Transforming Colorado Government for Today and the Future





2013 REPORT Governor's Office of Information Technology September 2013

STATE OF COLORADO

GOVERNOR'S OFFICE OF INFORMATION TECHNOLOGY

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Governor

Kristin Russell Secretary of Technology and State Chief Information Officer

September 2013

I am pleased to present the FY13 Governor's Office of Information Technology Report in accordance with C.R.S. §24-37.5-101 et.seq.

OIT is leading an effort to transform government through the use of shared information technology services. Our goal is to shift "business as usual" processes and tools toward innovative enterprise solutions that enable efficient, effective, and elegant services to be delivered to Coloradans on a daily basis. We designated Fiscal Year 2013, as the "Year of the Customer", and committed to focusing on how we are engaging with our customers in spearheading strategic initiatives such as the Colorado Information Marketplace at data.colorado.gov, a comprehensive data sharing website; cloud computing and the move of approximately 26,000 state employees from 15 disjointed and aging email systems to Google Apps for Government; and the Citizen Engagement Platform as a Service (CEPaaS), a concept that leverages cloud and standard technologies to provide a platform that can be used across state agencies and will enable us to truly look at citizens as customers and manage their engagement with government in a more holistic, elegant, and proactive manner.

Our path in FY13 was also about bolstering our foundation - both technologically and organizationally, creating an OIT culture through the introduction of employee-driven values, and intensifying our efforts to attract and retain the best IT talent.

We are proud to share our FY13 accomplishments and have made tremendous advances in becoming an award-winning enterprise organization. Rest assured, however, we will not rest on our laurels but will instead continue on our bold quest to become both the best IT service provider and employer of choice. I remain excited about the possibilities ahead and encouraged by your support "to enable the effective, efficient and elegant delivery of government services through trusted partnership and technology."

Sincerely,

Kristin D. Russell Secretary of Technology and Chief Information Officer



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Introduction

The Governor's Office of Information Technology (OIT) is responsible for the operation and delivery of all information and communications technology (ICT) services across all Executive Branch agencies in the State of Colorado. OIT's charge is twofold: (1) to provide best-inclass information technology (IT) services; and (2) to promote Colorado as the ideal location for IT companies and technology based workers.

As the enterprise provider of technology, OIT drives innovative solutions, provides quality service, acts as a



broker for new IT services, and supports the agencies whose missions are to serve all Coloradans. We do this by overseeing technology initiatives across the state level, recommending strategies and maximizing efficiencies of service delivery. Our enterprise approach enables the agile delivery of cost-effective, reliable, accessible and secure IT services to state agencies that improve citizen access and engagement with government services, while increasing accountability and transparency.

Our value proposition is to enable the effective, efficient and elegant delivery of government services through trusted partnerships and technology. We measure our achievements by whether our outcomes are successful and relevant (effective); eliminate waste and duplication and provide the best value at the lowest cost (efficient); and deliver services in a way where the employee and public feel respected and elevated through their experience (elegant).

A Brief History

The Governor's Office of Innovation and Technology was created in 1999 (and renamed Governor's Office of Information Technology [OIT] in July 2004) to serve as an advisory organization to the Governor and state agencies. At that time, information technology services and support were provided by each state agency in an independent, and at times, redundant manner. The result was a disparate infrastructure, duplication of functions and services, increased security risks, failing projects, and the inability to leverage statewide procurement opportunities.

Beginning in 2007, several events occurred to amalgamate the decentralized IT operations into OIT. These events culminated in 2008 with the overwhelming bipartisan passage of SB08-155 and a considerable shift in how IT services would be delivered to Executive Branch agencies in the state of Colorado. As a result of this legislation, which was codified in C.R.S. §24-37.5-101 et seq., all IT functions, systems, and assets were consolidated from the 17 executive branch agencies into a single organization - the Governor's Office of Information Technology - in July 2008.

In many ways, the consolidation was much like a merger of 17 diverse companies, bringing with it significant challenges but also providing the unique opportunity to plan, enable,

and implement truly transformative and lasting change for the state of Colorado. OIT took this historic opportunity to challenge the status quo and create an enterprise IT organization that is leaner and more effective in the delivery of a full range of technology solutions and services, not only for today but for the future.

In February 2011, Governor John W. Hickenlooper appointed Kristin D. Russell to lead OIT as the state's Chief Information Officer (CIO) and Secretary of Technology. Secretary Russell's dual roles require the oversight of all the information technology functions for the Executive Branch as well as the state's IT economic development, working in conjunction with the Office of Economic Development and International Trade (OEDIT) to promote Colorado as the ideal location for IT companies and technology-based workers.

In March 2013, Secretary Russell was named one of the <u>Top 25 Doers</u>, <u>Dreamers and Drivers</u> for 2013 by Government Technology magazine and in June 2013, she was named <u>Public/Non-Profit CIO of the Year</u> by the Denver Business Journal. These are just two of the many awards and recognition received by the Governor's Office of Information Technology over the past few years. Kristin D. Russell and her team at OIT are clearly leading Colorado and the nation toward the future of innovation and information technology services.

Strategic Planning

The Governor's Office of Information Technology Playbook is our strategic and operational roadmap, defining our value proposition, strategic priorities, and specific key initiatives we want to accomplish in a particular fiscal year. The Playbook also includes a current state assessment of our six strategic priorities (Customer Success, People, Innovation, Service Excellence, Trusted Partnerships, and Information Security) and the future state that we ultimately want to achieve.

OIT designated FY13 the **"Year of the Customer"** with a goal to put a laser focus on improving service delivery and to ensure we had a workforce strategy in place that would allow us to successfully execute upon that goal. To guide us in this regard, the FY13 Playbook included three overarching goals:

- Enhance the quality of services for our customers and end users including state employees, county workers, and Colorado residents.
- Develop a service catalog that is the foundation for how we engage with our customers, provide end-to-end services, and effectively manage our resources.
- Implement a workforce strategy for OIT focused on recruiting, developing, and retaining the IT talent necessary to provide enterprise IT services.

FY13 Playbook Results

Quarterly operations reviews are held to track and measure our progress towards achieving Playbook initiative goals, adjusting and developing "get well" plans as necessary. At the close of the 2013 fiscal year, we conducted a year end review and of our 41 active initiatives:

- * 31 (76%) were successfully completed; and
- 10 (24%) were not completed.
- 7 initiatives were either eliminated or incorporated into the FY14 Playbook.

The Playbook is a living document, meaning that we modify the initiatives as necessary to meet changing business conditions or mandates from the Governor and/or the Colorado General Assembly. In FY13, seven such initiatives were either merged with other existing initiatives or removed and being addressed in other projects.

FY13 Playbook – Year in Review



Performance Measures (Balanced Scorecard)

In addition to the targets defined in the FY13 Playbook, OIT has developed a more tactical and operational set of performance measures that are integral to the day-to-day service delivery management and align with OIT's value proposition. This complete set of metrics is called the OIT Balanced Scorecard.

This internal Scorecard provides an executive summary aligned to OIT's strategic direction and robust metrics on financial performance, customer service delivery, personnel, and information security. In all, more than 50 performance measures are managed and maintained on a monthly basis for each of these performance-based areas. Examples of the performance measures are: Cost Savings and Avoidance, Number of Days to Complete a Contract, Employee Attrition, Mean Time to Total Resolution, System Availability, Project Health, and Statewide Security Awareness Training.

Produced monthly, the Scorecard identifies trends, target metrics and actual performance metrics. The Scorecard has helped OIT achieve consistency of performance expectations against strategic priorities and has helped ensure organizational alignment to our core objectives. In short, it tells us how we are doing and whether we are improving over time. In addition, the Scorecard provides a foundation for data-driven decision making and creates transparency and focus across the organization. OIT leadership regularly reports out on the status of these metrics to our customers, to the Governor's Office, and during legislative hearings that are open to the general public.

OIT Values

Having clearly defined and communicated values that are known and internalized by all employees can be incredibly powerful for any organization, but especially for a recently formed one, such as OIT. With employees in 70 different physical work locations throughout the state, it is important to have bottom up and top down values to help drive a consistent organizational culture. To that end, an employee focus group from across OIT's functional areas and physical work sites came together in FY13 and worked diligently for more than six months to develop and recommend a set of clearly defined core values. The adoption of Service, Courage, Teamwork, Respect and Integrity as our values will help create the culture and drive OIT towards becoming a high performing organization. This combination of values also allows OIT to deliver the very best workplace environment and products and services to our customers and the people of Colorado. Consequently, starting this year, the values will be integrated into the FY14 performance plan cycle.¹

Service	•Serving the People of Colorado
Courage	Relentlessly Pursuing Innovation
Teamwork	• Working Together at OIT and Across the State
Respect	•Consistently Respecting Each Other
Integrity	•Honoring the Highest Office of the State of Colorado

Workforce

State governments, including Colorado, are faced with an unprecedented number of IT employees being eligible for retirement. According to a 2011 report from the National Association of Chief Information Officers (NASCIO), 21-30% of IT employees will be eligible for retirement in five years. In Colorado, the number of employees eligible to retire within five years climbs to 34% according to a 2011 report from the Department of Personnel & Administration (DPA).²

¹ The Performance Plan cycle is from April 1 to March 31 of the following year; the fiscal year is from July 1 to June 30.

² The Annual Workforce Report FY2010-2011 is available at http://www.colorado.gov/cs/Satellite/DPA-DHR/DHR/1251573425689.

In addition, with the rapid emergence of new technologies, we are faced with a need for a mixture of staff with the skills to maintain legacy systems as well as those who can work on newer systems and technologies such as mobile and web application development. The war for talent, especially technical talent, is fierce and shows no signs of relenting. As employees leave due to retirement and natural attrition, we face strong competition from the private sector to attract, compensate and retain staff. OIT's approach to combating these challenges is to create a culture and environment where people can "arrive, thrive and grow" their careers, becoming an employer of choice.

