





FY15 Annual Report

Transforming Colorado government for today and the future



COLORADO

Governor's Office of Information Technology

Serving people serving Colorado

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Letter from the Secretary of Technology & Chief Information Officer

I am pleased to present the Fiscal Year 2014-15 (FY15) Governor's Office of Information Technology Report in accordance with C.R.S. §24-37.5-101 et seq.

The Governor's Office of Information Technology (OIT) continues to be seen as an innovative technology leader across state governments. In 2015, our efforts in the IT security arena garnered three national awards. Known as Secure Colorado, this program continues to lead the way as a testament to affordable, effective IT security. A Brookings Institution study noted that Colorado was one of only two states that were "[a]ddressing the problem" of cybersecurity and who had "a solid and robust recognition of the need for cybersecurity and a multi-faceted plan."

We are also very proud to bring a long-term view of IT initiatives with our strategic Five-Year IT Roadmaps at both the enterprise and agency levels. For the first time, we are able to foresee technology gaps and budget challenges as we consider our customers' business priorities for the coming years.

Technology improvements and advances are critical, but they mean little if we do not take care of the fundamentals and ensure that our stakeholders receive the support and service they deserve and need. In FY15 our mantra was Building on the Basics. With laser-sharp focus, we succeeded in surpassing three of our four Wildly Important Goals (WIGs).

We decreased the state's IT security risks by 16 percent, we increased OIT employee engagement by 11 percent, we saw an increase of more than 4,000 new IT jobs in Colorado, and I am pleased to say we improved customer satisfaction by 25 percent.

Our ongoing commitment to these initiatives will continue to lead us to our ultimate vision — enhancing the citizen experience at every digital touchpoint. We are very pleased to present these accomplishments and to continue the robust work that has brought us tremendous success thus far.

Sincerely,

Suma Nallapati

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 the executive branch agencies at the State of Colorado. Our charge is twofold: to provide best-in-class IT services and to promote Colorado as the ideal location for IT companies and technology-based workers in conjunction with the Office of Economic Development and International Trade (OEDIT).

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 Colorado's residents. We oversee technology initiatives across the enterprise, partner on project implementations, lead technical standards, and maintain applications for state agencies. Through our Office of Information Security, OIT is also responsible for information security across all public agencies. Our enterprise approach facilitates 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 passion, purpose, and motivation is to serve the state of Colorado. We collaborate with customers to provide day-to-day digital support and present smart solutions that transform government through IT. We push ourselves to deliver next generation, integrated technology in order to create a dynamic end-user experience for Coloradans and offer the expertise our customers expect.

Our mission 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).

Our vision is to enrich the citizen experience at every digital touchpoint. We envision a future where the end-user experience shapes design and data analytics transform how the state responds to the needs of citizens. As OIT works with our customers to develop technology solutions that meet their business needs, the citizen experience is at the forefront. That means making it easier for Coloradans to interact with their government in a way that makes sense for them. No more one size fits all. Instead, we strive to provide next generation solutions for our agency customers so they in turn can offer Coloradans multiple engagement options, including secure online and mobile access.

"The customer experience may be the most impactful area of innovation available to businesses today."
-Gartner, 2014

i As defined in C.R.S. §24-37.5-402(9)

How we deliver is just as important as what we deliver, and the core values we established in 2013 define our character. Because it is critical that we embody service, integrity, teamwork, respect, and courage in all that we do, these values are incorporated into every employee's annual performance plan.ⁱⁱ



[Service]
Serving the people of Colorado
Intentionally and generously serving others for a better
Colorado



[Integrity]
Demonstrating credibility and sincerity in our work
Inspiring confidence and trust in the Governor's Office of
Information Technology through our personal conduct



[Teamwork]

Collaboratively working together at OIT and across the state

Working cooperatively with others and engaging in constructive dialogue to overcome difficult challenges



[Respect]
Appreciating and acknowledging the role, diversity,
and contribution of those with whom we work
Consistently conducting ourselves in a way that shows regard
and thoughtfulness to others



[Courage]

Pushing boundaries to foster postive change

Proactively and positively pursuing the transformations necessary to address tough issues and drive innovation

ii The state's performance plan cycle is from April 1 to March 31 of the following year; the fiscal year is from July 1 to June 30.

A Brief History

The Governor's Office of Innovation and Technology was created in 1999 (and renamed Governor's Office of Information Technology in July 2006) to serve as an advisory organization to the Governor and state agencies. At that time, IT 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.

The overwhelming bipartisan passage of SB08-155ⁱⁱⁱ resulted in a considerable shift in how IT services would be delivered to Colorado's executive branch agencies. As a result of this legislation, all IT functions, systems, and assets were consolidated from 17 executive branch agencies into a single organization — the Governor's Office of Information Technology (OIT) — in July 2008.

Much like a merger of 17 diverse companies, the consolidation brought with it significant challenges but also provided an extraordinary 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.

Recognizing the important role IT plays in the state's economic development efforts, in 2011 Governor John W. Hickenlooper expanded the state's Chief Information Officer (CIO) responsibilities to include the role of Secretary of Technology. Sumana (Suma) Nallapati was appointed to this dual role in June 2014.

8.4 Million

Number of security events the state encounters daily

1,121%

Increase in significant cybersecurity threats against U.S. government systems from 2006 to 2014

164%

Increase in loss of personal information through government data breaches since 2009

205

Average number of days attackers exist in breached environments before being detected

69%

The number of organizations who learned about their own breach in 2014 from an outside entity

iii Codified in C.R.S. §24-37.5-101 et seq.

