

OFFICE OF THE GOVERNOR
FY 2018-19 JOINT BUDGET COMMITTEE HEARING AGENDA

Wednesday, November 29, 2017

9:00 am – 11:00 am

9:00-9:15 INTRODUCTIONS AND OPENING COMMENTS

9:15-9:35 OFFICE OF THE GOVERNOR / OFFICE OF STATE PLANNING AND BUDGETING

- 1 How does the Governor’s Office coordinate land management issues with state agencies and the federal government? Does the Office have a formal role for this coordination? If not, should it have a role? How would that role function?**

Response: State agencies take the lead in engaging on management of their own state lands, and with the federal government related to federal land management planning processes and policies. State agencies coordinate with the Governor's office staff, as appropriate, to make staff aware of challenges and to coordinate when there are comments from multiple departments. In addition, the Governor's Office has, at times, coordinated meetings among interested local governments on federal land-use processes that implicate a broader geographic area than a field office or forest. Most recently, that has included work on greater sage grouse planning and conservation, methane capture from coal mines in the North Fork Valley, and Gunnison sage grouse conservation.

- 2 Please describe the purposes for which federal funds from the Jobs and Growth Tax Relief Reconciliation Act of 2003 are allowed to be expended. Are these purposes still being performed by the Governor’s Office?**

Response: The “JGTRRA” or the “Jobs and Growth Tax Relief Reconciliation Act of 2003” provided \$20 billion in state aid to help with budget deficits for fiscal years 2003 and 2004. The funds distributed to states were to be used for essential government services or to comply with unfunded federal mandates. Yes, these purposes are still being performed by the Governor’s Office.

- 3 **Why has the Colorado Advisory Council for Persons with Disabilities consistently reverted back funds from their annual appropriation for the past three years? Additionally, how have expenditures in the past three years aligned with the General Assembly’s intention for the appropriations to be used for the development and/or dissemination of marketing materials to Colorado television and radio stations? Are there recommended solutions for ensuring that advertising materials are disseminated to television and radio stations, digital outlets, and newspapers?**

Response: The Governor’s Office collaborates with the Department of Health Care Policy & Financing to administer this program. Funds have been reverted for a variety of reasons including: untimely approval of purchase orders; the capacity of the State Printing Office; and a Council requirement to keep a certain amount of funds available until the last day of the fiscal year.

The Disabled Parking Education and Enforcement Fund was revised under H.B. 10-1019, and the bill is not specific to parking education funds being used for television and radio only. The Council has worked with several media professionals and has split the parking education dollars between the following programs:

- **Media** – television has been used as well as the TV social medial platforms they manage.
- **Web based media** – Josh Blue has filmed educational PSAs for us that will be shared on all social media platforms in the coming New Year.
- **Think of Me Campaign** – these are parking signs that have been placed at over 2,000 locations across the state. These signs sit in the actual accessible parking spaces and put a “face to the space.”
- **Use of non-traditional advertising** – ads in placed in unusual areas – like on the board on the back of restroom stall doors and the back of buses and in DMV offices and city offices.
- **Education of medical professionals** – dollars have gone to putting our Board-appointed medical professionals in front of Colorado medical professionals at their annual and local conferences because “education works better medical professional to medical professional.”
- **Educational materials** – we have developed, designed and printed brochures for law enforcement and medical professionals in their offices and out in the community.
- **Educational messages for youth** – we have designed and developed training specific to 15-year-old drivers for driver education companies to use in their curriculum.

- **Drivers Ed Handbook** – Accessible parking was dropped from the Colorado Driver’s Education Handbook and the Council developed language so it would be added back into the online version immediately and the printed drafts when re-printed.

A viable solution to ensure all appropriated dollars are spent could be either to contract the work of this program out using the State's RFP system, or move this program to an office that has the appropriate resources to accomplish legislative goals of the program.

- 4 **The Office of State Planning and Budgeting submitted a request to reduce cash funds that are used to benefit multiple state agencies and programs as part of the 2.0 percent plan. Was the 2.0 percent reduction plan intended to reduce non-General Fund sources of money? Was the 2.0 percent reduction plan intended to include money that is provided to other state agencies as agency-to-agency grants?**

Response: Yes, the 2.0 percent reduction plan was intended to include non-General Fund sources of money. Yes, the 2.0 percent reduction plan was intended to include money that otherwise would be provided to other state agencies as agency-to-agency grants.