Attracting New Talent

In taking a new approach to attracting talent, OIT established a recruiting function that rivals the private sector. Through a process of targeted selection, networking, and social media, OIT has been able to identify and attract high performing candidates. Leveraging unique recruiting channels for veterans, their families, university graduates, alumni, and women was an integral part of the new approach; OIT attended 13 job fairs and recruiting events during the fiscal year, nine of which exclusively targeted veterans. In order to supplement our staff while also creating opportunities for others to develop new skills, OIT's Human Resources team (OIT-HR) implemented a Co-op program (similar



to an unpaid internship program). Through this program more than 20 unpaid Co-ops were sourced and placed, including two developers in mobile technology applications. The human resources team continues to seek and hire the very best talent in the IT field.

In addition to leveraging proven methods for hiring, OIT championed and adopted innovation to improve internal processes. New hiring goals were established to reduce the time between a job announcement and offer and our on-boarding process was streamlined through the introduction of web-based tools used by both the hiring managers and new employees.

Diversity: Women & Veterans

This year, OIT had a concerted focus on diversity hiring with an emphasis on recruiting and employing women and veterans. Through our efforts, we onboarded³ 60 women in FY13, a 45% increase over the prior year. OIT now has 39% women in our workforce, compared to an industry average of 26% nationwide.⁴ Our compensation measures are at full equality which is a remarkable metric as there is an 11% average gender salary gap for women in IT

³ Onboarding is the supportive process of assimilating new employees into the organization to help them acquire knowledge, skills and behaviors to quickly become effective members of the team.

⁴ National Center for Women & Information Technology. 2013. *Women and Information Technology By The Numbers*. [online] Available at: <u>https://www.ncwit.org/resources/numbers</u>

in the private sector nationwide.⁵ Of additional note, OIT was selected for participation in the National Center for Women and Information Technology (NCWIT) Pacesetters program and was the only public sector agency to receive this distinction in 2013. NCWIT is a two-year program in which executives commit their organization to increasing the number of women in their IT workforce through the use of innovative methods to attract new talent pools and to retain women who are at risk of leaving.

In support of the Governor's initiative to encourage veteran hiring, OIT onboarded 11 veterans including three disabled veterans this past year. OIT-HR established strong network relationships with Denver Army, U.S. Department of Veterans Affairs, VetSuccess (helping disabled veterans return to the workforce), LeaderQuest Careers (training veterans to enter the civilian workforce by applying their military skills differently) the Colorado Employers Support of the Guard and Reserves, Colorado National Guard, and the Buckley and Fort Carson military bases to continue expanding the candidate pipeline.

Organizing for Role Clarity and Better Service

OIT is a fairly young organization and as we continue to mature and as our customers' needs change, so must our organizational model adjust and evolve. In furtherance of our "Year of the Customer" and in alignment with IT best practices, we reshaped the organization to a establish a simple but impactful "Plan-Build-Run" model to create better clarity and synergies around roles and responsibilities and provide a better customer experience in engaging with OIT. The graphic below represents the Plan-Build-Run *Organizational Workflow*, which is built on ITIL⁶ and other industry standards and best practices. Please also refer to Appendix A to view the workflow companion - OIT's Plan-Build-Run *Functional Framework*.

⁵ National Center for Women & Information Technology. Ashcraft, C. and Blithe, S. 2010. *Women in IT: The Facts*. [online] Available at: <u>https://www.ncwit.org/resources/women-it-facts</u>.

⁶ ITIL is a widely adopted set of best practices for IT Service Management (ITSM) and aligning IT services to the needs of the business, and provides guidance on how to use IT to facilitate business change, transformation and growth. Source: <u>http://www.itil-officialsite.com/</u>



Information Security

Public and private sectors are faced with an ever-increasing threat landscape that places their information and technology assets at risk. State government is unique, however, in that it is being aggressively targeted due to the sensitive and valuable data contained within state systems. Between 2006 and 2011, there was a nearly 680% increase in significant cyber security threats against U.S. government systems. ⁷ OIT averts approximately 600,000 malicious events every day and the volume and sophistication of these attacks are increasing.

Secure Colorado

In June 2013, OIT's Office of Information Security (OIS) published a three year initiative called Secure Colorado. ⁸ This plan is the state's strategy for achieving quick and sustainable risk reduction at a reasonable cost, while promoting an environment of

technological innovation, adoption of open source and cloudbased technologies, and the sharing of data where appropriate. Secure Colorado outlines the strategic goals and initiatives of the Colorado Information Security Program to safeguard the state's information assets and assure the



⁷ U.S. Government Accountability Office. April 24, 2012. *Cybersecurity: Threats Impacting the Nation* (GAA-12-666T). [online] Available at: <u>http://www.gao.gov/products/GAO-12-666T</u>.

⁸ Available on the Colorado Information Marketplace at data.colorado.gov (specifically, <u>https://data.colorado.gov/Colorado-OIT-Technology-Standards/Strategic-Plan-Secure-Colorado/m7hs-7343</u>).

confidentiality, integrity, and availability of the information Coloradans have entrusted to its state government.

Secure Colorado is comprised of four strategic goals:

Protection: Protect State of Colorado information and information systems to assure that the confidentiality, integrity, and availability of all information is commensurate with mission needs, information value, and associated threats.

Research and Development: Research, develop, and employ innovative and sustainable information security solutions to address Colorado's cyber security challenges.

Partnerships: Develop and foster key partnerships to improve information sharing, reduce information security risk, and promote innovation and collaboration.

Compliance: Comply with applicable information security and data privacy laws and regulations.

Central to the plan is the phased implementation of the <u>SANS Twenty Critical Security</u> <u>Controls</u>. In the first phase, OIS is implementing a subset known as the "First Five" which are 1) Inventory of Authorized and Unauthorized Devices, 2) Inventory of Authorized and Unauthorized Software, 3) Secure Configurations for Hardware & Software on Laptops, Workstations, and Servers, 4) Continuous Vulnerability Assessment and Remediation, and 5) Malware Defenses. Organizations have reported that when successfully implemented, these first five critical controls can quickly and cost-effectively reduce risk to its information technology assets by as much as 85 - 90%. Implementation is expected to be completed in October 2013, putting Colorado on track to be the first state to implement the controls.

Additionally, OIT's security operations team implemented enterprise Information Security as a Managed Service to defend, protect and provide state agencies with continuous information security monitoring, management and incident response. This layer approach protects the state's 18 different networks, information and approximately 1,800 applications. With hundreds of thousands of attacks on the state's network per day, OIT is actively training, managing and monitoring to safeguard today's systems and look at business best practices to protect the systems of tomorrow.

Ultimately, the best resource for protecting state assets is state employees. In FY13, more than 95% of state employees received training on good basic information security awareness and hygiene.

Project Management

House Bill 12-1288

The 2012 Colorado General Assembly enacted House Bill 12-1288⁹ (HB12-1288), legislation which helps ensure the long-term sustainability of IT systems and that the full cost of ownership is considered - from idea to the eventual system retirement - *before* a project is initiated and approved. Among other things, this bipartisan bill specifies that IT project budgets and plans include things such as security, project management, business continuity, and disaster recovery. The bill also establishes the authority of OIT to establish and implement criteria and enhanced governance that will contribute to project success.

OIT's Enterprise Portfolio Project Management Office (EPPMO) formed a working group with representatives from eight state agencies to evaluate various standards and methodologies that would enable compliance with the stipulations in the bill and then made a recommendation on the processes, policies, procedures, standards and documentation. To better support state agencies in complying with the bill's requirements, OIT has extended Governance oversight not only to Major IT projects but also to all IT projects where there is a high risk or architectural impact. The oversight of these projects will follow the same stage gate approach and controls that are incorporated into the existing Executive Governance Committees (EGC).¹⁰ Our new processes are now setting the stage for successful project scoping, planning, execution and delivery.

Lean Program

Although OIT has previously delivered Lean¹¹ projects, OIT officially kicked off a formal Lean Program in February 2013. A core group of employees from across OIT's functional areas were selected to receive training and are working on a "train the trainer" concept to educate employees across the organization. Using best practices, this core group is also responsible for strategically selecting, aligning and prioritizing ideas that will result in Lean projects for the fiscal year.

One of the first Lean events to be implemented in FY13 was a Print Support project, the goal of which was to improve the consistency and level of support customers experience when contacting OIT's Service Desk for printer support. This effort resulted in increasing customer satisfaction from 78% to 90%. In June 2013 a Lean "Hardware Provisioning" event was held to improve the customer experience by reducing the time to provision end-user

⁹ Codified in \$24-37.5-102, et seq., this bill went into effect on August 8, 2012.

¹⁰ The EGCs serve as advisory boards for the state's largest information technology projects and are responsible for making recommendations to OIT regarding changes with project funding, scheduling, staffing and other issues that could impact a project. For more information on HB12-1288 and EGCs, please see our EPPMO website at www.colorado.gov/oit/eppmo.

¹¹ Lean is a five step, systematic approach that helps organizations identify and eliminate waste and create more value and savings. Lean provides the principles and tools to develop a culture that encourages and enhances employee creativity, innovation and problem-solving to use existing resources to create more value.

devices such as laptops, desktop computers, tablets and smartphones. OIT is also engaged in an ongoing LEAN project partnership with the Department of Personnel & Administration called the Multi-Function Device Program to create a business case to provide printing solutions at an enterprise level across the state.

Geographic Information Systems (GIS)

Geographic Information Systems (GIS) provide tools to manage and analyze information about the relationship of geographic locations with events. This is important for multiple agencies whether it means mapping and analyzing the availability of broadband service around the state or the locations of emergency incidents, such as wildfires. In fact, during the summer of 2013, GIS enabled OIT to provide information about the number of state employees and/or state-owned buildings in the areas impacted by the recent wildfires. This was possible only with the combination of critical spatial information such as address points and the wildfire perimeters and evacuation zone boundaries.