Business Overview & Operational Accomplishments

The OIT Playbook

The OIT Playbook is our strategic and operational roadmap which defines specific key initiatives and goals we want to accomplish during the course of the fiscal year. The Playbook also provides our stakeholders (i.e., customers, employees, Colorado General Assembly and partners) with a guide toward our future — where we aim to be and how we will get there — while linking our core mission, vision and values to our strategies and goals. The FY15 OIT Playbook initiatives were aligned with two overarching themes: getting back to basics for IT service excellence and collaboration between teams and our agency partners; and continuing to innovate to create IT solutions that serve our customers' goals, priorities, and business needs.

The strategic initiatives were not created in a vacuum. Instead, we incorporated a bottom-up approach in which each of the functional groups^{iv} created strategic plans for their teams. Additionally, OIT worked with our agency partners to make sure their business needs helped inform our direction. The team plans, metrics, goals and initiatives laid the groundwork for the enterprise Playbook.

Methodology

In an effort to create a common language and consistency across the executive branch, the Governor's Office introduced The 4 Disciplines of Execution (4DX) to structure strategic planning efforts. Though the methodology changed, the content aligned with OIT's past work. 4DX is a simple and proven set of practices for planning and executing on an organization's most important priorities. It employs four concepts to align and progress an organization toward common goals. The four disciplines — Focus on Wildly Important Goals, Act on Lead Measures, Keep a Compelling Scoreboard, and Create a Cadence of Accountability — target the routine and behavioral change necessary to drive organizational improvement. See Appendix B for examples of this methodology.

Wildly Important Goals & Playbook Results

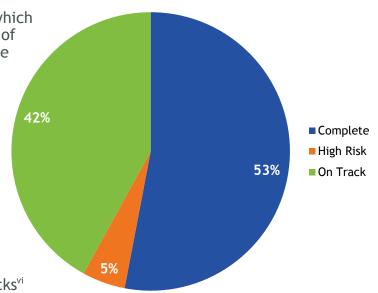
Wildly Important Goals (WIGs) are the topmost, primary goals from which all organizational initiatives flow. OIT placed a focus on four primary areas: *Back to Basics*, *Protect State Data and Assets*, *Customer-Focused Employees*, and *IT Job Growth*.

iv The term functional group (aka functional unit or functional office) refers to the primary groups under an Executive Leadership Team's (ELT) oversight. There are six functional groups, the offices of: financial services, information security, customer, technology, strategy, and communications. The term functional team refers to the individual teams within each functional unit (e.g., Enterprise Applications is a functional team within the Chief Technology functional unit, HR is a functional team within the Financial Services unit, etc.).

WIG	MEASUREMENT	RESULT
Back to Basics Achieve a 30% increase in Service Excellence rating by close of FY15	The Net Promoter Score (NPS) is used to gauge customer loyalty and satisfaction that their needs are being met	While OIT fell a bit short in reaching this goal, tremendous strides were made in pursuing customer excellence and we achieved a 25% increase
Protect State Data & Assets Achieve 10% reduction in information security risk for Colorado agencies by close of FY15	McAfee Risk Advisor is the tool used to determine the security risks that the state faces	We exceeded our goal and achieved an overall Risk Index Score of 15.41 for a 16% reduction
Customer-Focused Employees Increase Employee Engagement by 2% by close of FY15, reflecting the building of OIT's internal culture and enhancing the customer experience	The state's and OIT's Employee Engagement Survey ^v are used to gauge this measure	The remarkable increase of 11% reflects the dedication and focus OIT places on its employees and our primary responsibility — serving the customer
IT Job Growth Increase the number of IT jobs in Colorado by 1,000 (from 100,503 to 101,503) by close of FY15	Job numbers are obtained using the Labor Market Information (LMI) tool provided by the Colorado Department of Labor & Employment	This WIG was greatly exceeded with 4,843 new IT jobs reported by the end of the fiscal year



- 10 (53 percent) initiatives were completed and closed out
- 8 (42 percent) initiatives achieved key milestones and are on target for an on-time completion
- 1 (5 percent) initiative was at high risk of not being accomplished on time and/or is facing major roadblocks^{vi}



v The Employee Engagement Survey is administered by a third-party source in the the fall of every year. The survey is sent to all state employees by the Department of Personnel & Administration every odd year and in even years, is sent to OIT employees by our HR team. vi This is a multi-year security project and the timeline has since been adjusted to more realistically reflect the amount of work that must be done. While we did not meet the fiscal year goal, OIT is on track for meeting the overall goals.

Playbook Activities & Accomplishments

A full list of the 19 Playbook initiatives is found in Appendix C. The following are examples of some of our key WIGs and Playbook initiatives, and serve to show how they tie together.

Back to Basics: Pursuing Excellence in Customer Service

- Increasing Customer Satisfaction: The Service Desk is the first point of contact, and often times the only point of contact, a customer has when interacting with their IT organization. In FY15 the Service Desk saw a five percent increase in customer satisfaction, reaching an all time high of 96 percent.
- Providing Choices: OIT rolled out the Customer Service Portal, giving customers a self-service option to open and update their own IT service tickets as well as access to a knowledge base. As a result of the portal, call abandonment rates dropped 30 percent and customer hold times dropped 66 percent.
- Creating a Holistic IT EcoSystem: OIT has embarked on an multi-phased, multi-year project to merge the disparate service delivery and tracking mechanisms into a single and comprehensive system called the IT EcoSystem. In FY15, the infrastructure was built and Xtraction Reporting, IT Asset Management, and Endpoint Management established. The IT EcoSystem provides us with a platform that serves both internal and external purposes. For example, internally, it provides for better asset management and externally, it powers the above-referenced Customer Service Portal. Additional functionality is being added that will give customers even more services as it grows to become the one-stop shop for requesting OIT services such as employee IT onboarding (e.g., account setup), procurement of equipment, and more.

Protect State Data & Assets

OIT's Office of Information Security (OIS) is relentless in its pursuit to stay ahead of the increasing volume and sophistication of cybersecurity threats. Indeed, State of Colorado systems experience 8.4 million security events daily. OIS is directly aligned with the goals and objectives of the national strategy to secure cyberspace and works closely with both public and private sector partners to reduce risk to Colorado's information systems and data.

