a monthly basis.
Project Health Index for Major IT Projects	90%	94%	Assesses the progress of IT projects within the Executive Governance Committee structure. Based on six criteria: project scope, available resources, project budget, overall risk, project schedule, and expected deliverables. This is intended to measure the overall health of Executive Governance Committee technology projects. Data are tracked on a monthly basis.

Governor's Office of Information Technology
Key Operational Performance Measures
Fiscal Year 2012

Performance Measure	FY 2012 Target	FY 2012 Actual	Description
Application / System Availability	99.50%	99.89%	Measures the overall application availability percentage (excluding planned downtime) for critical and essential systems, as identified by the business owners, and business applications. This was defined as the most relevant measure of service delivery success by OIT customers in Fiscal Year 2011. Data are tracked on a monthly basis.
Security Awareness Trainings Completed	95%	95%	Identifies the percentage of state employees who complete the required annual statewide security awareness training. Data are tracked on an annual calendar year basis.
Broadband Availability by Household	94%	96.24%	Tracks the household broadband availability percentage (wireline and fixed wireless) across Colorado (where broadband is defined as 3 Mbps down and 1 Mbps up). The objective is to understand the current broadband landscape in Colorado and how we are improving. Data are tracked biannually through contracted services. Note that this metric is currently based on provider-reported data.
Rural Broadband Availability by Households	90%	88.26%	Focuses on broadband availability in rural areas only, and is similar to the previous measurement. Data are tracked biannually, through contracted services, and this metric is currently based on provider-reported data.

Source: Governor's Office of Information Technology.

State Legislation Impacting IT

Below we provide a list of legislation passed in Fiscal Year 2012 that will impact IT operations within state government. As shown below, most of the legislation pertains to system implementation and appropriations.

Enacted Legislation Impacting State Government IT 2012 Legislative Session of the Colorado General Assembly			
Bill	**Department**	**Effective date**	**Description**
S.B. 12-123 *Approved, May 11, 2012*	Department of State	May 11, 2012	Implements enhancements to the online business filing system, allows agents to become commercial registered agents to reduce filing fees and allow for efficient filing. Also allows for fees for the licensing or sale of business and licensing software developed in-house. Appropriates $525,788 from the Department of State Cash Fund to the Department of State for implementation. Directs the Secretary of State to implement enhancements to the online business filing system, including enhancements to user accounts.
H.B. 12-1052 *Approved, May 29, 2012*	Department of Regulatory Agencies	July 1, 2012	Requires the Director of the Division of Registrations to implement a system to collect health care workforce data from health care professionals who are eligible for the Colorado health service corps, from practical and professional nurses, and from pharmacists. The act appropriates $36,745 from the Division of Registrations Cash Fund to the Department of Regulatory Agencies.
H.B. 12-1339 *Approved, May 3, 2012*	Governor's Office of Information Technology and the Departments of Health Care Policy and Financing and Human Services	May 3, 2012	Authorizes the General Assembly to appropriate monies for the Colorado Benefits Management System (CBMS) improvement and modernization project. Requires the Chief Information Officer to submit a written report to the Joint Budget Committee on a quarterly basis concerning the project. The bill provides $12.3 million in appropriations for Fiscal Year 2012-13 for major CBMS system improvements

Enacted Legislation Impacting State Government IT 2012 Legislative Session of the Colorado General Assembly			
Bill	**Department**	**Effective date**	**Description**
H.B. 12-1041 *Approved, June 6, 2012*	Department of Public Health and Environment	August 8, 2012	Creates an electronic death registration system for purposes of allowing persons responsible for reporting death information to the Office of the State Registrar of Vital Statistics to do so electronically. Within 2 years after the act takes effect, the Department is to submit a report to the Health and Environment Committee of the House of Representatives and the Health and Human Services Committee of the Senate, or their successor committees, regarding the development and implementation of the electronic death registration system, detailing staffing level and fee modifications since implementation. The act appropriates $743,940 in Fiscal Year 2013.
S.B. 12-96 *Approved, March 24, 2012*	Governor's Office of Information Technology	March 24, 2012	Authorizes the Governor's Office of Information Technology to negotiate amendments to existing contracts entered into by any state agency for information technology resources. Contract amendments may include expanding the scope of the contract to include additional state agencies, extending the term of the contract, and improving cyber security. The act continues the office's authority to amend these types of contracts for an additional 2 years, until June 30, 2014.
H.B. 12-1288 *Approved, March 24, 2012*	Governor's Office of Information Technology	August 8, 2012	Develops a comprehensive risk assessment that will be applied to every new IT project to assess risk levels related to the project and determine whether the project should be classified as a major IT project. The act also requires OIT to establish project budgets for projects of all sizes, including major IT projects. As part of any major IT project, the act requires a state agency to consult with and obtain the approval of OIT in connection with any major IT project that it plans to undertake. Requires OIT's Chief Information Officer to develop a staged review process for IT projects that ensures a project meets specific requirements and complies with the project plan approved by OIT. Expands the definition of "capital construction" to include the purchase of services from OIT on the condition that the use of such services is the most cost-beneficial option or falls within the duties and responsibilities of OIT or its Chief Information Officer.
H.B. 12-1224 *Approved, May 9, 2012*	Department of Public Safety	May 9, 2012	Creates the consolidated Communications System Authority, which includes entities that use the statewide digital trunked radio system as their primary means of public safety wireless communication.

Enacted Legislation Impacting State Government IT 2012 Legislative Session of the Colorado General Assembly			
Bill	**Department**	**Effective date**	**Description**
H.B. 12-1335 *Approved, May 7, 2012*	General Appropriation – long bill	May 7, 2012	General appropriation - long bill. For the fiscal year beginning July 1, 2012, the act provides for the payment of expenses of the executive, legislative, and judicial departments of the state of Colorado, and of its agencies and institutions. The act provides for the payment of capital construction projects. The grand total for capital construction projects is $170,326,213 of which $8,626,790 was appropriated for COFRS Modernization and $1,900,000 was appropriated for the Data Center Consolidation.
Source: Office of the State Auditor staff review of 2012 Legislative session information.			