Many state agencies use geospatial information today (e.g., the Departments of Transportation, Public Health and Environment, Natural Resources, Agriculture, and Public Safety) and more are interested In leveraging this type of information in the future (e.g., the Colorado Energy Office and the Departments of Human Services and Revenue). In FY13, OIT embarked on an initiative to provide coordinated services to support the GIS efforts of state agencies and thereby save them time and money. OIT is providing the infrastructure backbone and GIS expertise to enable the State Land Board, Department of Agriculture, History Colorado and the Colorado Energy Office to use GIS technologies and to make their geographic information available to the public. OIT is also providing a centralized distribution point for spatial information that is used by multiple agencies. We have nurtured productive partnerships with local governments to share their spatial information in order to provide a broader picture, facilitate state agencies' use of these data and provide them with assistance as they further develop their spatial information capabilities at the local level. OIT has also been requested to serve as a conduit of critical local and state based data to some federal agencies. For example, at the request of the Bureau of Land Management (BLM), OIT is assembling and sharing address data with the federal firefighting community in preparation for wildfire response.

OIT's Financial Services team oversees all financial activities of OIT and all IT-related financial activities for the Executive Branch. Financial Services assists with IT planning, budgeting, procurement, contracting, accounting, and reporting. Specific duties also include:

- IT Storefront management and administration
- Management of enterprise budget, accounting, procurement, and contracting processes
- Capital investment planning, financial modeling, and cost reduction/containment activities
- Vendor Management Office
- Maximizing IT spend across the state
- Consolidation of enterprise-level contracts and procurements
- Financial analysis and trending

Cost Savings / Cost Avoidance

Consolidation and implementing newer technologies has afforded OIT the opportunity to attain substantial cost savings through such activities as renegotiation and/or consolidating enterprise contracts, consolidating and/or decommissioning hardware and software licenses, and moving to cloud-based services. Through these deliberate actions, OIT has achieved more than \$4.1 million in cost savings and avoidance in FY13. This represents more than a 36% increase over our goal of \$3 million.

Appropriation Structure

OIT operates solely as an internal service organization, and as such, is almost 100% funded via re-appropriated funds, and bills 100% of its costs and activities to users in accordance with federal and state governmental accounting standards and guidelines. OIT recalculates its services rates on an annual basis and bills it services to departments on a cost reimbursement basis. OIT is not a profit center.

Oversight

OIT is audited annually by the Office of the State Auditor (OSA) and the U.S. Department of Health and Human Services, Division of Cost Allocation (DCA). The OSA audits OIT's financial transactions and controls as part of the state's annual financial statement audit. Additionally, OIT's billing methodology is audited every year by DCA to ensure that our rate setting methods are sound, that OIT is billing each department in accordance with set rates, and that federal funds are not being used to subsidize state general or cash funded programs. OIT is proud of the fact that we have had no major findings from this annual federal review for the past 11 years!

IT Spend in Fiscal Year 2012-13

The total IT spend across Executive Branch departments has averaged nearly \$300 million in each of the past five fiscal years. These expenditures include costs that departments dedicate annually to OIT services (e.g., data center, network connectivity, long distance, etc.) as well as additional and significant costs associated with hardware, software (including lease costs, purchases, maintenance, support and licensing), and IT professional services. FY13 IT spend by department is summarized in the table below.

	State FTE	Contracted Professional		
DEPARTMENT	Personal Services	Services	Operating*	Total Spend
HUMAN SERVICES		\$ 14,201,314	\$ 65,121,500	\$ 79,322,814
REVENUE		\$ 7,336,390	\$ 25,809,704	\$ 33,146,094
HEALTH CARE POLICY		\$ 31,373,682	\$ 2,601,331	\$ 33,975,012
TRANSPORTATION		\$ 5,640,095	\$ 20,017,098	\$ 25,657,193
LABOR		\$ 3,032,065	\$ 19,069,043	\$ 22,101,108
NATURAL RESOURCES		\$ 1,771,991	\$ 13,798,581	\$ 15,570,573
CORRECTIONS		\$ 221,048	\$ 16,337,252	\$ 16,558,300
PUBLIC SAFETY		\$ 572,051	\$ 17,852,619	\$ 18,424,670
HEALTH		\$ 1,700,991	\$ 10,597,396	\$ 12,298,388
EDUCATION		\$ 5,605,385	\$ 2,795,180	\$ 8,400,565
REG AGENCIES		\$ 2,071,497	\$ 4,223,424	\$ 6,294,921
PERSONNEL		\$ 850,721	\$ 3,717,011	\$ 4,567,732
GOVERNOR		\$ 707,667	\$ 3,089,697	\$ 3,797,364
HIGHER EDUCATION		\$ 223,920	\$ 22,661,475	\$ 22,885,395
LOCAL AFFAIRS		\$ 60,221	\$ 1,313,085	\$ 1,373,306
AGRICULTURE		\$ 94,696	\$ 1,718,344	\$ 1,813,041
MILITARY AFFAIRS		\$ 1,000	\$ 607,797	\$ 608,797
TOTALS FY 2011-12	\$-	\$ 75,464,733	\$231,330,537	\$306,795,271
OFFICE OF INFORMATION TECH**	\$ 74,507,106	\$ 26,636,641	\$ 46,785,561	\$147,929,308

Information Technology Expenditures Fiscal Year 2012-13

*Operating includes billings to departments for OIT staff, telecomm & Capital Construction

**Department's Operating Spend includes OIT Common Policy charges

Information Technology Budget

The bar graph below identifies the distribution of nearly \$49.6 million in FY13 hardware, software and maintenance expenditures by department.



Vendor Management Office

Vendor management is a discipline that enables organizations to control costs, drive service excellence, and mitigate risk to gain increased value from their vendors throughout the deal lifecycle. A well managed vendor relationship will result in increased customer satisfaction, reduced costs, better quality, and better service from the vendor. With that in mind, in FY13 OIT created a Vendor Management Office (VMO) to coordinate the evaluation of third-party providers of information technology goods, services, and systems for the State of Colorado and to support the statutory requirements under C.R.S. §24-103.5-101 and §24-109-101.

The responsibilities of the VMO include:

- Support the establishment of guidelines for the state to help create the appropriate blend of IT outsourcing and insourcing opportunities
- Set vendor risk management policies and create performance level expectations for our strategic vendor partners
- Oversight and support for contract negotiations
- Supervise and evaluate the day-to-day interactions and establish long term relationships with the vendor community
- Monitor the length and substance of contracts during the contract life cycle

Additionally, the VMO is helping state agencies select the right vendors to meet their needs; categorize vendors to ensure the most effective contract type, establish service levels, define vendor metrics and relationships; and determine the ideal number of vendors on a project. This will in turn help OIT and our agency partners meet business objectives, minimize potential business disruption, avoid deal and delivery failure, and ensure more sustainable multi-sourcing opportunities; while driving the most value from partners and vendors.

I2E– Information Technology Financial Reform

OIT began an initiative known as "IT Innovation Effort" (I2E) to reform agency IT budgeting and to develop a sustainable, quantitative, transparent, and effective IT financial framework. The goal of I2E is to replace the current, reactive "break/fix" procurement model and enable us to be more proactive and strategic in how we plan, prioritize, and invest in IT spending. OIT is partnering with the Office of State Planning and Budgeting (OSPB) and state agencies on this effort. During FY13, an advisory group was created to provide input and insight into the current OIT budgeting and billing processes. In addition, a Request for Proposal was released to conduct an IT billing study of existing centralized information technology billing and allocation methodologies employed by other states and to help develop alternative methodologies for the OIT. Going forward into the new fiscal year, OIT will be more aggressive in establishing upfront engagement and governance over IT projects, contracts and spending statewide. In addition, OIT will continue to work OSPB on developing a proactive strategy for on-going investment in IT.

OIT Storefront

OIT launched the OIT Storefront in July 2012 in order to optimize financial decisions by leveraging statewide purchasing power; establish common standards for hardware, software and IT service purchases; comply with required security architecture standards; implement efficiencies in deployment and support of hardware, software and IT services; and provide for improved adoption of project management, vendor management and asset management. During FY13, approximately \$200 million was processed through the OIT Storefront and the approval cycle was reduced from 10 days to less than five (5) days on average.

The Storefront continues to evolve and we recently developed a new OIT Storefront web front which includes one-stop shopping for some of the services OIT provides. We will continue to enhance and expand the Storefront; changes in FY14 will include the addition of IT asset reporting and services to easily deploy equipment and set-up user access for new state employees.

SECTION 3: IT ECONOMIC DEVELOPMENT & BROADBAND STRATEGY

IT Economic Development

Through private and public partnership, Colorado will be recognized as a nucleus for innovation, technology, and economic growth -- the "Silicon Mountain of the IT Community."

In 2011, the state CIO took on the added responsibility of becoming Secretary of Technology. This new dual-role was created to provide specific industry focus on attracting, growing and retaining information technology (IT) jobs and businesses in Colorado, in addition to being responsible for overseeing all information technology services for the state. This move recognized the importance and strategic prominence that the technology industry has to the state's economic future. The Secretary of Technology builds economic development opportunities for IT businesses by promoting Colorado as a headquarters location for new and existing technology companies and by attracting technology companies of all sizes to relocate to, or expand within, Colorado. In close collaboration with the Office of Economic Development and International Trade (OEDIT), our commitment to job creation has resulted in 7,253 new IT jobs being announced in Colorado by 46 companies this past fiscal year. These job announcements do not reflect the actual job growth for the year, but are a leading indicator of the positive economic activity in building the IT ecosystem across Colorado.