• Educating Employees that Cybersecurity is a Shared Responsibility: The best security systems and technology are not enough by themselves. Through its online, statewide cybersecurity training and informational notices, OIS is helping all state employees understand the actions they can take to help safeguard the state's data and systems.



- Creating Public Awareness: As part of the its annual October Cybersecurity Awareness outreach activities, OIT used social media for the first time to provide educational tips to the public, reaching from 300 to 3,700 people daily. OIS also partnered with the Division of Homeland Security, ReadyColorado, the Colorado Army National Guard, and Regis University to arm Colorado residents with the information they need to stay safe on the Internet, and to conduct presentations about online safety, privacy and cyberbullying to sixth-graders in Denver public schools. Security is not a one-time event so the teams are available to make these presentations throughout the year. Additionally, OIS maintains colorado.gov/cybersecurityhelp to provide tips and resources to the public year-round.
- Implementing Robust Policies: To achieve the goals of the Colorado Information Security Act, OIS enacted new statewide policies in February 2015, replacing the dated policies issued in 2011, to ensure that new systems are built and implemented securely. The new policies are aligned with the National Institute of Standards and Technology's (NIST) framework permitting federal auditors to easily cross-reference federal requirements to state policies.
- Building a Robust Infrastructure: To further protect Colorado's data and IT systems, the Internet perimeter firewall was replaced with a new, robust Next Generation Firewall (NGFW). The NGFW not only enables us to more efficiently manage network traffic and automate manual processes, it allows for IT service continuity, availability, and scalability. Protections were added to email that enhanced spam filtering and ensure that protected information is encrypted before leaving the state's system. New security monitoring tools were rolled out and now 97 percent of the state's servers and 96 percent of the state's computers are in compliance with Secure Colorado, the state's first cybersecurity plan published in 2013. As a result, we are better able to manage risk and the overall risk rating dropped below our target of 16 to 15.44.

Customer Focused Employees

- Fostering Learning and Development: In November 2014, OIT implemented MyCareer: Individual Development Plan (IDP). This is an optional program that enables employees to shape the future of their own career with the support of the organization.
- Creating a Common Culture: With employees embedded in agencies across the state, it can be difficult for employees to feel connected to their own organization. To create a through-line between OIT headquarters and remote sites, the OIT leadership team made site visits to various locations, allowing employees to share their wins and challenges and to field questions about strategic direction. Additionally, a cross-functional team was formed to define who we are and create a brand platform that resonates across all locations. The results of this work are embodied in the OIT Culture Guide.

IT Job Growth

 Collaborating for the Common Good: IT job growth is good for Colorado's economy and thus for Colorado's businesses and residents. OIT's work in this area is not done in a vacuum. We partner with the Office of Economic Development & International Trade (OEDIT) and the Colorado Technology Association (CTA), local economic development organizations and others to visit other states, sponsor industry briefings, meet with IT companies and more. Please see IT Economic Development (page 16) for in-depth information on this topic.

vii C.R.S. 24.37.5, Part 4

viii More specifically NIST Special Publication 800-53 Rev. 4 framework; a comprehensive, modern security framework developed by an interagency partnership of NIST, the Department of Defense, the Intelligence Community, and the National Security Systems.

Performance Measures (Enterprise & Functional Scoreboards)

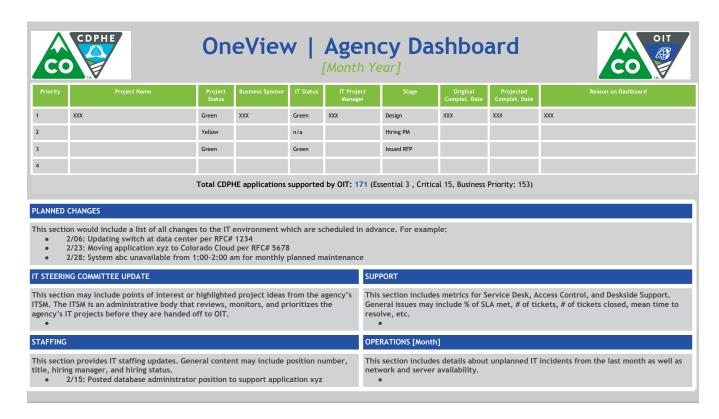
In addition to the targets defined in the Playbook, OIT annually develops a more tactical and operational set of performance measures that are integral to the day-to-day service delivery management and connect with OIT's mission. This complete set of metrics is called the OIT Enterprise Scoreboard. This internal scoreboard provides an executive summary aligned to OIT's Wildly Important Goals.

Produced monthly, the Scoreboard identifies trends, target metrics and actual performance metrics. The Scoreboard has helped OIT achieve consistency of performance expectations against strategic priorities and has helped assure 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 Scoreboard provides a foundation for data-driven decision making and creates transparency and focus across the organization.

In FY15 OIT added another level of operational metrics; each functional group has developed a functional Scoreboard that allows the teams to dive deeper into the metrics that are tracked at an enterprise level. In all, more than 154 performance measures were managed and maintained for each of these performance-based areas.^{ix}

OneView Dashboards

Just as OIT gathers metrics on our WIGs and operational goals, so do we gather data for each customer agency to provide them with a transparent snapshot of their IT projects and resources. These monthly dashboards help to ensure that we consistently deliver the IT services that align with our customers' highest business priorities.



ix Examples include: 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.



Additional Key Accomplishments

Colorado Benefits Management System (CBMS)

The Colorado Benefits Management System (CBMS) is the essential system that determines eligibility and manages benefits such as food, health and housing assistance for our state's most vulnerable residents. The Colorado Program Eligibility and Application Kit (PEAK) is the online tool that provides clients and community partners with a modern and easily accessible tool to apply for public assistance benefits that are managed within CBMS.