- 5 **Please explain the role of the Office of State Planning and Budgeting in coordinating with the State Architect on agency building and construction plans? Is there an FTE located in the Office for this purpose?**

Response: The Office of State Planning and Budgeting (OSPB) does not have an FTE fully dedicated to capital construction or coordination with the Office of the State Architect (OSA). This function is spread among all budget staff and management within OSPB. Senate Bill 15-270, sponsored by the Joint Budget Committee, created the Office of the State Architect in the Department of Personnel and Administration, and assigned the office new responsibilities associated with statewide planning for capital construction. Beginning in FY 2016-17, the OSA began reviewing state agency program plans and capital budget requests to make recommendations to OSPB. OSPB analysts meet with OSA throughout OSA’s review process and provide technical assistance related to capital budget requests and controlled maintenance budget requests from assigned departments and institutions of higher education. The OSPB deputy director and assistant director for budget also meet with the OSA several times to discuss capital budget requests and controlled maintenance budget requests from a statewide perspective. When OSA has completed its scoring and recommended prioritization, OSPB management meets with OSA again to discuss the scoring, recommendations, and

priorities for the budget submission. OSPB also approves operational master plans that are submitted to the OSA.

9:35-10:00 COLORADO ENERGY OFFICE

- 6 Please provide an overview of how the Office has been reorganized in the past year. As part of this response, please include information on the different functions each unit performs.**

Response: In its prior structure, CEO had weatherization, programs and initiatives, policy, communications/outreach, and finance in separate units and a long mission statement that was hard to communicate. This structure created programmatic inefficiencies and challenges regarding effective communication of the offerings and benefits of the Office. In an effort to address these issues and increase employee engagement efforts, CEO went through a process to create a more concise mission statement based on our broad statutory mission and reorganized staff into units that represent the customer classes our office serves.

The Office's new mission is: "To deliver cost-effective energy services and advance innovative energy solutions for the benefit of all Coloradans." This mission provides a filter for the work we do across the energy spectrum to pursue the reduction of long-term costs and emissions while driving growth in our energy industries.

Through the restructuring effort, CEO created four units that deliver cost-effective services to customers and work with stakeholders to expand consumer options and advance innovation.

Low-income & Residential Energy Services

- Weatherization services for low-income households
- Provide technical trainings to home builders on cost-effectively building high performing homes
- Deliver consumer information about available resources and home energy scoring platforms
- Support the expansion of energy financing products for the residential sector

Commercial & Industrial Energy Services

- Enables energy performance management for public and private sector facilities
- Programs include: Energy Performance Contracting, Energy Savings for Schools, energy building code training for local governments, EnergyCAP for state facilities, and Agricultural Energy Efficiency Program

- Support the expansion of energy financing products for the commercial and industrial sectors.

Transportation Fuels & Technology

- Alternative fuel infrastructure deployment
- Energy Assurance and Liquid Fuel Emergency Planning

External Affairs

- Supports the other three units with overall strategic outreach to the public and engagement at the Public Utilities Commission and General Assembly.
- Advance innovation in energy generation and production by conducting market assessments and research studies, holding workshops, targeted outreach and education, and providing technical assistance to project developers.
- These functions of innovation are based in external affairs rather than the direct service delivery.
 - For FY 2017-18 these efforts are primarily related to renewable energy and energy efficiency technologies due to funding constraints.
 - With the limited cash funds remaining in the Innovative Energy Fund, this unit will perform a similar limited function for traditional fuels. However, current funding levels are not sufficient to support dedicated staff to advance innovation in that sector.

This new structure has enabled the Office to become more efficient by breaking down silos that inhibited cross-collaboration. It also supports a more comprehensive approach to meeting the Office's mission.

7 Please explain how the existing grant money from the American Recovery and Reinvestment Act of 2009 (ARRA) can be used by the Office.