OIT, OEDIT and the IT Economic Development Advisory Council (ITEDAC)¹² have continued the partnership to recruit new companies to Colorado. In FY13, eight IT and/or technology-related companies or organizations relocated their headquarters or expanded to Colorado. Annually, OIT takes the lead on coordinating IT economic development trips to other states to develop relationships with key decision makers who have a vested interest in Colorado, either with current operations, future growth strategies or supply chain opportunities, and to bolster their commitment to Colorado. In November 2012, a small delegation of seven Colorado representatives traveled to the Silicon Valley area in California for the annual IT economic development trip and met with six companies and held a reception at Stanford University for several venture capital companies, site selectors and IT companies in the

¹² In 2011, OIT formed the IT Economic Development Advisory Council (ITEDAC), a public-private council comprised of senior IT business leaders to provide advice and feedback on proposed economic development strategies, IT ideas and solutions as well as to brainstorm job creation solutions.

area. During this trip, part of the delegation met with Google and uncovered an opportunity for Colorado to host a Google for Entrepreneurs Day. This idea became a reality on August 27, 2013. The event was wildly successful and had over 300 attendees. In April 2013, a delegation of 10 Colorado representatives traveled to Seattle and in a 2 $\frac{1}{2}$ day period met with 11 different companies and engaged in a venture capital roundtable. The discussions uncovered a variety of opportunities, led to the identification of local company leadership contacts, and provided the delegation with an opportunity to share Colorado's strengths and advantages with companies and venture capitalists who were not familiar with what Colorado has done and is doing to strengthen its business environment.

The IT Economic Development team at OIT has also developed a framework for a Public-Private Partnership (P^3) Job Training Program that will bring interns through a job rotation program between the state and prominent technology companies. We commenced the program this year with our first two interns at the state in partnership with Google. One of the most common challenges heard from technology companies is that Colorado produces a lot of IT or technology graduates - it ranks high as the 3rd smartest state in the nation, according to CNNMoney.com - however, companies often struggle to find people with the right amount and type of hands-on technical experience. The overall intent of this program is to proactively address the lack of IT professionals with relevant, on-the-job experience by providing them with real world experience in a variety of important IT areas, which are chosen in accordance with the needs of our private-sector partners. This program facilitates the development of a more skilled technology workforce in Colorado with handson experience while at the same time helping OIT and the private sector attract new upand-coming talent. There is already a list of several other companies looking to participate in this program, and the team will be formalizing, branding and expanding this program in FY14.

Enterprise-to-Emerging (E2E)

Startups are always looking for opportunities to connect with big corporations to form strategic partnerships and other business development relationships, but they constantly run into the problem of finding the "front door" to the companies they are trying to reach. Additionally, an increasing number of enterprise companies want to turn to startups for fresh ideas, disruptive technologies, and implementation, but don't know how to reach them. In other words, as was discussed during the FY13 COIN Summit, start ups need to scale and companies with scale need to start up. Enterprise corporations often find that the startup industry is extremely fragmented, changes too quickly and is inconsistent in the introduction process. Colorado has seen a tremendous growth in this space with 122 startups in 2012; that equates to approximately one startup every 72 hours.¹³ Further, a

¹³ Built in Denver. June 2013. 2012 Colorado Startup Report: "Colorado had developed into a state that every investor should watch. [online] Available at: <u>http://www.builtindenver.com/blog/2012-colorado-startup-report</u>.

study by Engine¹⁴ has ranked Boulder first across the nation in the number of tech startups per capita. Three other Colorado cities made the top 10: Ft. Collins-Loveland was ranked 2nd, Denver was ranked 6th and Colorado Springs was ranked 9th.

In Colorado, we're committed to spurring strategic partnerships and economic development in the technology industry marketplace. The explosion in innovative startup activity is exciting, but with everything happening so fast, it can be hard for an enterprise to stay connected with what is going on. To make it easier for the enterprise companies to connect to emerging companies and vice versa, OIT, in partnership with the Colorado Technology Association (CTA) and Startup Colorado, is launching a new program called Enterprise-to-Emerging or E2E. Each partner has a specific role with CTA focusing on those enterprise companies that wish to participate, Startup Colorado focusing on the startup companies and OIT promoting the E2E program as an economic driver for the continued growth of the technology ecosystem. To facilitate the connection, the partnership will leverage the Corporate Connections platform which connects America's largest companies with high-growth, innovative startups by providing an easy way for startups to share detailed information about their company and request an introduction to a corporation that matches their profile. Conversely, corporations will have data to help understand the reason for the introduction and strength of the connection. Additionally, CTA, Startup Colorado and OIT are developing an event that will bring together enterprise and emerging companies.



Broadband

The availability of robust broadband internet access is critical to economic development, provides widespread access to essential services such as health care and education,

¹⁴ Engine.is. August 2013. All Over The Country, New and Young High-Tech Firms Are Key Job Creators. [online] Available at: <u>http://engine.is/blog/posts/all-over-the-country-new-and-young-high-tech-firms-are-key-job-creators</u>.

facilitates the delivery of government services and promotes civic engagement. In fact, according to the Internet Innovation Alliance, a \$10 billion investment in broadband would produce nearly 500,000 new jobs and that local economic growth and secondary investment enabled by broadband expansion is 10 times the initial investment.¹⁵ Further, a study conducted by Jed Kolko, the Public Policy Institute of California, found a positive relationship between broadband expansion and local economic growth. Employment growth rates are about 6.5% higher in communities that have one to three providers compared to none and that the unemployment rate in communities with multiple providers is 1.2% lower than communities without broadband access.¹⁶

OIT is working on several fronts to bridge the digital divide and increase the availability, affordability and capacity of broadband to all Coloradans.

- OIT pursued and was awarded grant funding in the amount of \$175,000. The Colorado Performance Assurance Program (CPAP) provided a grant that will allow OIT to perform a statewide broadband asset inventory and develop a searchable database. The purpose of this database will be to better enable the public and private sectors to capitalize on existing public infrastructure to expand the coverage and capacity of broadband services throughout the state.
- In working with local communities across the state, OIT formed three new Local Technology Planning teams (LTPTs)¹⁷, one for Clear Creek and Gilpin counties, one for Las Animas and Huerfano counties and one for Park county, bringing the total number of LTPTs to 19.
- OIT's continued efforts to engage broadband providers resulted in about a 51% increase in the number of providers reporting data for the state's broadband coverage map (accessible at http://maps.co.gov/coloradobroadband/). In addition, 87% of all broadband provider data is now mapped. This increase of 51% gives Coloradans critical information for making data-based business decisions.
- OIT established the Colorado Broadband Knights of the Roundtable, a collaborative group of local, regional, and state representatives, to foster coordination and collaboration of broadband efforts across the state and provide input on the state's broadband strategy.
- OIT is developing a broadband information portal where a broadband community of practice can share ideas and obtain valuable information. This multi-dimensional portal will include a wealth of information, including funding sources and regional

¹⁵ Internetinnovation.org. 2013. *Special Reports* | *Internet Innovation Alliance*. [online] Available at: <u>http://internetinnovation.org/library/special-reports/10-facts-about-broadband-and-jobs/</u>.

¹⁶ Public Policy Institute of California. 2010. *Does Broadband Boost Local Economic Development?* [online] Available at: <u>http://www.ppic.org/content/pubs/report/r_110jkr.PDF</u>.

¹⁷ LTPTs are local and regional groups made up of community leaders, private citizens and business representatives who are focused on identifying broadband needs and developing unique solutions for their communities.

plans that will enable coordination among all stakeholders to create a comprehensive solution to solve the broadband problem.

• We also established relationships with a number of interest groups including the Colorado Farm Bureau, Colorado Rural Workforce Development, Club 20 and Colorado Telehealth. These relationships are crucial as we work to expand broadband throughout the state and ensure that all perspectives and voices are included as we address statewide issues.

Broadband Speed Test

OIT is also engaging residents and citizens in "crowdsourcing" broadband data that is being reported by providers. We do this by making available an online speed test (available at http://maps.co.gov/coloradobroadband/) that can help residents find out just how fast their web connection is running in comparison with what their Internet provider indicates they should be receiving in their area. Taking the speed test also allows OIT to validate the data and thereby develop a more accurate understanding of what broadband service is like from an end-user perspective. We began tracking the number of speed tests taken each month in September 2012 and since then through the end of FY13, over 3,500 speed tests were taken. FY14 is already off to a banner start with over 5,700 speed tests taken in the month of July 2013 alone due to a big media push.

Distance Learning

OIT continues to support Colorado's schools by bringing new technologies into the classroom. In rural school districts, limited resources prevent students from having access to a full selection of advanced or specialized courses that the larger, urban school districts provide. Distance learning makes it possible for students to have access to a wealth of resources that otherwise might not be possible. In FY13, we successfully configured and installed 14 initial installations of distance learning equipment in school districts across Colorado. Distance learning also enables us to reach beyond the borders of our state. For example, one of these installations allowed a school in Saguache County to connect with a sister school in Ghana. Students from both schools were able to interact and share information, learnings, songs and more.

FirstNet

OIT's IT Economic Development & Broadband Strategy team began planning for the first

nationwide Public Safety Broadband Network (PSBN) being implemented through the First Responder Network Authority (FirstNet)¹⁸ by partnering with the Colorado Department of



Public Safety (CDPS). We have applied for and received the first round of planning grant

¹⁸ The Middle Class Tax Relief and Job Creation Act of 2012 created FirstNet as an independent authority under the National Telecommunications Information Administration (NTIA) to establish the first high-speed, nationwide public safety network that enables first responders to better communicate with one another. Source: http://www.ntia.doc.gov/category/firstnet.

funds, established a steering committee for the funds, and are participating in regional FirstNet meetings. As the state's primary point of contact to FirstNet, OIT has also begun to establish the necessary relationships for success of this critical endeavor.

The State and Local Implementation Grant Program (SLIGP), managed through the National Telecommunications and Information Administration (NTIA), is designed to help states plan for the implementation of the nationwide PSBN. Colorado was one of the first five states to receive these funds which are designed to help Colorado develop the proper governance, perform education and outreach, and interact with FirstNet to design the specific implementation for Colorado. When completed, the PSBN will provide Colorado's first responders with a robust and dedicated wireless network to serve their unique needs.

SECTION 4: KEY IT INITIATIVES

Colorado Benefits Management System (CBMS)

OIT continues to make great strides in the modernization of the Colorado Benefits Management System (CBMS), the system that determines eligibility and manages benefits for food, health and housing assistance for our state's most vulnerable residents.