IT Projects

The Enterprise Portfolio Project Management Office currently oversees approximately 50 IT projects at 11 agencies. Of these 50 projects, approximately 20 have been identified as Executive Governance Committee (EGC) projects based on the criteria discussed in Section 1. These 50 projects are currently in process and have not yet been completed. In Appendix B, we provided a snapshot view of the 20 EGC projects showing the start and projected end dates, the planned and the actual budgets to date, and descriptions of the projects.

The planned budget for 17 of the 20 EGC projects totals approximately $236 million. The remaining three projects, the Colorado State Network Implementation, Data Center Consolidation (DCC) 2.0, and Google Apps for Government do not yet have established budgets. These projects currently do not have an assigned budget; because the projects are in the preliminary stages and resources and expected expenses have not been determined; because internal resources are being used; or because the projects are being managed as operational functions rather than discrete projects. In terms of planned budgets, the top five projects have a total budget of $94 million, of which $53.7 million is for one project (the Colorado Integrated Tax Architecture project at the Department of Revenue). All projects with a planned budget of $5 million or more are automatically qualified as an EGC project. We noted that even though seven of the 20 projects did not meet the threshold of $5 million, they still qualified as EGC projects. These seven projects were identified as major projects based on criteria such as risk to the State or criticality to business operations. Eight of the 20 projects are currently behind schedule. These projects include

- CCLAN/Internet Edge
- CDOT SAP SRM PPS P1

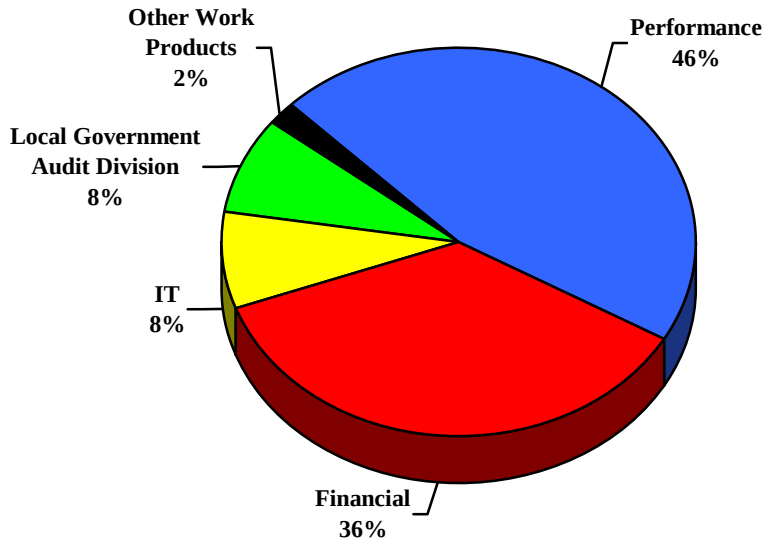
- CSN Implementation
- Data Center Consolidation (DCC) 2.0
- Google Apps for Government
- MAPSS: Premier One CAD Migration and Maintenance
- The Statewide Longitudinal Data System (SLDS) – LINK
- vBlock Shared Services

Further, two of these eight projects are not meeting budget expectations. These two projects are CSN Implementation and CCLAN/Internet Edge. Most projects with large planned budgets are multi-phased and multi-year.

Information Technology Audits and Reports

The OSA employs a risk-based audit approach whereby we target our limited resources to assess the State's highest risk IT applications and initiatives. As shown in the following chart, during Fiscal Year 2012, the OSA allocated 8 percent of its staff resources (by number of FTE hours) to IT audits and assessments. The remainder of the OSA's staff resources were allocated to performance and financial audits, work conducted on behalf of the Local Government Audit Division, and other work products.

Office of the State Auditor
Resource Allocation by Functional Area



Source: Office of the State Auditor's analysis of staff time data.

Based on the risks identified at the time, during Fiscal Year 2012, the OSA conducted and presented to the Legislative Audit Committee the following standalone IT audits/reviews.

Evaluation of the Sustainability of the Colorado Financial Reporting System (COFRS) Governor's Office of Information Technology and Department of Personnel & Administration June 2011

Purpose:	To assess the short- and long-term sustainability of COFRS, evaluate whether COFRS supports the State's 21st century business needs, and identify lessons Colorado can learn from other governments that have undertaken financial management modernization projects.
Overall Conclusion:	Overall, we concluded that COFRS does not support the State's 21st century business needs, that COFRS is increasingly becoming more expensive and difficult to sustain, and that the modernization of the State's financial management system should be a strategic priority for state government. Our evaluation also identified immediate and significant risks to the future sustainability of COFRS. We found that the likelihood of a partial or complete failure of COFRS is increasing and that a failure of COFRS would have significant financial, operational, and political ramifications.

Overview of Recommendations

Recommendation	Agency Response	Implementation Date	Status
1.OIT and the Department should: a. Establish a succession plan to ensure that the State employs adequate staff with sufficient technical knowledge to maintain COFRS. b. Limit the number of code changes made to COFRS.	Agree	1a. June 2011 1b. June 2011	1a. Implemented and ongoing 1b. Implemented and ongoing
2. OIT and the Department should work with the state financial managers and the General Assembly to develop and execute a viable plan for modernizing COFRS.	Agree	2. November 2011	2. Partially implemented (Status is reported as of March 2012.) *A budget request was approved for $8.6 million for the first two phases of the five-phase project which should commence by September 2012. The overall cost of the five-phase modernization project is estimated to be $42.5 million.*