Universal Application Project

OIT completed the Universal Application Project which merged the application processes for several early childhood programs into one using PEAK. Universal Application was a collaborative effort of various state agencies, nonprofits and educational groups putting aside their unique processes for a common solution. It reduces duplication of efforts, is faster and provides families with better access to much needed services.

Shared Eligibility System

OIT worked in collaboration with Connect for Health Colorado and its agency partners to further enhance the application process, improve the overall customer experience and allow Coloradans to better manage their health benefits. Since November 2014, consumers have been able to apply for health coverage using a single, dynamic online application whether they apply through Colorado.gov/PEAK or ConnectforHealthCO.com.

PEAKHealth Mobile App

The Department of Health Care Policy and Financing identified a need to be more readily accessible for our most vulnerable Coloradans. With the PEAKHealth mobile app implemented in FY15, Colorado Medicaid and Child Health Plan Plus (CHP+) members can now quickly and easily access their benefits, find medical providers in their network, view and use their electronic medical card, update their information and more.

Eliminate Redundant Applications

OIT manages approximately 1,088 applications, nearly 16 percent of which are in the sunset stage of their lifecycle. In acknowledgement of the need to streamline and modernize the application landscape, the 2014 Colorado General Assembly provided funding to eliminate at least 120 redundant applications over a 24 month period. After a successful proof of concept, OIT embarked on a formal program to reduce the number of redundant applications, and 68 applications were decommissioned by the end of FY15.



Colorado Cloud

We continue to look for opportunities to reduce the state's IT footprint. In FY15, more than 900 servers were virtualized, decommissioned or migrated to cloud services. The Colorado Cloud continues to grow with 668 systems within the cloud infrastructure at the end of the fiscal year. The implementation of a cloud automation tool provides OIT with a centralized management platform that drastically reduces the timeline for deployment.

Change Management

In FY15, we formalized a new, organization-wide major incident and change management program. Since the implementation of this new governance process, we have realized a 69 percent decrease in failed changes, and our overall average change failure rate for FY15 was just four percent. Additionally, customers can now opt-in to receive email notifications when there is a service interruptions affecting their own agency and/or other agencies. Customers are also able to access the Major Incident Management dashboard, 24 hours a day, seven days a week, to view the status of any major incident (i.e., service interruption).

Project Lifecycle Methodology

In May 2015, a new and more mature project lifecycle methodology was launched to give stakeholders a better understanding of the phases of project development and allow them to maintain control of the project more efficiently. The features include a suite of tools with definitions around change order and new projects, new requirements, guidelines and flows, and an updated framework of activities mapped to each project governance path. The methodology establishes a common ground for all projects within OIT and allows us to build on a set of best practices over time.

Engaging the Public To Inform & Be Informed

Colorado Information Security Advisory Board

To build upon the success of Secure Colorado, the Colorado Information Security Advisory Board was reconvened to provide input and recommendations into Secure Colorado 2016-18. This board, comprised of 37 security, privacy and business professionals from the public and private sectors, also assists the State Chief Information Security Officer in determining a cost-effective and direct method of implementing the Center for Internet Security (CIS) 20 Critical Security Controls over a three year timeframe.^x

x The "First Five" of these controls were implemented at the network layer in February 2014. Colorado is believed to be the first state in the nation to have successfully done so.

GIS Data Coordination Summit

The inaugural GIS Data Coordination Summit held in May 2015 was attended by more than 80 representatives from GIS programs at state and county levels. The enthusiastic discussion among participants helped identify the need for GIS data^{xi} in key business areas like emergency management, law enforcement, economic development, transportation management and natural resource management. The invaluable feedback from the Summit will be used to shape a tactical plan that will guide Colorado's GIS coordination over the next year.

Boulder Design Works (BDW)

In July 2014, OIT hosted a 36-hour design sprint for students in the University of Colorado Boulder's entrepreneurial graduate program called Boulder Digital Works. Approximately 30 students, divided into five teams, were tasked with brainstorming on how to use Google Apps for Government to tap into, track and help manage information about state employee skillsets. The ideas generated from the design sprint had a direct and lasting impact on how we structure our work with Shadow IT.^{xii}

Industry Briefing Forum

The Industry Briefing Forum is a public-private collaborative effort between OIT, Colorado Technology Association (CTA), and the Office of Economic Development & International Trade (OEDIT). The forum brings in subject matter experts bi-monthly to speak about the myriad of topics that impact the technology industry. OIT led the planning and execution of several of these well-attended briefings including the September 2014 Regional Tech Economy which showcased IT economic development in Northern Colorado and the Pikes Peak Region, the October 2014 session on the state of digital healthcare in Colorado, and the June 2015 session which focused on the state of broadband in Colorado.

Government in Tech

The ongoing partnership between OIT and CTA provides free monthly tech forums focused on relevant and timely issues and technologies. The forums are available to any interested public or private sector employee (e.g., state and local government, local technology companies).

Colorado Distance Learning Association

The Colorado Distance Learning Association's (ColoDLA) annual conference was held in April 2015, with the presentation theme "Finding Boundaries in a Constantly Connected Society." The event was hosted by OIT's ARRA-funded distance learning grant Project Manager. More than 70 participants attended in person or virtually. One keynote and two session speakers presented via the interactive video distance learning technology used in schools.

xi This critical GIS data includes parcels, transportation, address points, and structures.

xii Shadow IT refers to information technology projects and systems being implemented and managed outside of the knowledge of the organization's central IT department.

Financial Review

OIT's Financial Services team oversees the financial activities of OIT. They also oversee all IT-related financial activities for the executive branch and assist with IT financial planning, budgeting, procurement, contracting, accounting, and reporting. Specific duties also include:

- Management of enterprise budget, accounting, procurement and contracting processes
- Capital investment planning, financial modeling and cost reduction/containment activities
- Administration of procurement and vendor services
- 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, in FY15 OIT achieved nearly \$3.4 million in cost savings/cost avoidance; more than \$42 million in cost savings/cost avoidance have been realized since fiscal year 2009-10.