In FY12, the Executive Steering Committee (ESC) approved a comprehensive 18 Month Work Plan to stabilize, upgrade, and modernize the CBMS system, as well as improve the end user experience. The work in FY12 to make system improvements included major upgrades and the move of the entire system to a web-based platform, which allowed us to focus our FY13 efforts on enhancing the end user experience and continuing to improve timeliness. This work has resulted in 90%+ of all transactions now being processed in 4

seconds or less, a 30% improvement in system timeliness and a 41% reduction in service desk tickets. Users are now able to access the system for benefit approval much faster and county workers are better able to deal with increasing caseloads by reducing the amount of time it takes to deliver benefits to needy individuals and families.



Furthermore, timeliness of benefits eligibility is now greater than 95% for Food Assistance/Colorado Works and between 90-95% for Medicaid. These enhancements have also enabled OIT to track and monitor all system processes.

Other enhancements launched in FY13 include:

- PEAK for Medicaid which gives us a web-based portal for online access and connection to our statewide customer base
- CBMSColorado.com a public-facing website that ensures project transparency to the public, legislators, and community-based organizations
- CBMS Community Internet Portal, the "one stop shop" for CBMS Users and Administrators to get information on releases and system changes, has helped improve the system and the customer experience
- Establishment of the necessary linkages in CBMS to allow the Affordable Care Act and Connect for Health Colorado to be operable

These improvements have dramatically elevated the state's relationship with the counties who must use the system and the public, for the first time in many, many years, is beginning to regain confidence in this critical program.

Google Apps for Government

On October 8, 2012, more than 26,000 state employees were introduced to a new way to communicate and collaborate in the world of cloud computing. Acting on a challenge from

the Governor to simplify government, OIT replaced the state's 15 siloed and disparate email systems with Google Apps for Government, a single, cloud-based email and calendar platform. This solution enabled the state to migrate Executive Branch agencies from the legacy systems spread over 50 servers to a single solution. The migration and consolidation was completed within just 10 months after the selection of Google Apps for Government was announced.

The initial intent was to provide the state with a common email and calendaring platform to facilitate consistent calendar sharing and email addressing, reduce cost, and to leverage 21st century technology solutions offered through the cloud. A host of other Google-provisioned tools were subsequently rolled out and supported in the second half of FY13. For example, with Google Docs, state employees are now empowered to easily share and collaborate on work product in progress and streamline workflow. Employees are also taking advantage of Collaboration Sites, Google Hangouts On Air (video conferencing), instant messaging/chat, point-to-point video, mobile access, archiving, and encryption. In total, there are 67 applications that the state can leverage through Google Applications for Government at no additional cost. This change in technology has also enabled many agencies to more easily comply with and enhance information security and improve current policies, procedures and processes, including data archiving, data retention, and e-Discovery; data sharing, video collaboration, etc.

The ancillary benefits of the Google transition are extremely innovative to government. The cost savings and future cost avoidance, enablement of collaboration tools and ease of use from any device, anywhere, at any time, are examples of how this solution is enabling the effective, efficient and elegant delivery of government services.

WyCAN

Colorado is the lead state of a four state consortium called WyCAN (Wyoming, Colorado, Arizona and North Dakota) which is focused on using a federal grant to modernize and build a new unemployment insurance (UI) platform. The new platform will replace the respective states' aging legacy systems with the nation's first ever Unemployment Insurance cloud-based service.

The cloud-based solution will combine multiple systems into a single, multi-tenant UI Tax and Benefits system that is extensible and configurable by business users rather than developers. It will also allow more states to join for a fraction of the normal cost of building a new UI solution, giving smaller states a lower cost structure to improve affordability and sustainability.

COFRS Modernization Project

In partnership with the Department of Personnel & Administration (DPA), OIT has embarked upon an exciting journey to modernize the Colorado Financial Reporting System (COFRS). As the state's accounting and financial management system of final record, this aging mission critical system processes approximately \$70 billion in annual expenditures and revenues. Despite its successful performance over the past 23 years, it has become costly to maintain and increasingly difficult to keep current with improvements in technology.

COFRS is used by nearly every state agency¹⁹ and this project supports Colorado's longstanding commitment to fiscal discipline financial accountability, government transparency and cost-beneficial controls. The new system, called CORE,

will be a modern, web-enabled, vendor-hosted Enterprise Resource Planning (ERP) system that will not only provide the necessary accounting and budgeting functions for the state, but will also enable greater transparency of financial matters

and reporting that is currently unavailable under the existing system. Additionally, the system will significantly improve financial controls and forecasting capabilities across the state along with the ability to support programs through self-service while reducing major operational risks and costs. CORE is expected to be fully implemented in July 2014.

Big, Open and Secure Data

Colorado Information Marketplace (CIM)

States collect enormous amounts of data and are faced with the daunting task of how to harness it and make it available. Unlocking data creates the opportunity to improve the delivery of services in unprecedented ways,²⁰ providing a platform for crowdsourcing and citizen engagement. The Colorado Information Marketplace at data.colorado.gov is an award winning approach to data sharing between agencies and the public and is providing Colorado with new tools to analyze and harness big data assets.

Since CIM was launched in June 2012 there has been a 212% increase in the number of datasets posted and in FY13, there were nearly 165,000 page views. The success of CIM has led to cities within Colorado, including Denver and Arvada, reaching out to join CIM in order to post their own information and gain more exposure within the state of the data available. Additionally, the City and County of Denver is reusing the CIM model to build templates to fit their own privacy and sharing structures. Imperative to enabling mobile development, the CIM platform was also used to make data available to coders who participated in the state's first annual Hack4Colorado, a mobile application development



¹⁹ All state agencies use COFRS except the Colorado Department of Transportation and institutions of higher education. These agencies have implemented their own ERP systems that through an interface provide summarized accounting information to COFRS.

²⁰ For example, in the public health arena, by consolidating and tapping into the knowledge that is often buried in multiple healthcare and social services databases, agencies can spot public health trends, deliver care to vulnerable patients and develop proactive responses to health risks. The Illinois Dept of Healthcare & Family Services is working on a data analytics project with a goal to improve birth outcomes for children and mothers receiving WIC (Women, Infants and Children program) and Medicaid benefits. The project combines data from the Census, Medicaid and WIC with alcohol and substance abuse and other health information to identify at-risk pregnancies and develop appropriate services for women and children.

marathon, held over the weekend of May 31, 2013, in conjunction with the National Day of Civic Hacking.

CIM takes best in breed ideas from the public sector to make the data accessible in a reusable, transparent and trusted environment. It's about sharing, requesting and rating data sets that can be used in new and different ways. Our goals for CIM include:

- improving information availability, business intelligence and analytics between agencies and increasing government transparency of public information
- reducing the cost and redundancy of recapturing data, increasing the availability of real time reporting
- increasing citizen access to data in one easily accessible site
- enabling economic development and encouraging innovation by providing entrepreneurs opportunities to develop mobile and web applications
- increasing information security by following industry, federal and state standards and practices

Government and the public alike can benefit from the open sharing of data. Government agencies will find that protected information can be easily shared between government agencies and they will have access to information that will transform the decision making process through better use of analytics and reporting. The public will have access to previously unavailable information which they can locate, sort, download, and easily share. The continued support and participation of public sector agencies will ensure that this fledgling platform grows into a robust repository of open data.

A Case in Point – Relevant Information to Strengthen Education

As part of an effort to share data better, OIT and the Colorado Department of Education (CDE) worked together to implement the Relevant Information to Strengthen Education (RISE) system to provide secure information about students, educators, and schools to support student success from preschool to workforce readiness. RISE was made possible by the Statewide Longitudinal Data Systems (SLDS) Grant Program, as authorized by the Educational Technical Assistance Act of 2002 Title II of the statute that created the Institute of Education Services (IES). The program is designed to aid state education agencies in developing and implementing systems intended to enhance the ability of states to efficiently and accurately manage, analyze, and use education data. RISE will help states, districts, schools, and teachers make data-driven decisions to improve student learning, as well as facilitate research to increase student achievement and close achievement gaps.

OIT created the system that links data from six disparate agencies, allowing authorized personnel to securely view and share the data. In the initial phase, the Colorado Departments of Education, Higher Education and Human Services are the first to use the linked data to gain a better understanding of individual student needs, inform teacher preparation programs, and strengthen the educational system in Colorado. The Department of Labor & Employment and Department of Corrections will be the next agencies to be linked as we continue with this exciting and important initiative to improve government services and policymaking through cross-agency data sharing.

Citizen Engagement Platform as a Service (CEPaaS)

Effective business models require a comprehensive view of their customer base, enabling a proactive customer lifecycle management. While the private sector does this well, government customer management solutions are immature, un- or under-developed and duplicative. As demonstrated in the graphic below, government agencies have similar needs but rather than creating an enterprise solution, agencies continue to build and manage siloed systems. This occurs not only across departments but across programs and services. As a result, the public sector is not meeting our customers' growing needs.

Government needs an innovative and elegant Citizen Engagement Platform that includes a marketplace for government solutions. Tomorrow's government platform is predicated on the use of a common platform specifically built for governments to provide holistic, comprehensive customer lifecycle management services. A technology innovation such as cloud-based, standardized Citizen Engagement Platform as a Service (CEPaaS) will transform governments across the United States and beyond.



TODAY'S MODEL

TOMORROW'S MODEL



In 2012, Secretary Russell and Chief Technology Officer Sherri Hammons co-authored a white paper on this concept and OIT has since then laid the groundwork with the aforementioned launch of PEAK for Medicaid. The cost savings in hardware and software alone reside in the millions of dollars. However, the solution requires a public-private partnership with leadership, expertise, innovation and collaboration across the technology industry and all levels of government. The software community can use this platform to build out agency specific solutions that integrate seamlessly through standard web-based services. Application vendors can build specific capabilities on top of the platform for various services and products, while the Citizen Engagement Platform will likely require collaboration within many facets of the technology industry, including software and hardware vendors.