Tax Processing Department of Revenue September 2011	
Purpose:	To assess the Department of Revenue's tax processing system, called the "tax pipeline," for opportunities to increase efficiency and effectiveness, reduce state expenditures, and produce greater value for taxpayers and the State of Colorado.
Overall Conclusion:	Overall, our audit found that the Department's operations related to income and business tax (including sales taxes) processing and payments are outdated, inefficient, and not cost-effective and that taxpayer use of e-filing has not reached its fullest potential. By updating these processes, the Department stands to improve efficiency, reduce costs, and improve the accuracy and timeliness of income and business tax processing. When feasible, we quantify potential cost savings for each area in which we recommend improvements. However, in some cases, the cost savings depend upon how the Department of Personnel & Administration and Division of Central Services choose to implement the audit recommendations. In total, we were able to identify potential annual cost savings of at least $2.1 million, including savings of $574,000 for implementing new technology and updating processes in the tax pipeline. We also recognized that there will be one time upfront cost for implementing the new technology. In addition we identified cost savings of $1.5 million if the Department can take additional actions that encourage taxpayers to increase their use of e-filing.

Overview of Recommendations

Recommendation	Agency Response	Implementation Date	Status
1.The Departments of Revenue and Personnel & Administration should: a. Determine which department should implement new technology for the tax pipeline and eliminate positions no longer needed. b. Maximize the Department of Revenue's use of the Department of Personnel & Administration's Division of Central Services for outgoing mail processing and warrant printing, and reallocate or eliminate staff no longer needed. c. Establish a plan and specific performance measures for increasing e-filing and e-payment rates, including seeking additional statutory e-filing and e-payment mandates.	Agree	July 2012	1a. Implemented 1b. Partially implemented 1c. Partially implemented

Recommendation	Agency Response	Implementation Date	Status
2. The Department of Revenue should maximize its use of Central Services for outgoing mail processing and warrant printing, and reallocate or eliminate staff currently performing this work.	Agree	July 2012	Partially implemented
3.The Department of Revenue should work to increase e-filing and e-payment rates by: a. Working with stakeholders to establish a clearly defined plan for increasing e-filing and e-payment rates. b. Working with stakeholders and members of the General Assembly to evaluate possible statutory mandates that require the use of e-filing and epayment for key types of tax filings, taxpayer groups, and tax preparers, and to implement a small filing fee for tax preparers who want to continue to file paper forms.	Agree	3a. December 2011 3b. May 2012	3a. Implemented 3b. Implemented /No longer applicable *(The Department has decided not to pursue e-filing mandates at this time.)*

Consolidation of Executive Branch Information Technology Governor's Office March 2012	
Purpose:	To evaluate OIT's progress in consolidating IT resources, procurement, and operations within the Executive Branch. Specifically, the audit evaluated (1) whether the State's IT consolidation initiative was on schedule and delivering the benefits anticipated by the General Assembly, and (2) whether OIT's cost allocation model for calculating service rates and billing state agencies was reasonable, appropriate, and compliant with state and federal standards.
Overall Conclusion:	The consolidation process has been slow and hampered by leadership changes, budget and resource constraints, an undeveloped governance framework, and organizational resistance.

Overview of Recommendations

Recommendation	Agency Response	Implementation Date	Status
OIT should: 1. Strengthen governance and oversight of the State's consolidation initiative.	Agree	June – October 2012	OIT is expected to provide a status update in October 2012.
2. Move all Executive Branch IT appropriations under the control of OIT.	Agree	October – December 2012	OIT is expected to provide a status update in October 2012.
3. Perform a full physical inventory and reconciliation of hardware and software assets, including accounting for and reconciling records to inventory and inventory to records, as needed.	Partially Agree	July 2012	OIT is expected to provide a status update in October 2012.
4. Improve its human resources function and more aggressively manage organizational change.	Agree	July – October 2012	OIT is expected to provide a status update in October 2012.
5. Improve its cost allocation model by implementing billing based on real-time consumption of services.	Partially Agree	December 2012	OIT is expected to provide a status update in October 2012.

In addition to the standalone projects discussed above, the OSA's IT Audit Division performed audit work in support of the Statewide Single Audit for Fiscal Year Ended June 30, 2011 (released February 2012). The purpose of this IT audit work was to:

- Determine if the State of Colorado's IT control activities, individually or in combination with others, are properly designed, in place, and operating effectively to prevent, or detect and correct, material misstatements in Colorado's Comprehensive Annual Financial Report and the Schedule of Expenditures of Federal Awards.

To achieve the above-stated objective, we tested the following applications:

- Access control software (Top Secret) for mainframe applications
- Colorado Financial Reporting System (COFRS)
- Colorado Personnel Payroll System (CPPS)
- Colorado Benefits Management System (CBMS)
- GenTax
- JP Morgan Electronic Benefits System
- KRONOS
- Medicaid Management Information System (MMIS)
- Revenue Accounting System

In total, we made 50 recommendations including subparts in the Fiscal Year 2011 Statewide Single Audit report. While an agency might only receive one recommendation number in the report the recommendation will often contain many subparts, e.g. (a) through (f). Each subpart is counted as a separate recommendation in the total of 50 recommendations. The recommendations covered the areas of IT security, change management, and operations.

In addition to our staff's audit work, we also provided IT audit programs to the contractors that assist our office in conducting the annual financial audit of the State.

IT Initiatives, Risk Areas, and Audits Planned for Fiscal Year 2013

Section 3

This section focuses on upcoming IT initiatives in Fiscal Year 2013 for Executive Branch agencies only and reviews our methodology to identify areas of high IT risks within state government. Our discussion of IT risk areas addresses those risk areas that could affect agency operations within all three branches of state government. The areas of high risk we identified have been incorporated into our audit plan for upcoming IT audits.

Governor's Office of Information Technology Fiscal Year 2013 Playbook

OIT's Fiscal Year 2013 Playbook carries forward the same six strategic priorities from Fiscal Year 2012. OIT envisions that these priorities will be in place for the long term. What changes from year to year is the list of initiatives that OIT will pursue for each priority. The following table shows OIT's Fiscal Year 2013 initiatives for the six strategic priorities.