OIT's implementation of Google Apps for Government in 2012 continues to show a significant return on investment. In FY15, the use of Google services such as Hangouts, Sites and mobile device management resulted in a cost avoidance of \$3,024,477. This is the third year in a row that we have netted more in cost avoidance than the total annual cost for the Google platform.

Appropriation Structure

OIT operates solely as an internal service organization, and as such, is almost 100 percent funded via re-appropriated funds, and bills 100 percent of its costs and activities to users in accordance with federal and state governmental accounting standards and guidelines. OIT calculates its services rates on an annual basis and bills its 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.

IT Expenditures in FY15xiii

The total IT expenditures across executive branch agencies include costs that the agencies allocate 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.

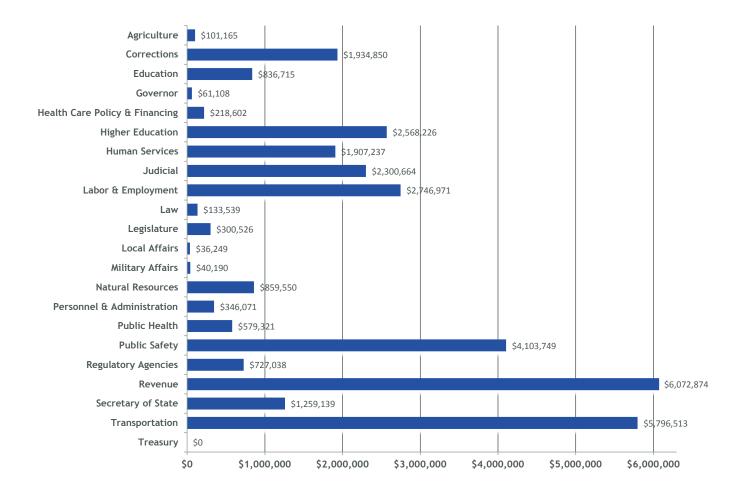
The following table summarizes FY15 IT expenditures by agency.

AGENCY	STATE FTE PERSONAL SERVICES	CONTRACTED PROFESSIONAL SERVICES	OPERATING	TOTAL SPEND
Agriculture	\$0	\$1,357,839	\$770,435	\$2,128,274
Corrections	\$0	\$145,545	\$24,285,603	\$24,431,148
Education	\$0	\$323,855	\$3,253,634	\$3,577,489
Governor	\$0	\$24,444	\$2,192,993	\$2,217,437
Health Care Policy & Financing	\$0	\$701	\$28,975,546	\$28,976,247
Higher Education	\$0	\$0	\$22,321,956	\$22,321,956
Human Services	\$0	\$10,508,158	\$60,620,052	\$71,128,210
Judicial	\$0	\$3,419,937	\$12,902,638	\$16,322,574
Labor	\$0	\$1,263,553	\$14,249,270	\$15,512,824
Law	\$0	\$365,662	\$1,425,430	\$1,791,092
Legislature	\$0	\$0	\$619,001	\$619,001
Local Affairs	\$0	\$0	\$2,024,399	\$2,024,399
Military Affairs	\$0	\$0	\$715,770	\$715,770
Natural Resources	\$0	\$202,481	\$12,222,276	\$12,424,758
Personnel & Administration	\$0	\$78,701	\$1,281,170	\$1,359,871
Public Health	\$0	\$545,395	\$11,367,523	\$11,912,918
Public Safety	\$0	\$712,576	\$22,301,583	\$23,014,159
Regulatory Agencies	\$0	\$571,829	\$5,122,870	\$5,694,699
Revenue	\$0	\$509,209	\$27,050,393	\$27,559,602
Secretary of State	\$0	\$2,276,896	\$1,809,138	\$4,086,034
Transportation	\$0	\$118,628	\$29,106,742	\$29,225,370
Treasury	\$0	\$0	\$291,614	\$291,614
Total (without OIT)		\$22,425,409	\$284,910,036	\$307,335,445
Office of Information Technology	\$90,084,959	\$12,376,715	\$64,931,171	\$77,307,886
Total IT Expenditures FY15		\$34,802,124	\$349,841,207	\$384,643,331

xiii The state has not closed its books for FY15 and therefore these numbers are subject to change.

IT Budget in FY15

The bar graph below identifies the distribution of \$32,930,298** million in FY15 hardware, software and maintenance expenditures by agency.



xiv The state has not closed its books for FY15 and therefore these numbers are subject to change.

IT Economic Development

In 2011, the state CIO took on the added responsibility of Secretary of Technology. This new dual-role was created to provide specific industry focus on attracting, growing and retaining IT jobs and businesses in Colorado in addition to being responsible for overseeing all IT 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 is charged with driving IT economic development for the state by promoting Colorado as a headquarters location for technology companies, attracting technology companies to relocate/expand here, and fostering relationships with technology companies already in Colorado to strengthen their commitment to our state.

In close collaboration with the Office of Economic Development and International Trade (OEDIT), our commitment to job creation helped contribute to 4,843 net new IT jobs being added to Colorado in FY15; bringing the total number of IT jobs in Colorado to 105,346. Additionally, three technology companies newly headquartered their businesses in Colorado, and OIT led two IT companies through the Job Growth Incentive Tax Credit process. Both companies were approved for the tax credit and have selected Colorado for their growth which is projected to result in nearly 400 jobs over the next eight years.