Government should run effectively, efficiently and elegantly, just as successful private sector companies do. Decreasing costs while increasing citizen satisfaction is a win-win for any business, but it is truly transformative for government. A public-private collaboration for CEPaaS is a response to growing citizen concerns around government spending and waste, while offering citizens a way to positively and proactively interact with government entities. And that makes sense for us all.

The Colorado Cloud

In June 2013 OIT launched the state's first internal private cloud²¹ which will enable further consolidation and virtualization of the servers and storage equipment used to support the applications that serve Colorado's residents and state employees. The Colorado Cloud has significantly improved our IT infrastructure and provides the following benefits:

- Creates a more stable and standard IT environment;
- Increases system uptime;
- Enhances quality of service by providing redundancy and reduced time to deliver services;
- Virtual environments as landing zones for applications can be turned up in days;
- Standardization eliminates the support of disparate systems; and
- Enables automation of routine tasks.

Bring Your Own Device (BYOD)

OIT has published a "Mobile First" strategy, which means that when we initiate and/or modernize any service, we will do so ensuring that the application is accessible via a mobile device. Given that the traditional PC market for computers is declining while shipments of mobile phones are increasing, this is becoming ever more important. In April 2013, Gartner²² reported that the worldwide shipment of mobile phones and tablets in 2013 will exceed 2 billion whereas just over 315 million desk-based and notebooks will be shipped in the same time period. This is a decline of 7.6% from 2012 and Gartner projects that the numbers will continue to decline with just over 271 million desk-based and notebooks being shipped in 2017 while the number of mobile phones and tables are expected to reach nearly 2.6 billion.²³

Today, many state employees use a mobile device on a daily basis and whose jobs require mobile access to conduct state business. OIT recognized there was a need to supplement the use of state-issued telephone devices (e.g., mobile, cell, smartphones) with a Bring Your Own Device (BYOD) program. The BYOD Program allows qualified employees the option to turn in their state-issued device in favor of utilizing their own personal telephone devices to access state resources, data and information. It also allows employees who may not have a state-issued device, to utilize their own device to access basic state information so that they can work remotely or in the event of an emergency. An Acceptable Use Policy was also developed in conjunction with the rollout of the BYOD program that includes expectations around the appropriate use of employee owned devices

²¹ Private clouds are virtualized cloud data centers within an organization's firewall and which are restricted for the exclusive use of the organization whereas a public cloud is provisioned for use by the general public.

²² <u>Gartner</u> is a leading information technology and research advisory company.

²³ Gartner.com. 2013. *Gartner Says Worldwide PC, Tablet and Mobile Phone Combined Shipments to Reach 2.4 Billion Units in 2013.* [online] Available at http://www.gartner.com/newsroom/id/2408515.

and access to state information. Allowing the use of personal communications devices creates a convenience for the workforce, eliminates the need to procure digital devices for all employees, and increases security.

Colorado State Network (CSN)

Great strides were made in FY13 to further the massive undertaking of replacing the state's aging wide area network known as the Multi-Use Network (MNT) with the Colorado State Network (CSN). This project began in June 2011 when OIT entered into a managed service contract to upgrade, modernize and improve the state network which touches all 64 counties and connects nearly 100 public-sector entities statewide. CSN provides the state with modern technology and scalable bandwidth that is more reliable, redundant, secure and sustainable than its predecessor. It also offers the flexibility and capability necessary to meet the state's needs by providing a statewide foundation that is vital for future services and upgrades.

At the end of FY13, the project was 60% complete with 395 of the 659 sites having been converted. Customers are reporting better IT service, less downtime and greater speed of applications resulting in the ability to provide more responsive service to Coloradans. Applications like the Colorado Benefits Management System (CBMS), Driver's License offices and many more, are experiencing solid performance with reduced error rates and increased system availability with this managed service and business class network. We anticipate final completion of this crucial project to occur in September 2013, three months ahead of the expected completion date of December 2013.

Managed IP Communications (MIPC)

As part of our "cloud first" strategy, OIT began to migrate its Voice over IP (VoIP) service offering to Managed IP Communications (MIPC) in June 2013. This change allows the state to shift capital investments to operational expenses, provides a higher level of reliability and redundancy for our telecommunications services and over time, will reduce the number of disparate voice systems throughout state government. By the end of FY13, nearly 66% of the migrations identified in Phase 1 were completed and OIT is on track to fully complete this project in September 2013.

Consolidation

OIT continues to pursue opportunities wherever we can to consolidate and centralize IT services in order to achieve cost savings, better utilize scarce resources, improve service delivery, enhance security and enable shared common business practices. Consolidation activities have resulted in the state realizing a total cost savings and cost avoidance of more than \$35 million over four years.

Governor's Office of Information Technology Cost Savings and Cost Avoidance							
	Annual Cost Savings						
	FY10	FY11	FY12	FY13			
	Actual	Actual	Actual	Actual			
Personal Services Reductions	\$2,013,000	\$7,555,000	\$7,550,000				
Telecomm Contract Renegotiations	\$800,000	\$1,200,000	\$1,990,000	\$674,756			
Contract Consolidation/Renegotiation	\$620,000	\$700,000	\$924,989	\$851,035			
Decommission Software/Hardware	\$232,000	\$942,667	\$2,601,522	\$1,017,770			
Data Center Consolidation	\$130,000	\$30,000	\$693,753				
Software Migrations		\$136,988	\$206,988				
Consolidated Procurements		\$2,900,000	\$143,000	\$1,561,343			
Total	\$3,795,000	\$13,464,655	\$14,110,252	\$4,104,905			

Data Center Consolidation

Data center consolidation is our most complex consolidation effort. An entity the size of Colorado's Executive Branch should not need more than two or three data centers, yet a 2007 study found 38 data centers were being managed by 23 state departments and that three locations housed more than one data center within a single building. (Two additional data centers were identified after the study, bringing the total to 40.) Some were no more than storage closets, and many were without adequate security, fire protection, cooling and back-up power. Poorly equipped data centers put expensive servers and other assets at risk, as well as the businesses they support.

OIT continues to make steady progress and our activities are reducing the state's data center footprint, creating significant cost savings, operational efficiencies, reduced energy consumption, and stronger information security. To date, OIT has migrated and terminated 11 data centers and decommissioned or migrated 678 servers²⁴ through consolidation, virtualization, and/or migration to cloud-based solutions. More than 4,700 square feet of space has been recovered and the space can now be repurposed. These efforts have resulted in more than \$52,000 in annual energy cost savings and over \$800,000 in annual operating costs.

²⁴ The state owns approximately 1,800 servers of varying ages and operating systems.

SECTION 5: AWARDS & RECOGNITION

In June 2013, the implementation of the Colorado Information Marketplace was honored as a 2013 Computerworld Honors Program Laureate and Finalist in the Collaboration category. This annual award program honors visionary applications of information technology to promote positive social, economic and educational change. CIM is a platform for data sharing and the transparency and accessibility of public information. It allows for the integration of information between and across government agencies, fosters innovation and engagement in the public sector, and helps policymakers effectively evaluate existing programs, reduce waste and increase government efficiency.

In June 2013, the Denver Business Journal (DBJ) named Kristin D. Russell as the <u>Public/Non-Profit CIO of the Year</u> in the Public/Non-Profit category. The CIO of the Year awards recognize local technology leaders who achieve company goals, develop their teams and give back to the community. The winners are selected by the Colorado chapter of the Society for Information Management (SIM).

In June 2013, the State of Colorado received the <u>2013 Informatica Overall</u> <u>Innovation Award</u> for its work on the RISE Link Project and our use of the Informatica Platform to maximize return on data by delivering benefits beyond IT. More than 5,000 customers were considered for the twelve Innovation Award categories which recognize exemplary data integration, data management results and business outcomes.

In March 2013, the Colorado Governor's Office of Information Technology was selected for participation in the <u>National Center for Women and</u> <u>Information Technology (NCWIT) Pacesetters Program</u>. OIT is the only public sector agency to be selected and joins 35 esteemed universities and companies such as Carnegie Mellon University, Purdue University, The Women's College at University of Denver, Aetna, Cisco and Intel. NCWIT Pacesetters is a two-year program in which executive leaders commit their organization to increasing the number of women in their computing and technology workforce. Participants use innovative methods to attract new talent pools and retain those who at risk of leaving; the goal is to bring significant "net new" women to their organizations. The Pacesetters program is sponsored by the National Science Foundation, Google, and Qualcomm.

In February 2013, Kristin D. Russell was named one of the <u>Top 25 Doers</u>, <u>Dreamers & Drivers of 2013</u> by e.Republic's Government Technology magazine and the Center for Digital Government. This prestigious annual award honors public sector visionaries for the strides they have made in










using technology to improve and strengthen government performance and citizen services.

In February 2013, Monica Coughlin, Director of IT Economic Development & Broadband Strategy, and Jessica Roe, Chief Communications Officer, were selected as honorees in the Denver Business Journal's Forty Under 40 awards. This annual award recognizes 40 dynamic up and coming leaders under the age of 40 for their business success and contributions to the community.

Breakaway Leader by Global CIO Executive Summit. This prestigious peer nominated and judged award recognizes CIOs from across the globe for their leadership in elevating their people, partners and business.

In August 2012, the Colorado Eligibility Application Kit (PEAK) won the 2012 Digital Government Achievement Awards in the Government-to-Citizen state government category. This national award from e.Republic's Center for Digital Government recognizes and highlights outstanding applications that are enabling government to operate more efficiently.