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
Customer Success: We will enable our customers, the state agencies and departments that serve all Coloradoans, to be national leaders. We will honor our commitments; provide reliable, consistent, and high-quality services; communicate openly; and be a trusted advisor in helping our customers solve their toughest problems.	
Fiscal Year 2013 Initiatives	
1.	Create an end-to-end service delivery model for all OIT programs and products. (Owner: Chief Technology Officer)
2.	Develop and publish a comprehensive OIT Service Catalogue. (Owner: Agency Services Director)
3.	Create and implement a quality improvement plan around end-user support (help desk and deskside support). (Owner: Director of Service Operations)
4.	Establish a social media strategy and update the social media policy for OIT. (Owner: Chief Communications Officer)
5.	Utilize emerging media (video live stream, video conferencing) to communicate with employees, customers, and Coloradoans. (Owner: Chief Communications Officer)
6.	Implement Business Analyst (BA) Center of Excellence. (Owner: Agency Services Director)

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
People: People are the foundation of our success. We will attract, develop, and retain the best talent for OIT by fostering a culture of empowerment, high performance, and mutual respect.	
Fiscal Year 2013 Initiatives	
1.	Build, deliver, and facilitate the development and integration of OIT values enterprise-wide. (Owner: Human Resources Director)
2.	Design and implement a workforce strategy to include recruiting and pipeline development (university relations, veterans affairs, alumni networks, professional associations, user groups, job fairs, etc.), professional and cultural development, and aligned performance management. (Owner: Human Resources Director)
3.	Develop and implement a leadership development program piloting a talent development tool, including 360 degree feedback, to support succession planning, and create a Manager's Toolkit. (Owner: Human Resources Director)
4.	Develop and implement a nonclassified human resource strategy. (Owner: Human Resources Director)
5.	Sponsor and adopt high-performing organizational behaviors to position and brand OIT as an "Employer of Choice" through the development of on-boarding processes, retention strategies, employee recognition and rewards, flexible work arrangements, and career development opportunities, in concert with our commitment to diversity. (Owner: Human Resources Director)
6.	Implement a "Trusted Advisor" approach to human resource management throughout OIT, building on our commitment to serve and deliver to our "customer." (Owner: Human Resources Director)
7.	Implement an annual employee engagement micro-survey for OIT. (Owner: Human Resources Director)
8.	Create new metrics for measuring both employee engagement and the quality of organizational communication activities, such as All Hands, All Managers, and Open Mic OIT meetings. (Owner: Chief Communications Officer)
Source: Governor's Office of Information Technology.	

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
Innovation: We will provide strategic, sustainable solutions using emerging technologies that align with business needs and deliver both short- and long-term value for the State and all Coloradoans.	
Fiscal Year 2013 Initiatives	
1.	Publish standards, both supported and unsupported, for hardware, software, requests for proposals, service-level agreements, cloud strategies, and other standards as they apply to information technology. (Owner: Chief Technology Officer)
2.	Tap into university and college-level resources for help solving problems or creating innovations, such as fraud analysis and mobile development. (Owner: Chief Technology Officer)
3.	Use data from the Colorado Information Marketplace to provide better decision making for state government as it pertains to analytics and fraud, waste, and abuse. (Owner: Chief Technology Officer)
4.	Develop a Geographic Information Systems strategy and migrate data into the Colorado Information Marketplace. (Owner: Chief Technology Officer)
5.	Develop a Health Information Technology strategy and publish online. (Owner: Chief Technology Officer)
6.	Create an Acceptable Use Policy for internal and external access, as well as a Bring Your Own Device standard, in order to enable state employees to work more efficiently and effectively. (Owner: Chief Technology Officer)
7.	Implement a Platform as a Service (PaaS) model to better enable the business that includes building out the Citizen Engagement Platform as a Service (CEPaaS) to empower all Coloradoans. (Owner: Chief Technology Officer)
8.	Develop and publish a mobile computing and application strategy and publish it online. (Owner: Chief Technology Officer)
9.	Create an enterprise solution around Identity Management and Single Sign On. (Owner: Chief Technology Officer)
Source: Governor's Office of Information Technology.	

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
Service Excellence: We will deliver timely, secure, agile, cost-effective, sustainable, and high-quality IT services that meet and exceed business requirements.	
Fiscal Year 2013 Initiatives	
1.	Achieve $3 million (3 percent) in cost savings or cost avoidance through IT consolidation activities, reductions in software licensing, contract renegotiation, and reduced maintenance costs. (Owner: Chief Financial Officer)
2.	Move to true Executive Leadership Team based departmental budgeting. (Owner: Chief Financial Officer)
3.	Implement all aspects of OIT Storefront. (Owner: Chief Financial Officer)
4.	Develop a statewide IT asset management strategy. (Owner: Chief Financial Officer)
5.	Complete email and calendar migration to Google Apps for Government. (Owner: Director of Service Operations)
6.	Continue Data Center Consolidation efforts with a goal to reduce the overall state infrastructure footprint, including physically reducing IT-related data center space and executing cloud strategies. (Owner: Director of Service Operations)
7.	Develop a strategy to consolidate local and wide area networks and domain and directory services across the Executive Branch infrastructure. (Owner: Director of Service Operations)
8.	In alignment with our end-to-end service delivery strategy, develop the business requirements for an OIT-wide resource management process, including both personal services and operating resources. (Owner: Agency Services Director)
Source: Governor's Office of Information Technology.	