Other FY15 outreach activities include:

- Co-hosted with the Metro Denver Economic Development Corporation (Metro Denver EDC) and OEDIT a full day site visit for prospective IT companies with the potential for more than 100 jobs
- Completed successful IT economic development trip to San Francisco/Silicon Valley with OEDIT, CTA and Metro Denver EDC; met with 16 IT companies and held two events strengthening relationships with California companies who have a significant and/or growing presence in Colorado
- Hosted a two day tour of data centers and supply chain vendors for IT companies looking at consolidating IT operations in Colorado

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."

Distance Learning

OIT provided distance learning technology resources and training to schools across Colorado, expanding access to educational courses and providing students with the opportunity to gain exposure to global perspectives.** The federal grant money that was funding this program ended in FY15, but during the course of the year, we finalized a Distance Learning White Paper which will be utilized to help build support for the continuation of the distance learning project in the future and identify the necessary business partner for the effort.

FirstNet Colorado (FNC)

After 9/11 and Hurricane Katrina, it was found that existing communications infrastructures were inadequate for the interoperability needed to allow public safety first responders to communicate and collaborate efficiently. As a result, the First Responder Network Authority (FirstNet) was created to coordinate with state and local governments to plan and design the first nationwide Public Safety Broadband Network (PSBN), a dedicated 4G LTE wireless broadband data and cellular voice network for use by public safety first responders. Initial planning and outreach efforts are supported through the State and Local Implementation Grant Program (SLIGP), and in FY14 Colorado was one of the first five states to receive this grant allocation.

In FY15, we launched the FirstNet website at firstnetcolorado.org and continued to build on our outreach activities, attending 147 events and contacting 2,442 stakeholders. In February 2015, FirstNet Colorado, in partnership with the Town of Vail, Eagle County, the Federal Bureau of Investigations (FBI), and multiple private sector partners, implemented a Public Safety LTE Demonstration Network for the 2015 FIS Alpine World Ski Championships in Vail and Beaver Creek, Colorado. The more than 1,100 local responders and volunteers whose focus it was to ensure a safe and successful event, as well as others involved in FirstNet activities, were invited to see the benefits of a dedicated LTE network and how it can provide communications coverage to first responders in mountainous and difficult terrain.

xv The distance learning program is serving Colorado students in urban areas as well as those in rural communities such as Silverton, Fairplay, Saguache, Elbert, Caliche, and Brush.



Awards & Recognition

STATESCOOP50AWARDS

Chief Strategy Officer Monica Coughlin Golden Gov: State Executive of the Year 2015 StateScoop50 Award

State Representative Max Tyler
State Leadership
2015 StateScoop50 Award

Department of Revenue Infrastructure Modernization Initiative¹
State IT Program of the Year

2015 StateScoop50 Award

Program Eligibility & Application Kit (PEAK) Enhancements²

State IT Program of the Year 2015 StateScoop50 Award



State GIS Coordinator Jon Gottsegen DRCOG 2015 Distinguished Service Award PEAK Real Time Eligibility³

ACT-IAC

Advancing Government

ACT-IAC Igniting Innovation 2015 Showcase and Awards

Also of note, Colorado was called out as second in the nation for its use of IT in transportation and motor vehicles in the 2014 Council of State Government's Digital States Survey.

3 PEAK's real time eligibility (RTE) determinations for Medicaid have put Colorado near the top in the nation for RTE technology, with more than 80 percent of all Medicaid applications happening in real time.

¹ The Infrastructure Modernization initiative modernized the core data infrastructure and facilitated the migration of mission-critical applications to a virtualized environment, and implemented security control consistent with state standards and security best practices.

2 In 2014 three major enhancements were made to the Program Eligibility and Application Kit (PEAK), the online service for Coloradans to screen and apply for medical, food, and cash assistance programs.



CIO & Secretary of Technology Suma Nallapati Computerworld Premier 100 IT Leaders for 2015



PEAK Real Time Eligibility ISM Innovation in Service Delivery Award

NASCIO

Chief Data Officer Dianna Anderson NASCIO 2014 State Technology Innovator



Data Insights Platform⁵ 2014 CIO 100 Award

Secure Colorado is the state's first strategic cybersecurity plan.

The Data Insights Platform is geared toward helping Colorado state agencies use the data they collect to make sound business decisions and support smart policy that benefits all Coloradans.

Summary

The Governor's Office of Information Technology continues to make strides in transforming technology and is providing Colorado with long-term, sustainable solutions. Due to our success in implementing our FY15 WIGs, our theme in FY16 will be to build on the basics, with key measures targeting service excellence, cybersecurity, and continuing to strengthen workforce and customer relationships. In-depth details are available in the OIT FY16 Playbook: Strategic Planning Roadmap, which is posted on our website at colorado.gov/oit.

Attracting and retaining employees will also remain an area of focus. The competition for talent is fierce. We have confidence that with our IT Recruiters, we will continue to find the people with the skills we need to help move us forward.

It is our privilege to serve the State of Colorado and deliver the technology services that enable state workers to do their job and help Coloradans to better interact with their government. We strive to enhance the citizen experience at every digital touchpoint, with efficient, elegant and effective IT solutions.

"I want to leverage next generation technology to make it easier for Coloradans to engage with their government."