In September 2012, Kristin D. Russell was named a 2012 Top 10





LEADERS

SUMMARY

The Governor's Office of Information Technology is committed to delivering the finest information technology services while producing significant, measurable operational and financial benefits to our customers, including all Coloradans. We continue to build collaborative relationships and implement new technologies and best practices that move us forward in reaching our goals. In FY13 OIT has accomplished significant results, including:

- Vastly improved public access to government services while increasing accountability and transparency and thus promoting public trust;
- Increased the number of women on our staff by 45%;
- Launched Secure Colorado and began implementation of the First Five of the SANS Twenty Critical Security Controls;
- Implemented Lean, identifying areas of improvement and increasing customer satisfaction;
- Released the PEAK Medicaid platform, laying the groundwork for CEPaaS;
- Partnered with CTA and Startup Colorado to introduce the Emerging to Enterprise (E2E) Program;
- Transitioned more than 26,000 state employees to Google Apps for Government; and
- Attained a cost savings/avoidance of \$4.1 million against a goal of \$3 million.

As we begin the new fiscal year, our FY14 Playbook will guide us to "Achieve More Success." We take great pride and pleasure in delivering effective, efficient and elegant services in collaborative, innovative ways that best serve our partners, stakeholders, state agencies and the people of Colorado.

APPENDIX A: OIT FUNCTIONAL FRAMEWORK

Office of Information Technology



OIT is committed to entering into partnerships to maximize best practices while encouraging an innovative collaboration between the public, private, and non-profit sectors.

Chief Technology Officer (CTO) Advisory Council

For OIT to be successful, it is imperative we continue to innovate and improve our services. To tackle that challenge, the CTO Advisory Council was formed with members from the public and private sectors to provide us with greater insight into ways the private sector may help improve how technology is used in the public sector. The Council makes recommendations on frameworks, technologies, architectures, and applications that may be of benefit to the state's enterprise architecture. Agreed upon recommendations are then submitted to the Secretary of Technology and State Chief Information Officer for adoption. Through the Council, we are also discovering new collaboration opportunities between the two sectors that offer advantages that neither sector can enjoy on their own.

Colorado Broadband Knights of the Roundtable

The Colorado Broadband Knights of the Roundtable typically meets monthly and continues to be a successful forum to convene thought leaders on the topic of broadband deployment across Colorado. This group focuses on the coordination and collaboration of broadband activity across the state.

Colorado Innovation Network (COIN)

In November 2011, Governor Hickenlooper announced the Colorado Innovation Network (COIN), a public-private partnership created within the Colorado Office of Economic Development and International Trade (OEDIT). The Secretary of Technology and Chief Information Officer has served as the Chair of COIN's Board of Advisors since its inception. COIN's mission is to make Colorado the most innovative state in the nation and to help spur and cultivate innovation within Colorado by connecting innovation leaders and inventors to solutions and ideas through which they can foster new technology development. Annually, COIN brings together diverse leaders from around the globe for an invitation only, two day summit to collaborate, innovate and network.

Colorado Information Security Advisory Board

The Chief Information Security Officer (CISO) formed this board in 2012 to help determine a cost-effective and direct method of implementing the Twenty Critical Controls on the systems and networks owned and managed by the State of Colorado. The board is comprised of members from the public and private sectors from all industries and governments. This advisory board played a critical role in making the recommendations that would become Secure Colorado and move security forward in the state of Colorado.

Colorado Higher Ed - Cyber Security Internship Program

OIT's Office of Information Security is partnering with Colorado Institutions of Higher Education to train our state's next generation of cyber security professionals through the Colorado Cyber Security Internship Program. Three Colorado students were trained in FY13.

Colorado Technology Association (CTA)

OIT's partnership with CTA has remained strong and continues to grow. Over this last year, CTA, OIT and OEDIT formed the Industry Collaboration Office (ICO) to tackle initiatives and drive discussions coming from the Technology, Information & Electronics Key Industry Network (KIN). One particular initiative that the ICO is leading is E2E²⁵. CTA also participates in OIT's IT economic development trips, and OIT participates in CTA's signature events like APEX and C-Level at a Mile High. This partnership also continues to provide free monthly tech forums focused on relevant and timely issues. The forums are available to any interested public or private sector employee (e.g., state and local government, local technology industries). Sessions have included presentations by Intel, Salesforce.com, Greenhouse Technologies, and Perceptive Software.

IT Economic Development Advisory Council (ITEDAC)

The IT Economic Development Advisory Council is a group of executive business leaders from across the state who act as trusted advisors providing feedback on proposed economic development strategies, IT ideas and initiatives and brainstorming job creation solutions. They support activities associated with the technology and information business development pipeline as well as IT economic development trips to other states to meet with IT business leaders to assess how Colorado could be more attractive for these businesses and encourage them to consider Colorado when they have opportunities for growth and expansion. They also help lead targeted business development initiatives and projects. OIT has leveraged the ITEDAC to get direct feedback from the technology industry and extend the outreach of our office.

Technology & Information Key Industry Network (KIN)

In 2012, OIT in conjunction with OEDIT and CTA assembled a Technology Key Industry Network (KIN) Steering Committee and Tactical Team with representation from the technology industry, academia, state and federal government, nonprofit associations and others to develop a business plan for the technology industry in Colorado. The KIN has evolved to include electronics and is also referred to as "Colorado's Technology Industry Alliance" whose motto is "[c]ollectively putting Colorado's technology industry on the map in a bolder more united way." OIT, OEDIT and CTA have formed the Industry Collaboration Office (ICO) to drive and track the initiatives that were identified through this KIN.

²⁵ Please see section 3 for more information about E2E.

APPENDIX C: ADDITIONAL ACCOMPLISHMENTS

OIT provides and manages the systems that our customers - state agencies - use to deliver services to Coloradans. The following is a sample of the many projects in which the OIT team engaged in FY13 to create or improve these agency-specific systems.

Agriculture & Wildlife

- The legacy telephone switch at the Inspection & Consumer Services Lab within the Department of Agriculture was upgraded to OIT's Voice over Internet Protocol (VoIP). VoIP provides an integrated and flexible structure that requires less equipment to manage than traditional phone lines. This transition paves the way for future improvements, including the conversion to Managed IP Communications (MIPC).
- The improved Inventory Management Program (IMP) application was successfully deployed into production on June 26, 2013 for the Department of Natural Resources, Colorado Parks and Wildlife (CPW). The IMP application supports terrestrial biologists in managing and storing wildlife inventory data.
- OIT implemented enhancements to the Chronic Wasting Disease application for CPW. The system supports biologists and administrative staff who track data related to animal disease, observations of animal behavior and autopsies. The data is used in making informed decisions related to the management of potential dangers to the animal and human populations in the state.

Business and Labor

- The Internet Self Service Project developed by the OIT team supporting the Colorado Department of Labor and Employment (CDLE), launched SmartPay, the online application that allows claimants to file for continuing unemployment benefits. SmartPay replaces the legacy online application, Internet Continued Claims, which was implemented in 2003. This public facing application processes an average of 60,000 claims per month, with a high of 85,000 in April 2013.
- OIT completed the migration of the Department of Local Affairs' (DOLA) Flex-to-Elite system supporting the integration of two housing authorities in DOLA into a common system using a single platform. The implementation included transferring all active tenants and landlords from Flex-to-Elite along with the most recent action and financial history. All payments to landlords and tenants were accurate and on time when the system went live and all reporting to the U.S. Department of Housing and Urban Development has been both accurate and timely.
- OIT implemented local guest wireless access for the Department of Local Affairs provide convenient, high speed wireless connectivity to the internet to government employees as well as visiting guests. Additionally, the Wi-Fi service at the State Capitol was expanded to provide coverage on the first floor.

 OIT established the standards and enterprise architecture for the Salesforce platform to be used by state agencies. This has enabled agencies such as DORA to leverage this platform to manage the Pits and Peeves program and the Governor's Office to build the Governor's Communications and Scheduling program.

Corrections

- By 2014, all entities that offer General Education Development (GED) tests, including the Colorado Department of Corrections (DOC), must utilize Pearson Vue computer based testing services. In late FY13, Pearson Vue Testing areas were established in three of DOC's correctional facilities and we are on track have all 21 facilities completed, including GED testing, before the end of the year, making Colorado one of the first in the nation to be fully prepared to meet the January 2014 deadline.
- OIT delivered 19 completed development projects which serve to enhance and streamline the daily business of the DOC. This includes an Exceptional Conduct Earned Time system to automate the process of requesting and routing these types of earned time requests; developing the Human Resources Barcode Generator so that the DOC Office of Human Resources can convert paper processes to electronic processes; creating the Electronic Scheduling Referrals system to automate and save countless hours for the Behavioral Health Clinicians responsible for completing the Mental Health Transition form for offenders leaving DOC; and a new web-based application named SOAR (SSI/SSDI Outreach, Access and Recovery) which improves the quality of SSI/SSDI benefit applications and reducing costs.

Health & Human Services

- OIT completed a technology application refresh of the Automated Child Support Enforcement System (ACSES). ACSES, the application that provides automated support for the delivery of child support collections to families and supports child support workers in all 64 counties, was moved from the state's mainframe to a modern web-based solution which is more flexible, supportable. The new solution provides greater reporting capabilities for operational decision support which will enable the ACSES section to provide better customer facing services in the future.
- OIT completed the Colorado Department of Human Services' (CDHS) Domestic Violence Program (DVP) tech refresh project including servers and desktops environment moving from a Novell environment to an enhanced Microsoft environment that supports OIT enterprise initiatives. DVP serves as a funding administration and provides technical assistance, training and consultation to state, county and community stakeholders. This refresh will save approximately \$40,000 annually in licensing cost and move the department closer to centrally supported windows administration environment.

Military and Veterans Affairs

• At the Department of Military and Veterans Affairs (DMVA), OIT deployed a **Tuition Assistance** website using an open source content management system (CMS). This new system allows for web-enabled forms to be submitted into a MySQL database allowing for better and more accurate reporting and management of the program.