Response: For FY 2017-18, CEO received approval from U.S. Department of Energy (DOE) to repurpose \$3.1 million of previously awarded federal American Recovery and Reinvestment Act dollars from the office's Revolving Loan Fund to expand the Office's current DOE supported programming. This allows the Office to retain staff and continue providing energy services to Coloradans. However, this solution does not fully replace the necessary state funding to fulfill the office's statutory duties nor does it support the office's work on traditional fuels. CEO was approved by DOE to administer the activities outlined above in question #1 with the repurposed ARRA funding for FY 2017-18.

8 Is it possible to use existing money from ARRA in combination with state General Fund to cover the gamut of the Office’s statutory obligations while lessening the impact on the General Fund?

Response: Yes, potentially. It primarily would depend on gaining the approval from the DOE to allow the office to repurpose additional funds for FY 2018-19. That funding is approved by the DOE for use in a revolving loan fund that supports the working capital needs of local energy companies deploying innovative, market-ready technologies. It would also depend on the General Fund appropriation amount. The current repurposed federal funding covers \$3.1 million of FTE and preapproved work on energy efficiency and some innovation on renewable energy. State General Fund would need to cover the energy efficiency and renewable energy related statutory programming dollars and associated FTE. It would also need to fund FTE and programming dollars for on traditional energy sources.

9 What is the Office’s role in regards to the Clean Power Plan?

Response: In 2016, the U.S. Supreme Court stayed the U.S. EPA’s Clean Power Plan, and the rule remains in the federal court system. Following that decision in 2016, the CEO has not worked on compliance toward the rule. The CEO regularly meets with all utilities to discuss programming and provide information which includes resource planning, but has no regulatory authority to compel those decisions.

10:00-10:55 OFFICE OF INFORMATION TECHNOLOGY

10 To which functions and programs are each of the Office of Information Technology's 963.5 FTE assigned?

Response:

(A) OIT Central Administration (EGE)		148.0
	Central Administration	96.0
	Project Management	52.0
(B) IT Infrastructure (EAB)		134.0
	Infrastructure Administration	23.0

	Data Center Services	8.0
	Mainframe Services	31.0
	Server Management	72.0
(C) Network (EAC)		106.0
	Network Administration	4.0
	Colorado State Network Core	36.0
	Voice and Data Services*	12.0
	Public Safety Network (DTRS)	54.0
(D) Information Security (EAD)		47.0
	Security Administration	3.0
	Security Governance	6.0
	Security Operations	38.0
(E) Applications (EAE)		354.5
	Applications Administration	15.0
	Shared Services	114.0
	Agency Services	176.0
	Colorado Benefits Management System (CBMS)	49.5
(F) End User Services (EAF)		174.0
	End User Administration	2.0
	Service Desk Services	48.0

	Deskside Support Services	121.0
	Email Services	3.0
	TOTAL	963.5

- 11 **How much did the state spend for information technologies in FY 2016-17 across all agencies? Please include operating budget and capital construction budget totals, as well as figures for non-executive branch agencies.**

Response: The table below provides total OIT spend for FY 2016-17. Statewide (non-OIT) figures will be presented at the time of the hearing. OIT does not have all information on IT expenditures for non-appropriated high education or other non-executive branch agencies.

Statewide Information Technology Expenditures in FY 2016-17

	Operating	Capital	Total
Actuals - Office of Information Technology (includes all Operating and Personal Services Expenditures)	\$242,864,344	\$12,548,848	\$255,413,192
Estimated - Other Agencies (appropriated operating funds only)	TBD	TBD	TBD
TOTAL	TBD	TBD	TBD

- 12 **Please provide a status of Secure Colorado, including what steps have been completed, what steps are pending completion, and what is required to complete the pending steps.**

Response: OIT’s Secure Colorado establishes a roadmap for improving cybersecurity in Colorado over the next three years. This plan was developed in cooperation with the Colorado Information Security Advisory Board (Board).

Secure Colorado includes four strategic goals supported by 18 strategic initiatives. These goals and initiatives are based on foundational information security principles that are designed to be relevant for years to come. Supporting operational initiatives are developed

annually and included in the OIT Playbook, which can be found on the OIT's website (colorado.gov/oit). These operational-level initiatives will be the Colorado Information Security Program's primary focus for that specific fiscal year and will be aligned with one or more of Secure Colorado's strategic goals and initiatives.