-Suma Nallapati, Secretary of Technology & CIO



Appendix A: Organizational Chart

Secretary of Technology & CIO

Suma Nallapati

Chief Customer Officer

William Chumley

Customer Relations

Process Governance

Project/Portfolio Management

Service Desk

Chief Technology Officer

David McCurdy

Colorado Benefits Management System (CBMS)

Data Center Operations

Deskside Support

Enterprise Applications

Enterprise Architecture

Google Service Delivery

Network Operations

Security Operations

System/Server/Mainframe

Chief Financial Officer & Deputy CIO

Brenda Berlin

Accounting

Budget

Contracts

Human Resources

Fiscal Customer Service

Legislative Affairs

Procurement

Vendor Services

Chief Strategy Officer

Monica Coughlin

Broadband

Business Operations

Geographic Information Systems (GIS)

IT Economic Development

Chief Information Security Officer

Deborah Blyth

Compliance

Security Architecture

Security Governance

PIO & Chief Communications Officer

Tauna Lockhart

Customer Communications

Internal Communications

Media Relations

Appendix B: The 4 Disciplines of Execution (4DX)

Discipline of Focus: Wildly Important Goals (WIGs)

- Focus on the major areas where change can make the largest impact
- Lag measures let you know if you've achieved the goal
- Show the relationship: From [X] to [Y] by [when]

Example: Reduce weight from 150 to 140 pounds by Aug. 1, 2015

Discipline of Leverage: Act on Lead Measures

- Lead Measures are high-impact things the team must do to impact and reach the goal
- Must be predictive and influenceable

Example: Go to the gym at least twice every week and consume a maximum of 2,000 calories per day

Discipline of Engagement: Keep a Compelling Scoreboard

• Provides a clear and widely visible display of progress

Example: Keep a diary that includes calories consumed per day, gym activities and weight

Discipline of Execution: Create a Cadence of Accountability

• Holding each other accountable regularly and rhythmically through regular meetings

Example: Discuss weight loss activities with a trusted family member or friend who will provide honest and direct feedback

Appendix C: FY15 Playbook Initiatives

OIT selected 19 enterprise initiatives to support the four Wildly Important Goals (WIGs), several of which span across one or more fiscal years.

Back to Basics

INITIATIVE	STATUS
Reliable Infrastructure Provide consistent, robust, and highly reliable technology infrastructure and enterprise application architecture and tool framework to increase agility, efficiency, and service quality	On track
Responsive End-User Support Create a framework to seamlessly transform the end-user computing landscape from its current state to a world-class environment that enables enhanced end-user productivity with a focus on transforming user design, support, optimization, and transformation	On track
Transparent Billing Improve transparency and understanding of OIT services and billing	Completed
Define Architecture Define OIT internal system architecture, tools, and interfaces	On track
Establish IT EcoSystem Improve end-to-end Service Delivery Management and related metrics across OIT	On track
Mature Incident Management Mature, drive, and communicate service operational processes to enterprise IT levels: major incident management, change management, problem management, release management, and service desk intake	On track
Eliminate Redundant Applications Reduce the number of state owned applications in order to reduce cost of maintenance, increase application flexibility, and drive alignment across the enterprise	On track
Consistent Project Management Collaborate and partner with agencies to identify IT solutions that meet business needs, reduce complexity, and apply proven technology	Complete
Strengthen GIS Coordination Develop the state of Colorado repository of GIS data and web services in partnership with local governments and other state agencies	Complete

Protect State Assets & Data

INITIATIVE	STATUS
Standardize Compliance Create a framework for streamlining external audit remediation	Complete
Identify Risk Create an agency risk report card	Complete
Manage Risk Implement a standard risk management framework for all state agencies	At risk ^{xvi}
Reduce Risk Implement the "next 4" 20 Critical Security Controls	On track

Customer-Focused Employees

INITIATIVE	STATUS
Clearer Communication Continue role clarification and process implementation to ensure our agency customers receive consistent and timely messaging and information	On track
Define Governance & Process Implement process and governance enabling visibility and linkage to IT strategy, budget, and annual plan	Complete
Relevant Metrics Evaluate and modify current organizational metrics to more effectively monitor the organization's status both internally and externally	Complete

IT Job Growth

INITIATIVE	STATUS
Engage IT Economic Development Define and launch ambassador program for IT companies new to Colorado	Complete
Mature Broadband Define and implement state-owned broadband mapping process and measurements (includes stakeholder input process and data verification process)	Complete
Expand Planning for FirstNet Kick off and manage the formal FirstNet state consultation process	Complete

xvi This is a multi-year security project and the timeline has since been adjusted to more realistically reflect the amount of work that must be done. While we did not meet the fiscal year goal, OIT is on track for meeting the overall goals.

Appendix D: Additional Accomplishments

OIT provides and manages the systems that our customers use to deliver services to Colorado's residents and businesses. The following is a sample of the many projects that OIT worked on in FY15 to create and/or improve systems.

Agriculture & Wildlife

- AgLicense: The Department of Agriculture's (CDA) paper licensing, permitting, inspection and enforcement systems was replaced with an application that allows agricultural businesses to register and renew online. More than \$3 million in renewals have been processed using this new system.
- Mobile Apps: Three mobile apps were rolled out for CDA. The Farm Fresh app allows
 users to locate the farmer's markets in the state, provides maps and directions, and lists
 available products. The CO Wineries app enables users to find all things related to the
 Colorado wine industry including the location and operating hours for vineyards and winerelated businesses. The Colorado Noxious Weed app can be used to identify non-native,
 invasive weeds.
- Colorado Parks and Wildlife (CPW) Website: A new website was designed for CPW after
 the merger of Colorado State Parks and Colorado Division of Wildlife. Three separate
 websites were consolidated with more than 24,000 web pages manually reviewed,
 removed, transformed, and migrated to the new website. More than 90 staff members are
 now able to update CPW activities, conditions, and facilities information as well as obtain
 status reports and training materials.

Corrections & Public Safety

- Computer-Aided Dispatch (CAD): After three years of dedicated effort, the Department of Public Safety's Colorado State Patrol (CSP), OIT, and a vendor rolled out a new Computer-Aided Dispatch (CAD) system as a replacement for an outdated dispatch system. Dispatchers now have a more efficient system to send location and other critical information to responding emergency services personnel. The dispatch system is directly tied to a trooper's mobile computer providing mapping and other data that significantly decreases their response time and that of other first responders. The six CSP communications centers handle more than one million calls annually, providing emergency dispatch services to thousands of emergency personnel in 32 law enforcement agencies, and 31 fire and emergency medical service (EMS) agencies across the state as well as the Colorado Department of Transportation.
- IT Infrastructure Improvements: Several internal projects in FY15 helped lead to better service delivery and customer satisfaction at the Department of Corrections. They include enhancing wireless network capabilities and fiber connectivity, replacement of hundreds of network switches, migration of more than 6,000 devices from Novell eDirectory to Microsoft Active Directory, and the implementation of proactive, robust security solutions on more than 150 servers and 6,000 workstations.