Public Safety

- In May 2013, the Colorado Bureau of Investigation (CBI) and OIT launched the Automated Fingerprint Information System (AFIS), automated fingerprint identification and criminal history system that is available to law enforcement 24/7/365. The system is critical in solving crime and enhancing homeland security, and is used to process more than 100,000 fingerprint-based background checks each year for more than 60 professions in Colorado, including teachers, Realtors, and day-care providers. The CBI AFIS system also enables local law enforcement to use a handheld mobile fingerprint identification device to allow Colorado officers to identify wanted or dangerous persons in the field. Future technology and modules will easily incorporate additional biometrics such as facial recognition, rapid DNA, tattoo, and iris recognition. AFIS has more than doubled the efficiency of the CBI Identification Unit, reducing the time required for civil fingerprint background checks from multiple weeks to just a few days and increasing the throughput of the unit to tens of thousands of fingerprints processed per week.
- OIT working in conjunction with members of the Colorado Department of Public Safety's (CDPS) Executive Director's Office successfully launched the CDPS home page website which was developed using Google Sites. This new website utilizes a number of key features of Google Sites and enables the CDPS Executive Team to more effectively communicate the mission and capabilities of the entire Department to its constituents as well as to quickly provide information about new and revised state rules and obtain timely feedback during the rulemaking process.
- Working in conjunction with members of the Colorado State Patrol (CSP) and a SharePoint development vendor, OIT successfully migrated the CSP records management forms to SharePoint 2010. These forms, used by CSP troopers in the field, are used to capture key business information such as traffic stops, accident reports, citizen contacts; as part of this project, the back-end database of the system was re-designed which dramatically improves the reporting and analysis processes for the CSP troopers and command staff.

Revenue, Licenses & Registration

The Waitless Project was implemented last year and is a key component of the Department of Revenue's Division of Motor Vehicles (DMV). Kiosks were placed in 13 metro-area DMV offices to intelligently route customers based on their service need. The kiosks can "check-in" customers, manage customer flow and track wait times for services. This allows DMV to gather critical metrics and manage their operation more efficiently.

- OIT partnered with the U.S. Department of Homeland Security and the Multi-State Information Sharing Analysis Center to obtain an Intrusion Prevention System (IPS) to further protect the Department of Revenue's (DOR) tax subnets. The new system will allow us to more granularly protect the tax data entrusted to DOR by Coloradans. Additionally, the new IPS will be at no cost to DOR or the State of Colorado and is equipped to identify and stop the new and advanced persistent threats that we're seeing.
- The multi-phased Pipeline project is a top priority for the Department of Revenue. Pipeline will fully automate what is now a manual method for opening, processing and scanning state income tax documents and will consequently result in faster deposit of funds to the bank and speeding up the return process. In FY13, Phase 3 was completed which was to award a contract, design the solution, and procure all needed equipment and services to stand up the infrastructure.
- OIT completed the software upgrade of the Public Safety Records (PSR) case management application which is heavily used by the DOR's Enforcement division and Lottery division. The upgraded case management system provides DOR with better tools and functions making their job more efficient.

Transportation

- An upgrade of several modules of the Colorado Department of Transportation's (CDOT) SAP was completed. This upgrade opens up 22 new business function sets to fully leverage more of the SAP functionality and activates additional business capabilities for the SAP accounting project systems. Additionally, the SAP web GUI for Work Order UI project consolidated multiple data entry screens for maintenance work orders into a single user web-based user interface for use by CDOT's 800 maintenance workers. The result is a simpler, user friendly interface that saves time and improves employee productivity.
- Leveraging the features provided by Google Apps for Government, OIT worked with the Colorado Department of Transportation to test and implement Google Hangouts to replace the video conference system used to communicate with CDOT's 3,000+ employees across the state. This has saved time and money by allowing CDOT employees to 'skip the trip' to headquarters while achieving communication and collaboration between regional CDOT locations throughout the state. The CDOT PBX was also upgraded to provide for voicemail integration with Google email and to create a more stable environment to support business continuity.
- An executive dashboard was created in collaboration with the CDOT Executive Director and team. This performance reporting dashboard provides overall visibility and data drill-down capabilities for CDOT HR, Payroll, and Projects by financial cost center. The dashboard facilitates spending and cash flow analysis, uses data from SAP and leverages its BOBJ (business objects) reporting functionally.

APPENDIX D: 2013 LEGISLATIVE AGENDA

OIT has continued to work closely with the Colorado General Assembly to advance its value proposition of enabling the effective, efficient and elegant delivery of government services through trusted partnerships and technology. Key legislation that was passed during the 2013 legislative session which helps OIT further its goals and strategies include:

Bill Number	Short Title	Sponsors	Legislative Achievement
HB13-1001	Advanced Industries Acceleration Act	Young / Heath	The bill creates a grant program for advanced industries acceleration in the Colorado Office of Economic Development.
HB13-1079	Creation of the Joint Technology Committee	Tyler / Newell	Creates a year-round Joint Technology Committee comprised of members from the House and Senate for IT oversight.
HB13-1193	Advanced Industries Export Acceleration Program	Kraft-Tharp / Jahn	Creates a 5-year program administered by OEDIT for the advancement of accelerated industries including aerospace, information technology, and bioscience.
HB13-1286	Suspend State Recovery Audits	Williams / Tochtrop	Allows for the complete implementation of the COFRS modernization project before the next series of recovery audits is conducted.
HB13-1303	Create the Voter Access and Modernized Elections Act	Hullinghorst / Giron	Implements several changes to the "Uniform Election Code of 1992" including OIT to sit on the oversight committee.
SB13-004	Electronic Renewal Senior Identification Card	Kefalas / Ginal	Authorizes people over 65 years of age to electronically renew an identification card issued by DOR.
SB13-053	Exchange of Student Data K-12 and Postsecondary	Kerr / Hamner	Establishes a procedure between the Dept. of Education and the Dept. of Higher Education to transfer information pertinent to the transition from the high school to postsecondary systems.
SB13-137	Improving Medicaid Fraud Detection	Roberts / Navarro	Directs the OIT Chief Information Officer to design and implement a Medicaid fraud detection system.
SB13-190	Implementation of Financial Reporting System Modernization	Steadman / Gerou	Allows the state to enter into lease-purchase agreements for the implementation costs of the Colorado Financial Reporting System Modernization Project.
SB13-246	Criminal Discovery Task Force	Lambert / Levy	Creates a discovery task force to address the issue of discovery costs in criminal cases. OIT will supply a non-voting advisor to the task force.

APPENDIX E - GLOSSARY OF TERMS

ACSES		
	Automated Child Support Enforcement System	
AFIS	Automated Fingerprint Information System	
AUP	Acceptable Use Policy	
BLM	Bureau of Land Management	
BOBJ	SAP Business Objects	
BYOD	Bring Your Own Device	
C.R.S.	Colorado Revised Statutes	
CBI	Colorado Bureau of Investigations	
CBMS	Colorado Benefits Management System	
CDA	Colorado Department of Agriculture	
CDE	Colorado Department of Education	
CDHS	Colorado Department of Human Services	
CDLE	Colorado Department of Labor and Employment	
CDOT	Colorado Department of Transportation	
CDPHE	Colorado Department of Public Health and Environment	
CDPS	Colorado Department of Public Safety	
CEPaaS	Citizen Engagement Platform as a Service	
CIM	Colorado Information Marketplace	
CIO	Chief Information Officer	
CISO	Colorado Security Information Officer	
CMS	Content Management System	
COFRS	Colorado Financial Reporting System	
COIN	Colorado Innovation Network	
СРАР	Colorado Performance Assurance Program	
CSN	Colorado State Network	
CPW	Colorado Parks & Wildlife	
CSP	Colorado State Patrol	
СТА	Colorado Technology Association	
СТО	Chief Technology Officer	
DCA	Division of Cost Allocation	
DMV	Division of Motor Vehicles	
DMVA	Colorado Department of Military & Veterans Affairs	
DNR	Colorado Department of Natural Resources	
DOC	Colorado Department of Corrections	
DOLA	Colorado Department of Local Affairs	
DOR	Colorado Department of Revenue	
DPA	Colorado Department of Personnel & Administration	
DVP	Domestic Violence Program	
E2E	Enterprise to Emerging	

Acronym	Description	
EGC	Executive Governance Committees	
ЕРРМО	Enterprise Portfolio Project Management Office	
ERP	Enterprise Resource Planning	
ESC	Executive Steering Committee	
FirstNet	First Responder Network Authority	
FY	Fiscal Year	
GED	General Education Development	
GIS	Geographic Information Systems	
НВ	House Bill	
12E	IT Innovation Effort	
ICO	Industry Collaboration Office	
ICT	Information and Communications Technology	
IDG	International Data Group	
IES	Institute of Education Services	
IMP	Inventory Management Program	
IPS	Intrusion Prevention System	
IT	Information Technology	
ITEDAC	IT Economic Development Advisory Council	
ITSM	IT Service Management	
KIN	Key Industry Network	
LTPT	Local Technology Planning Teams	
MIPC	Managed IP Communications	
MNT	Multi-Use Network	
NASCIO	National Association of State Chief Information Officers	
NCWIT	National Center for Women and Information Technology	
NTIA	National Telecommunications & Information Administration	
OEDIT	Colorado Office of Economic Development and International Trade	
OIS	Office of Information Security	
OIT	Governor's Office of Information Technology	
OSA	Office of the State Auditor	
OSPB	Office of State Planning and Budgets	
P ³	Public-Private Partnership	
PEAK	Program Eligibility and Application Kit	
PSBN	Public Safety Broadband Network	
PSR	Public Safety Records	
RISE	Relevant Information to Strengthen Education	
SB	Senate Bill	
SIM	Society for Information Management	
SLDS	Statewide Longitudinal Data Systems	
SLIGP	State and Local Implementation Grant Program	
SOAR	SSI/SSDI Outreach, Access and Recovery	
UI	Unemployment Insurance	

Acronym	Description	
VMO	Vendor Management Office	
VoIP	Voice Over Internet Protocol	
WIC	Women, Infants and Children	
WyCAN	Wyoming, Colorado, Arizona and North Dakota	



Governor's Office of Information Technology

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