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
Trusted Partnerships: We will cultivate and strengthen existing partner relationships and develop new partnerships necessary for successful service delivery.	
Fiscal Year 2013 Initiatives	
1.	Establish a proactive IT economic development growth and retention strategy. (Owner: IT Economic Development & Broadband Strategy Director)
2.	Lead and coordinate a Fiscal Year 2013 IT economic development prospect/retention trip for the Governor. (Owner: IT Economic Development & Broadband Strategy Director)
3.	Develop the framework for a public/private sector job training pilot program. (Owner: IT Economic Development & Broadband Strategy Director)
4.	Solidify OIT's broadband roles and responsibilities in state statute. (Owner: IT Economic Development & Broadband Strategy Director)
5.	Lead the implementation of the State's strategic broadband plan. (Owner: IT Economic Development & Broadband Strategy Director)
6.	Coordinate the State's execution of the State and Local Implementation Grant Program for the Nationwide Public Safety Broadband Network. (Owner: IT Economic Development & Broadband Strategy Director)
7.	Establish a formal Vendor Management Office. (Owner: Chief Financial Officer)
8.	Create standard contract language for service delivery requirements (e.g., cloud, security, etc.). (Owner: Chief Financial Officer)
9.	Develop, formalize, and consistently engage with an IT-focused group of legislators who can be our advocates and champions within the Colorado General Assembly for IT initiatives ("LegTek Committee"). (Owner: Chief of Staff)
Source: Governor's Office of Information Technology.	

Governor's Office of Information Technology Fiscal Year 2013 Strategic Initiatives	
Information Security: We will protect the confidentiality, integrity, and availability of state and citizen information. We will be compliant with all federal and state policies and requirements.	
Fiscal Year 2013 Initiatives	
1.	Create annual state security report. (Owner: Chief Information Security Officer)
2.	Develop a unified and consistent information security program for the State that includes the planning, development, and implementation of core security requirements such as intrusion detection and system monitoring, policy management, awareness training, asset inventory, disaster recovery, incident response, change management, and risk assessment. (Owner: Chief Information Security Officer)
3.	Develop a secure development lifecycle for state application development and vendor management. (Owner: Chief Information Security Officer)
4.	Develop a sustainable funding source for security. (Owner: Chief Financial Officer)
Source: Governor's Office of Information Technology.	

IT Risk Areas

Computers and computer systems have become a significant part of our modern society. It is virtually impossible to conduct many day-to-day activities without the aid of computer systems controlled by software. As more reliance is placed on these software systems, it is essential that they operate in a reliable manner. Failure to do so can result in errors, data integrity issues, and eventually substantial high monetary loss.

The Executive Branch alone has nearly 800 systems in place, of which 133 are deemed to be critical to state operations. Constraints such as resources and time prevent the OSA from reviewing all these systems every year. Therefore, we follow a risk-based approach to identify systems and initiatives that pose the highest risk to the State. We assess risk based on the three criteria listed below:

- **Technical risk**—represents the current risk from a technology and platform perspective. This includes risk in the areas of data security, application size and complexity, the number and complexity of external interfaces, whether the application is hosted internally or externally, the flexibility of code changes, whether a sufficient service-level agreement is in place, whether the technology behind the application is unsupported, and whether OIT staff have the technical resources needed to maintain the technology. Applications at risk for support or maintainability issues represent difficulties with keeping the application running, or present difficulties with providing enhancements or business changes.

- **Business risk**—represents the risk that a business will not be able to meet customer demand or regulatory requirements should a key application or service fail or if the security of the system is breached.

- **Financial risk**—represents the risk that a system failure or regulatory noncompliance will result in significant financial loss to the State. Systems that are considered to have high financial risk are the ones that have high development and maintenance costs.

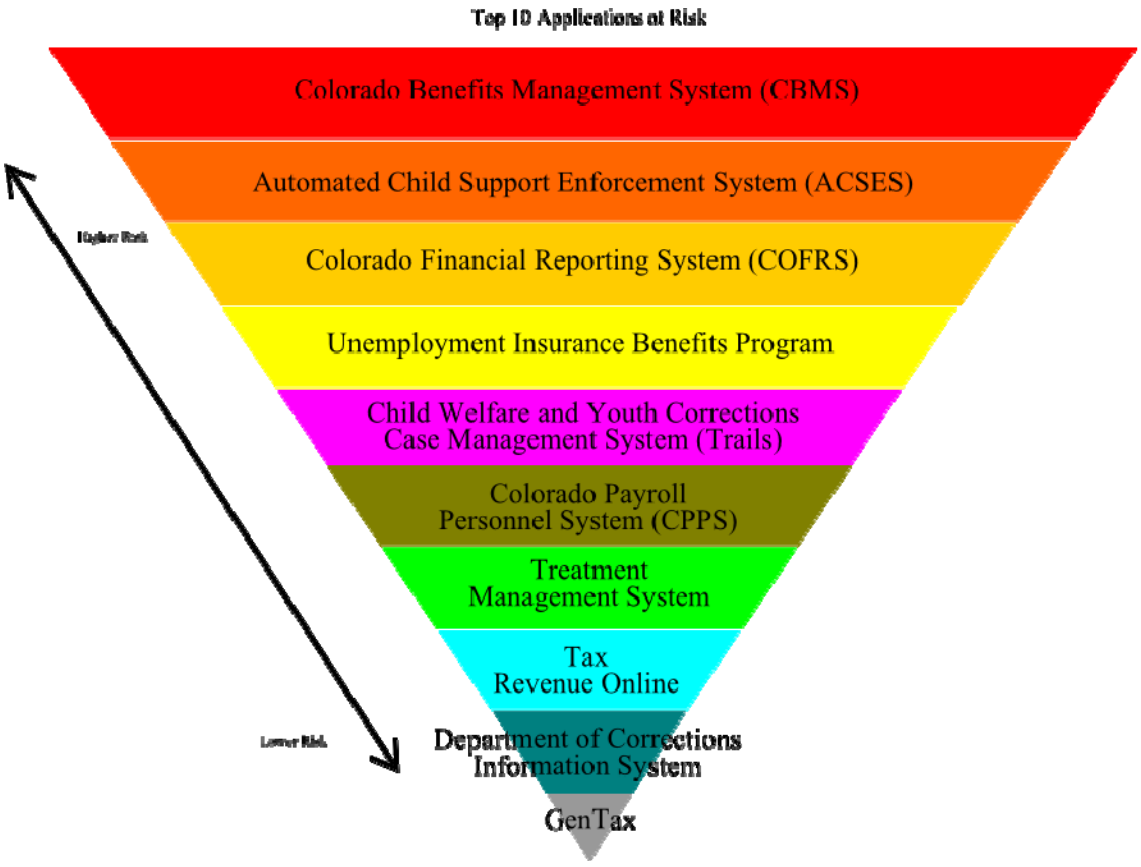
It is critical to recognize and identify the risk that is inherent in any application whether created in house or by a vendor. A risk assessment is a mechanism of assessing, communicating and managing the risks facing an organization to ensure that the organizations objectives are being met. While risk can indicate that there are problems with the system, in many instances a risk assessment will show which applications are the most critical to day to day business operations.