Additionally, OIT's Secure Colorado plan utilizes the 20 Critical Security Controls (Center for Internet Security) as the programmatic framework to ensure we are investigating on those highest controls that have the highest value for breach mitigation. Each of the 20 Controls contains multiple sub-controls, for a total of more than 130 actual controls. Each year, OIT evaluates changes made within the 20 Controls, and the maturity of OIT's implementation of each control (including sub-controls) and we select activities intended to improve our maturity of those controls across our environment.

Secure Colorado was originally intended to be a 3-year plan, ending at the end of Fiscal Year 2016. However, we recognized that we will never be "done" improving security. As a result, to maintain its relevancy, Secure Colorado and our annual plans are reviewed and updated annually by the CISO, in conjunction with the Colorado Information Security Advisory Board and OIT Executive Leadership Team.

This year the following security improvement activities are underway:

- We are populating a Governance, Risk and Compliance toolset, which enables us to manage and aggregate risks and mitigate activities across the environment.
- We are building a vendor risk management program to proactively assess vendor risk and correct issues of non-compliance with our policies.
- We have assembled a team and are beginning to perform security assessments for the 120 critical and essential applications that OIT manages on behalf of our agencies. We are starting first with systems containing federal tax information, in preparation for the upcoming (March 2018) IRS audit.
- We are installing recently purchased and/or upgraded security tools throughout the environment.
- We are incorporating automated threat intelligence feeds and capabilities into our existing toolsets.
- We are upgrading agency firewalls to bring them onto our enterprise standard.
- We have numerous Role Based Access Control (RBAC) projects underway, essentially right-sizing access to only what is required for individuals to accomplish their duties.
- We are expanding our two-factor verification implementation across all privileged access.

- We are implementing an Identity and Access Management framework that is tied into every agency. This will allow us to begin provisioning, de-provisioning and auditing user accounts in a consistent manner across all agencies.
- We are conducting classroom-based technical security training aimed at equipping technical resources with security knowledge to help them perform their roles more securely.

13 How many staff in the executive branch are assigned to information technology security functions? What are the challenges associated with hiring these individuals?

Response: 47 individuals provide IT security functions, these are as follows:

- Security Administration and Governance (9)
- Risk and Compliance (5)
- Security Operations (16)
- Identity and Access Management (17)

This skill-set has less than 0 percent unemployment, meaning there are more positions open than qualified talent available to fill the positions in Colorado and nationwide at this time. OIT is losing candidates and existing staff to offers of \$20K-\$30K more on a consistent basis. OIT is competing with the private sector which is affecting our ability to attract, hire and retain staff in this area.

Nationwide statistics for cybersecurity professionals:

- Unemployment rate: ZERO (Gartner)
- >348,000 Open security positions nationwide (CyberSeek)
- 1.8 Million Unfilled Positions by 2022 (Center for Cyber Safety and Education)
- Average CISO Salary Increase Since 2014 > 20% (Gartner/Mercer Report)
- The Demand will Increase by >50% Through 2018 (U.S. Bureau of Labor Statistics)

Approved by the JBC for FY 2017-18, OIT has recently started a Veterans Transition Program, which is a paid internship to bring departing military personnel into our Security Operations Center, to help augment our staff, while we provide training and experience with our security tools. We will be seeking to hire, permanently into our environment, as many Veterans as we can, as they are concluding their internship.

14 How does the Office of Information Technology work with agencies to assist them in rolling-out new or replacement information technology systems? Is there a set project

plan that the Office of Information Technology follows when developing and implementing new or replacement information technology systems?

Response: OIT works with agencies from the strategy level, five-year roadmaps, budget planning, change management, training, role clarification and retooling, and standard project life cycle methodology for new or replacement IT systems. There are template project plans that encompass OIT's project life cycle gating and all activities and deliverables. These templates are utilized by departments and OIT sponsors to ensure successful completion of all required components. Key project plan tools include risk management plan, organizational chart, roles and responsibilities (RACI), change control, testing, disaster recovery, communications, training, configuration, and implementation plans.

- Attachment 1: [Project Life Cycle Overview](#)
- Attachment 2: [Project Life Cycle Activities and Deliverables](#)

15 If the HRWorks FY 2017-18 emergency supplemental request and FY 2018-19 request are not approved by the General Assembly, what is "plan B"?