Digital Trunked Radio System (DTRS): Hardware and software upgrades were made to DTRS to sustain the core infrastructure to mitigate risks associated with security, interoperability, capacity needs, and other concerns. DTRS is a critical component of the Public Safety Communications Network (PSCN) managed by OIT. Its 216 sites enable more than 81,000 subscriber radios across more than 1,000 state, local, county, federal and tribal agencies to communicate with one another.

Health & Human Services

- Child Abuse Statewide Hotline: OIT provided contract and project management, technical support and call routing for the January 2015 implementation of the Child Abuse Statewide Hotline system. This hotline is available 24 hours a day, every day of the year and provides citizens with the single easy to remember toll-free phone number (1-844-CO-4-KIDS) to report suspected child abuse and neglect.
- Division of Youth Corrections Computer Labs: OIT took over the responsibility of the network, infrastructure, security and computing environment for the computer labs in 10 youth facilities within the Colorado Department of Human Services' Division of Youth Corrections. OIT made upgrades to meet state and national security requirements and modernized the technology including the design of a secure and standardized desktop delivery of education. This new model is receiving national attention for its operational efficiencies as well as the ability for youth to immediately pick up where their education left off as they move across facilities.

Labor & Employment

• Technology Upgrades: Several projects were completed to update the computers and technology used by employees at the Colorado Department of Labor & Employment, including the migration of the Unemployment Insurance's scanning operations to the most current Windows operating system. More than 100,000 pages of unemployment claims and tax filings for unemployment insurance are scanned each month. The high scan volumes, critical and immediate nature of the work, and customized software on both servers and workstations made this migration complex. OIT re-architected the system, updated the software and moved more than 50 desktops to a new operating system. The new system configuration now runs on supported software and operating systems, is easier to maintain, and has better security to protect sensitive citizen data.





Revenue, Licenses & Registration

- Infrastructure Modernization Initiative: This was one of 10 infrastructure projects completed for the Department of Revenue. It modernized the core data infrastructure and facilitated the migration of more than 30 mission-critical applications including the state's core tax system and motor vehicle renew by mail to a virtualized environment with security controls that meet state standards and security best practices. The virtualized environment allowed for the decommissioning of more than 200 servers. The project resulted in faster service and greater accuracy, and is the single largest, non-enterprise infrastructure improvement since Colorado's consolidation in 2008. Statescoop recognized this project with a 2015 State IT Program of the Year award.
- Viper Upgrade: In September 2014, OIT successfully upgraded and virtualized Viper for the Department of Revenue. Viper is the database behind the Colorado State Title and Registration System (CSTARS) that processes all vehicle titles in registrations in Colorado's 64 county offices and 42 branch offices. More than 1.1 billion records were moved into a new, state-of-the-art virtual database. The result: Processes that once took four hours now take only ten minutes.
- Colorado DRIVES: A multi-year, multi-phased project to revamp the Division of Motor Vehicle's Driver's License System (DLS) and the Colorado State Title and Registration System (CSTARS) into one modern, user-friendly system was launched. At the end of the fiscal year, a vendor had been selected and contract negotiations underway. The project is slated to be fully complete in 2019.
- eLicense: Implemented a web-hosted application for the Department of Regulatory Agencies that allows real estate brokers, mortgage and loan originators, appraiser, community associations, and landowners to submit and manage licensing activities (e.g., payment, renewals, etc.) online. Prior to eLicense, there was a five to seven business day wait to receive a license by mail. With eLicense, the turnaround time is now 24 to 48 hours. eLicense also enables the general public to verify licensee status, generate a full list of licensees by license type, file a complaint, and view any disciplinary actions taken.



Transportation

- **Technology Upgrades:** The FY15 PC lifecycle rollout replaced hundreds of laptops and mobile devices with newer technology for customers at the Colorado Department of Transportation's (CDOT) headquarters and five regions.
- Fuel Tracking Phase II: CDOT uses fuel cards to pay for fuel for all CDOT registered vehicles and equipment. Phase II of the Fuel Tracking project was the implementation of a system to manage and audit fuel card purchases. The system generates a report which is mailed to senior management and division heads monthly. The ability of management to view this data allows them to plan routes that allow drivers to maximize fuel efficiency.
- Oversize/Overweight Vehicle Permit System: Implemented a public facing, user friendly web portal for CDOT that allows drivers to request permits online, pay for their transaction, and print documentation either before traveling to Colorado or at one of the ports of entry when arriving with oversize/overweight cargo freight.

Public

- Colorado Operations Resource Engine (CORE): CORE, the state's accounting and financial system of final record, went live on July 1, 2014. CORE replaces the 22 year old Colorado Financial Reporting System (COFRS) with a modern system that provides new functionality. On the first day of operation, more than \$73 million in transactions were processed.
- **High Speed Guest Wireless Network:** A guest wireless Internet service was installed at the El Pueblo History Museum. It is available to visitors as well as employees who use the wireless service while working away from their desks (e.g., in conference rooms, etc.).
- Transparency Online Project System (TOPS): Replaced the TOPS that was originally implemented in 2009 with a web application hosted by the Statewide Internet Portal Authority. TOPS is the state's "checkbook" that provides access to the state's actual revenue and expense transactions. This upgraded version integrates with CORE and provides even greater transparency into the State of Colorado's financial information. Users are able to search by department, unit, fund, vendor name or transaction and can download the information into Microsoft Excel.

FY15 Annual Report

Enriching the citizen experience at every digital touchpoint



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