Based on historical information, discussions with State's IT management staff, prior audits, and the current status of IT in Colorado state government, we determined the following applications and areas as high risk:

- **Applications:** In Fiscal Year 2012 OIT along with their contractor performed a risk assessment of the most critical applications under the Executive Branch, in order to determine the degree of risk associated with the entire application portfolio under the executive branch. OIT's risk assessment identified 133 applications that were determined to be critical or essential to the State. About half of these critical applications are older than 10 years, and approximately 21 percent of the critical applications are considered unsupported because of outdated technology or extreme customization that the vendor can no longer support.

Based on the criteria of risk of failure, support/maintainability issues, technical risk, high public visibility, criticality to the State's business processes, and high hardware and software cost, the following 10 applications have been identified as the riskiest for the State by the Governor's Office of Information Technology. For a description of the 10 applications listed in the pyramid below, see Appendix C.

Governor's Office of Information Technology
Applications Risk Assessment (January, 2012)



Source: Governor's Office of Information Technology.

- **Information Security:** The State, as custodian of public data, is responsible for safeguarding the information it receives and for ensuring the confidentiality, integrity, and availability of its systems and the information contained within those systems. Information security threats are becoming more serious and difficult to detect and our audits regularly identify noncompliance with basic security control requirements.

- **Large IT projects:** The development and deployment of large scale IT projects consume tremendous resources and often span multiple years. Over the last decade, the State has experienced several failed IT projects. Additionally, research indicates that the cost to correct software errors increases exponentially through the lifecycle of the development project.

As such, our Office has made it a priority to assess the governance over large scale IT projects earlier in the project's lifecycle.

- **Network Consolidation:** The existence of multiple and independent networks dramatically increases the cost and the complexity of managing the State's overall IT infrastructure. At the same time, multiple networks offer multiple ways to penetrate the security perimeter, potentially putting all of the data contained within state systems at risk.

Fiscal Year 2013 IT Audits and Reviews

Based on the risk methodology discussed above, we have identified IT audits and reviews that will be important to conduct and follow up on during Fiscal Year 2013.

IT audits and reviews that we have already released during Fiscal Year 2013 include the following:

- **Independent Verification and Validation Review of the Judicial Department's Integrated Colorado Courts E-Filing and Judicial Paper on Demand Systems:** This audit was released in July 2012. We undertook this audit because the successful implementation of the systems under review is critical to the efficient and effective operations of state-funded courts. The audit performed an independent verification and validation review of the Colorado Judicial Department's Integrated Colorado Courts E-Filing System (ICCES) and Judicial Paper on Demand (jPOD) system development projects. Overall, we concluded that the Judicial ICCES/jPOD system development projects are following best practices to ensure a successful outcome managerially, financially, and technically. These systems are expected to go live as of January1, 2013.

IT audits and reviews we plan to conduct during the remainder of Fiscal Year 2013 include the following:

- **Request for Proposal for Penetration Testing and Technical IT Security Audit Services:** With the assistance and cooperation of a contractor, the OSA intends to perform focused penetration tests and technical IT security audits, with the goal of reviewing all state IT systems, including those at institutions of higher education, within the next 5 years.

- **Statewide Internet Portal Authority (SIPA):** SIPA is responsible for payment processing services and other services for a large number of state entities. **S**IPA uses contractor services for its payment processing functions. Due to the high volume of credit card and e-check transactions

processed by SIPA's contractor and the sensitive information contained in those transactions, we are performing an audit of the internal and information technology controls that SIPA currently has in place.

- **Statewide Single Audit for Fiscal Year 2012:** The state uses several key computer applications to record financial activity and administer state operations. This annual audit includes testing IT controls over these key applications in order to evaluate the State's IT effectiveness at preventing and detecting potential material misstatements in financial records and to verify that the IT infrastructure that supports key applications is secure and available.

In addition to these projects, we plan to monitor other IT initiatives the State is undertaking, including efforts to modernize the Colorado Financial Reporting System, Colorado Benefits Management System, Medicaid Management Information System, and those systems currently utilized by the Department of Labor and Employment for the collection and distribution of unemployment insurance taxes.

APPENDICES

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Appendix A
Fiscal Years 2009 through 2012 IT Expenditures

Below are the Fiscal Years 2009 through 2012 IT expenditures for each state department or branch of government.