Response: If the emergency supplemental for the HRWorks project is not funded, departments will continue present practices and systems for HR, timekeeping, and payroll. This approach exposes the state to greater risk of not paying its employees accurately and timely. It also increases the risk that the state will miss federal reporting requirements.

The state will continue using Colorado Personnel Payroll System (CPPS), a highly customized, COBOL-based program based on a 1970s design. There are, on average, two CPPS outages a month (10% of working days) and the system "slows down" repeatedly which impacts payroll processing. It is difficult to find capable COBOL programmers to support the system. The precarious reliability of CPPS puts paying the state's 33,000 employees at risk; there is no backup system to pay employees. If CPPS fails, the state will not be able to pay employees and will be in violation of the Fair Labor Standards Act. Most importantly, a failure of CPPS would cause significant hardship for thousands of state workers.

OIT and the Department of Personnel & Administration are evaluating whether certain parts of the HRWorks project could continue if the emergency supplemental request is not approved. There is a possibility that work performed during this implementation will be lost, which will need to be duplicated when the state pursues another human resources

information system (HRIS). The cost associated with this duplication of effort cannot be recaptured.

16 Please explain the challenges faced by the "24/7" facilities in time tracking and how these challenges are addressed. As part of this response, please indicate how the proposed HRWorks solution addressed the risk of fraud in the time tracking process.

Response: A good example of 24/7 operations is the Colorado Department of Corrections (CDOC) which has employees working shifts around the clock. Employee shifts are scheduled on a monthly basis and entered into the timekeeping system in advance. If a CDOC employee works hours outside their scheduled shift during the monthly schedule, an exception report must be filled out and submitted to the employee's supervisor. The supervisor has the ability to review and approve the exception time in the timekeeping system. This process is part of a CDOC Administrative Regulation which is reviewed annually. Adherence to DOC Administration Regulations is part of every CDOC employees' responsibilities. HRWorks meets the requirements of CDOC.

Many of the challenges faced by 24/7 facilities at Colorado Department of Human Services (CDHS) in time tracking are due to needs of the facility for staffing and reporting. Current challenges include:

- Gathering data across multiple systems to combine pay, time and financial is time consuming and the exact reporting request is sometimes difficult to achieve;
 - HRWorks will be a 'beginning to end' reporting tool with the ability to collect data from HR all the way through to dollars.
- Need to schedule to acuity and other metrics; the care needs of clients can change hourly necessitating a different skill level of staff. This makes it challenging to fill anticipated shifts and even more challenging to efficiently determine staff available to fill a shift that someone might unexpectedly be unable to cover due to licensing or other skill requirements.
 - CDHS does have an advanced scheduling module written into their portion of the HRWorks system
 - This module can be used by other departments as required
- Ability to staff to needs and licensing requirements;
- Complying with state personnel rules, department rules, guidelines, standards and procedures, and licensing body requirements (ex: work weeks, overtime, shift pay, building a schedule with employees with the right licenses)

- HRWorks meets various department requirements and is an industry standard system. Often the difficulties these facilities face in time tracking have little to do with tracking time and more to do with filling vacancies, retaining quality staff and ensuring rules and standards are followed and enforced.

HRWorks system is designed to track and report everything from timekeeping to processing and adjustments. Additionally, Department procedures and audit practices help mitigate human error and fraudulent time tracking scenarios.

17 Please provide an update on the FirstNet alternative plan RFP process. As part of this response, if possible given procurement rules, please share with the Committee any information related to the financial risks and rewards associated with the FirstNet alternative plan.

Response: The State has issued an Intent to Award to the partnership of Rivada Networks and Macquarie Infrastructure Inc that is conditional upon several events; the first is the FirstNet Colorado Governing Board (FNCGB) recommending to the Governor to opt-out, next is the Governor making the decision to opt out, and then for the State and FNCGB to accept the design and financial model, sign a contract and be able to pass all regulatory requirements.

Unfortunately, the details of the financial model would not be known until a final design is completed as the capital costs are ultimately determined on the technical design. The selected vendor has committed to implementing the network within the two key financial parameters; there is no up-front capital from state or local jurisdictions (outside of the grant that would be received from the NTIA - approx. \$80 million) and that the network would be self-sustaining based on user fees (and private monetization of the spectrum). The primary risk to this business model would be if the network were not able to convince local users to adopt and use the network or the fundamental technical design was flawed. The rewards under this model is that the state (including local jurisdictions) would have significantly more control and input over both the design of the network and its long-term performance. Additionally, under the opt-out model the state and local jurisdictions would be able to utilize the investment in the network to help facilitate solutions to other institutional broadband issues such as transportation, education, general connectivity, etc.

18 Please provide a broad vision of how the state's land mobile radio systems, including DTRS, have the potential to merge with long-term evolution technology (LTE) in the future. Are there opportunities to share assets between DTRS and FirstNet LTE?

Response: The answer to this question is incredibly complex and dependent on a number of variables but at the same time, it is important to begin discussing. As with any technology transition, there is no single ‘flip the switch’ moment and with public safety communications it is even less realistic. What is more realistic is a gradual transition, based on local user needs and demands as well as the reliability of the underlying networks supplying each technology. From a practical perspective, these technologies are already merging. Most DTRS manufacturers (Motorola, Harris, JVC Kenwood) are making devices that work on both Land Mobile Radio (LMR - the underlying technology of DTRS) and LTE. Additionally, there are an increasing number of ways to let traditional cell phones interface with DTRS and turn them into ‘radios.’

The decision to opt-in or out of the national FirstNet solution will have significant impact on the timeline of any transition and the merging of technologies. Opting in will likely slow the transition for two reasons; first, jurisdictions will be hesitant to trust a commercial network as their foundational communications medium (due to concerns about hardening, reliability, etc.) and second, AT&T will control the mechanism to interface LTE and LMR which will cause hesitation as well. In an opt-out scenario, the state and local jurisdictions will have direct control over these issues and be able to implement them according to their needs.

The state has very little influence over local communications systems so any long-term statewide approach must be collaborative and open. OIT has proposed to lead this effort by building off the work done leading up to the current FirstNet decision. OIT commissioned a study to look at the best way to begin this transition and has been working with local and state communications leaders to begin developing a path to integrate LTE technology with OIT’s current LMR structure. OIT hopes to continue this effort and develop a statewide set of standards that can be implemented with any LTE network (commercial or private) that will create opportunities for individual jurisdictions to begin the migration process. Additionally, OIT is beginning to look at how these networks interact with other critical communications networks (9-1-1, transportation) to help ensure that the state can adopt and integrate these technologies in a thoughtful way.

From an asset perspective there can be overlap between LTE and LMR technologies. Towers that hold LTE technology can hold LMR technology and vice versa. Currently, the state managed portion of DTRS does not share any infrastructure with LTE providers however many local jurisdictions and other states currently co-locate the two technologies.

- 19 Please provide an estimate of DTRS coverage in Colorado. As part of this response, the Office of Information Technology may wish to provide a map to illustrate coverage.**

Response: The DTRS provides the greatest coverage footprint of any public safety communications voice network across the state, far surpassing all cellular networks. It consistently meets or exceeds the mission critical requirements for public safety communications, available to first responders 99.999% of the time. The network has the highest level of security and hardening, making it the most reliable and trusted public safety communications network available today.

OIT-PSCN (Public Safety Communication Network) signal propagation or coverage modeling software indicates 93% mobile highway coverage (see attachment 3: coverage maps). Mobile radios are high powered radios mounted in a vehicle and utilizing high powered roof top antennas. Conversely a low power portable radio will not work in the same area. The use of a lower power portable or ‘hand-held’ radio in the same area creates a diminished coverage pattern that in many cases renders the portable radio useless. Portable radios are typically used by first responders any time they must perform their duties outside the reach of the mobile radio mounted in their emergency vehicle.

Pockets of poor or no DTRS coverage do exist in areas across the state, with the largest areas of concern being across the western slope, southeastern, and extreme southern areas of the State. OIT-PSCN works closely with state and local law, fire and emergency medical services (ambulance, paramedics, fire rescue, etc.) agencies to identify areas of the State where coverage is lacking or in some cases unavailable. The attached tracking sheets (attachments 4 and 5) have been developed through these cooperative discussions. There are a number of remote, rural, and mountainous areas of the state identified as having coverage gaps. A significant portion of these poor or no coverage areas are directly related to the geographical diversity and complex topography of our state i.e. deep mountain canyons with narrow rock walls and difficulty in networking sites where microwave connectivity is difficult or impossible. The funding needed for the addition of DTRS sites in these areas has not been available for nearly a decade.