Department/Agency/ Branch	FY2009	FY2010	FY2011	FY2012	Total
Agriculture	$ 203,005	$ 199,561	$ 813,800	$ 1,005,608	$ 2,221,974
Corrections	$ 11,462,745	$ 11,333,985	$ 12,638,483	$ 13,184,154	$ 48,629,367
Education	$ 4,033,811	$ 3,124,361	$ 3,138,975	$ 3,784,621	$ 14,081,768
Governor's Office	$ 69,196	$ 342,481	$ 369,768	$ 129,523	$ 910,968
Health Care Policy and Financing	$ 35,231,521	$ 32,788,975	$ 34,816,292	$ 43,822,219	$ 146,659,007
Higher Education	$ 80,009	$ 89,561	$ 358,888	$ 280,204	$ 808,662
Human Services	$ 121,231,180	$ 51,590,936	$ 53,780,506	$ 55,272,279	$ 281,874,901
Judicial	$ 8,887,895	$ 7,609,914	$ 4,973,922	$ 5,805,543	$ 27,277,274
Labor and Employment	$ 3,044,665	$ 1,992,290	$ 7,503,802	$ 8,592,308	$ 21,133,065
Law (Attorney General)	$ 60,456	$ 68,003	$ 37,522	$ 73,188	$ 239,169
Legislative Branch	$ 58,228	$ 55,870	$ 60,711	$ 52,068	$ 226,877
Local Affairs	$ 179,243	$ 167,344	$ 511,462	$ 571,355	$ 1,429,404
Military Affairs	$ 252,618	$ 194,093	$ 366,597	$ 326,583	$ 1,139,891
Natural Resources	$ 13,788,671	$ 12,570,700	$ 17,436,623	$ 17,834,355	$ 61,630,349
Personnel & Administration	$ 9,166,134	$ 3,453,433	$ 4,957,705	$ 2,903,859	$ 20,481,131
Public Health and Environment	$ 7,642,778	$ 7,622,233	$ 11,152,500	$ 11,956,883	$ 38,374,394
Public Safety	$ 13,285,070	$ 13,477,336	$ 8,154,807	$ 17,966,504	$ 52,883,717
Regulatory Agencies	$ 1,304,369	$ 1,496,940	$ 3,110,140	$ 3,474,050	$ 9,385,499
Revenue	$ 20,746,773	$ 26,208,855	$ 22,407,760	$ 22,385,237	$ 91,748,625
Secretary of State	$ 7,542,789	$ 7,024,437	$ 7,431,499	$ 6,478,836	$ 28,477,561
Treasury	$ 30,515	$ 31,505	$ 12,753	$ 137,191	$ 211,964
Total					$ 849,815,567

Source: Colorado Financial Reporting System.

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Appendix B

Executive Governance Committee Projects

S.No	Project	Start Date	End Date	Planned Budget	Actual to Date	Status	Description
1	Colorado Integrated Tax Architecture	24-Sep-07	31-Dec-12	$53,670,204	$44,176,384	92% complete	To implement comprehensive integrated tax architecture with a modern and robust technology to support and carry out Colorado Department of Revenue business functions.
2	MPSC Women, Infant, & Children (WIC)	7-Feb-06	13-Oct-13	$17,131,325	$14,816,787	82% complete	To develop a new Web enabled WIC system that will replace the existing legacy system and will be used for case management and payment control. The project is in partnership through a Mountain Plains Consortium (MPSC) that includes the states of Wyoming and Utah. The project is 100% federally funded and is under the gated process of the U.S. Department of Agriculture.
3	The Statewide Longitudinal Data System (SLDS) - LINK	1-Jan-11	22-Oct-13	$8,032,500	$2,196,872	5% complete	To integrate and deploy user identity master data management/identity access and authentication management solution for the Executive Branch. In addition, to enable the integration of information from multiple state and local agencies.
4	ACSES Migration - Master	1-Aug-11	7-Aug-13	$7,875,000	$1,223,380	45% complete	To migrate the Automated Child Support Enforcement System (ASCES) from a Natural Adaptable Data Base System mainframe platform to a state-of-the-art operating platform.
5	SLDS - Capture	1-Jul-10	30-Jun-13	$7,412,400	$2,119,410	52% complete	To facilitate capture of timely and reliable data that can then be linked for purposes of making P-20 educational decisions. This falls under the CAPTURE initiative of the 2009 SLDS Grant.

Executive Governance Committee Projects

S.No	Project	Start Date	End Date	Planned Budget	Actual to Date	Status	Description
6	UI Internet Self Service - ISS	1-Apr-09	30-Sep-13	$7,063,095	$6,583,991	83% complete	To modernize the current Internet Self Service (ISS) applications; develop, implement, and maintain the functionality of new applications; and integrate these elements into an Internet Self-Service Suite.
7	Colorado Department of Transportation (CDOT) - Public Budget Formulation (PBF) Project	6-Dec-10	28-Sep-12	$6,959,982	$4,682,426	94% complete	To Implement new PBF module in CDOT's Systems, Applications, and Products in Data Processing (SAP) system, including migration of 10 existing applications from old SAP functionality to PBF and creation of one new application in PBF.
8	Colorado Bureau of Investigation (CBI) Automated Fingerprint Identification System (AFIS) Replacement	14-Apr-11	18-Feb-13	$6,728,701	$1,500,000	10% complete	To support criminal fingerprint identification, support applicant and licensee background checks, and process latent fingerprints from crime scenes in support of criminal investigations.
9	vBlock Shared Services	1-Feb-11	20-Jul-12	$5,661,258	$5,392,573	90% complete	To implement a consolidated virtual server, storage and security environment (i.e. a "data center in a box") at the Lakewood and e-FORT Data Centers.
10	Colorado Broadband Data & Development Program (CBDDP)	1-Jan-10	30-Oct-14	$5,361,506	$1,903,739	47% complete	To map the availability of broadband at community anchor institutions such as schools, hospitals, public safety entities, and non-federal government agencies. This project is funded by a grant from the National Telecommunications and Information Administration.

Executive Governance Committee Projects

S.No	Project	Start Date	End Date	Planned Budget	Actual to Date	Status	Description
11	Division of Motor Vehicles (DMV)- Driver's License Refresh / Upgrade Project	2-Mar-09	24-Jul-12	$3,516,050	$2,728,052	89% complete	This project will provide new equipment in all of the 56 driver's license offices throughout the state and new servers to store the ever-increasing amount of information. It will include upgrade software for facial recognition, document authentication and gated issuance.
12	Department of Regulatory Agencies (DORA) Licensing System Replacement	2-Mar-10	2-Jul-12	$3,054,903	$1,635,316	98% complete	To improve overall licensing services. The new system will support approximately 175,000 licenses annually related to more than 40 occupations.
13	CCLAN/Internet Edge	1-Feb-11	31-Jul-12	$2,343,160	$2,343,160	95% complete	To install and configure new networking equipment at 1525 Sherman and at the Lakewood Data Center to enable a new Multiple Protocol Label Switching (MPLS) Core and to increase network bandwidth and reduce redundancy for state office buildings in the Capitol Complex area.
14	MAPSS: Premier One CAD Migration and Maintenance	7-Dec-10	30-Jun-13	$2,000,000	$867,162	30% complete	To upgrade the Colorado State Patrol's (CSP) three critical communication systems to enable CSP to upgrade its Computer Aided Dispatch (CAD), Records Management System, and Mobile Data Computers hardware and software.
15	MITA MMIS Reprocurement	1-Jun-11	30-Jun-13	$1,731,500	$1,091,300	80% complete	To conduct an assessment of the Medicaid Information Technology Architecture (MITA), the Medicaid Management Information System (MMIS) and Fiscal Agent services procurements in other states in preparation for the upcoming MMIS procurement.

Executive Governance Committee Projects

S.No	Project	Start Date	End Date	Planned Budget	Actual to Date	Status	Description
16	WyCAN Phase 1	11-Aug-11	30-Sep-13	$1,574,133	$391,161	55% complete	The WyCAN Consortium consists of the Unemployment Insurance (UI) programs in Arizona, Colorado, North Dakota, and Wyoming. The Consortium is seeking information about procuring a combined UI Tax and Benefits system that is extensible and configurable and will be cost-effective for development, operations, and support.
17	CDOT SAP SRM PPS P1	29-Mar-11	3-Dec-12	$1,396,028	$1,218,683	70% complete	Install and setup Procurement for Public Sector Supplier Relationship Management. This project will be completed in five phases.
18	CSN Implementation	19-Mar-11	31-Dec-13	$0	$0	36% complete	Solicit and procure a new service provider and contract for the Multi-Use Network (MNT), which will be called the Colorado State Network (CSN).
19	Data Center Consolidation (DCC) 2.0	3-Oct-11	30-May-13	$0	$0	24% complete	To initiate a fresh approach to the original DCC project started in 2009. With an upgraded network and an enterprise virtual environment, DCC 2.0 has the tools necessary to move forward with consolidating the remaining "agency" data center into OIT's two enterprise data centers.
20	Google Apps for Government	25-May-12	16-Nov-12	$0	$0	3% complete	To implement Google applications such as e-mail, etc government functions

Source: Governor's Office of Information Technology

Appendix C
Description of Top 10 Critical Business Applications At Risk

Description of Top 10 Applications at Risk	
Automated Child Support Enforcement System (ACSES)	ACSES is used for the automated support of the management of child support enforcement cases. It is used to locate noncustodial parents, establish paternity for children born out of wedlock, and obtain and enforce child support and medical support orders in the state of Colorado.
Child Welfare and Youth Corrections Case Management System (Trails)	Trails is a case management system for child welfare and youth corrections clients. It tracks client demographics, caseloads, and services; supports foster care, adoptions, child abuse, and neglect tracking; and provides statewide case management and a centralized provider management directory for foster care, adoptions, and child care.
Colorado Benefits Management System (CBMS)	CBMS determines eligibility and benefit amounts for cash and medical public assistance programs. These programs include Temporary Assistance for Needy Families (TANF), child health programs, Supplemental Nutrition Assistance Program (SNAP), family and adult medical, long-term-care, and others. The system provides case management for client tracking for Adult Protective Services. The system supports the business processes of entering applications for benefits information, ensuring the information is complete, determining the applicants' eligibility based on the information entered, and determining the benefit amount for cash programs or the fee required for medical programs. It also supports the process for determining the impact to benefits from changes to information reported timely and retroactively. The system is fed information through direct screen entry from interfaces and from an online application system (PEAK). It also provides reporting and supports many interfaces that share data.
Colorado Financial Reporting System (COFRS)	COFRS provides overall accounting and financial management for the State and is the accounting system of final record.
Colorado Payroll Personnel System (CPPS)	CPPS provides a repository for employee data and processes payroll for the State of Colorado. It includes human resources, payroll, position control, employee self-service, and a human resources data warehouse.
Department of Corrections Information System (DCIS)	DCIS provides a fully integrated offender management and tracking system for the Department of Corrections. The application supports functional areas such as inmate banking, inmate pay, inmate programs/jobs, custody issues, gang monitoring, criminal history, canteen, inmate property, custody classification, parole hearings, parole plans, visiting, earned time, restitution, and victim notification. The application also supports some staff functions, such as employee timesheets, payroll, and staff training.

Description of Top 10 Applications at Risk	
GenTax	GenTax is the tax processing system for income and business taxes as well as the International Registration Program (IRP). High level processes include full taxpayer accounting, return processing, payment processing, audits, and collections. Distribution of funds collected is made to local governments, other state agencies, and clearinghouses for IRP and International Fuel Tax Agreement (IFTA). Taxpayers can access account information, file tax returns, and make payments through Tax Revenue Online (TAP - Taxpayer Access Point).
Tax Revenue Online	Tax Revenue Online is the processing system for income and business taxes as well as the International Registration Program (IRP). High level processes include full taxpayer accounting, return processing, payment processing, audits, and collections. Distribution of funds collected is made to local governments, other state agencies, and clearinghouses for IRP and IFTA. Taxpayers can access account information, file tax returns, and make payments through Revenue Online (TAP - Taxpayer Access Point).
Treatment Management System	The Treatment Management System captures all demographic and outcome information for substance use disorder clients, including the driving under the influence population.
Unemployment Insurance Benefits Program	Provides unemployment insurance payments to Colorado citizens.
Source: Governor's Office of Information Technology.	

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