20 Is there federal funding available to state and local governments to build out DTRS sites on federal public lands?

Response: Federal funding is not available to the state for this purpose. The State does have a significant number of tower sites currently located on federal lands. The state’s partnership with the U.S. Forest Service, Bureau of Land Management, and U.S Bureau of Reclamation is extremely valuable to the State. The federal government waives State lease and permit costs on these sites, provided the State does not permit commercial users of the site.

There are a number of federal grants that local governments may apply for to support public safety communications. However, many grant programs have seen reduced funding in the past 5 years. Local governments are often constrained financially and limited in regards to matching funds federal grants require. In addition, some local governments are simply not interested in dealing with burdensome approval and reporting requirements that accompany federal grants.

- 21 Given that the need for new DTRS sites outweighs the proposed funding amount of \$2.0 million put forth in JBC staff's recommendation, how would the Office of Information Technology prioritize locations to receive funding?**

Response: The most effective and expedient method of utilizing this limited funding is to immediately address coverage gaps where the local governments have identified the availability of an existing communication tower and building. We currently document and track the proposed sites that are for the most part 'site-ready', or in need of limited site development (This could be as simple as adding a backup power generator, properly grounding the tower and/or building, or adding an HVAC unit to the building). With those limited improvements, OIT PSCN would be able to use this funding to purchase the DTRS and microwave equipment and deploy OIT personnel to provide programming and installation of the equipment. OIT would own the equipment and retain responsibility for monitoring, maintenance and repair, upgrades, and future replacement of the equipment at the end of its useful life. This plan can effectively address the addition of three or four sites per year, for the duration of the two-year program.

- 22 Does the Office of Information Technology (or any other state agency) own any satellite phones for first responders? If so, in what instances are these phones deployed?**

Response: OIT does not have any satellite phones for first responders.

- 23 What other options did the Office of Information Technology consider prior to submitting a capital construction information technology project budget request for FY 2018-19 to remodel its existing data center? What are the pros and cons of remodeling versus building new versus leasing?**

Response: Considering the age of the State Data Center (30 years old), needed repairs and upgrades, and the future of Data Center provided services, OIT looked at multiple options for a capital construction request. OIT recognized 3 key options: (1) do nothing and immediately move all assets to an existing secondary data center and cloud service, (2) repair and upgrade

portions of the data center infrastructure, while also establishing cloud integration to move workloads to the cloud, or (3) build a new data center.

Due to the risks related to the data center repairs and upgrade needs, Option 1 is not realistic; the effort and resources required to migrate existing workloads into another cloud or leased data center is too time consuming and far too risky due to the repairs that are needed. Workloads cannot migrate and exist in an off-premise cloud environment today, and the secondary data center cannot handle all workload capacity that exists in the Lakewood Data Center.

- Option 3 for building a new data center is cost prohibitive and most institutions are trying to move away from owning and supporting full data center operations in lieu of using Cloud services. While a new data center is appealing and would ensure a long life of infrastructure needs for the state, it's costly and does not align with the state's strategy to leverage managed services and cloud solutions.

OIT determined that Option 2 was best for the state. This option enables the state to repair/upgrade critical infrastructure and extend the life of the Lakewood data center. With the extended life of the data center, cloud integration can be established and important applications' workloads moved to these cloud services. The long-term goal is to establish mature cloud integration, move workloads to cloud services and leverage the second data center (EFort) for on-premise critical/important workloads. The Lakewood data center would become the on-premise disaster recovery and lower importance workload site.

OIT also looked at co-location hosting (leasing) to resemble that of the existing EFort facility. EFort represents the state's second data center that is co-managed by a 3rd party provider and OIT. A combination of high cost, industry trending away from data center management and the adoption of cloud services eliminated this as a viable alternative to the selected option identified above, Option 2.

OIT believes that repairing and upgrading the Kipling data center infrastructure, as well as developing cloud integration for off-premise application workloads is the most cost efficient and strategically aligned recommendation.

ADDENDUM: OTHER QUESTIONS FOR WHICH SOLELY WRITTEN RESPONSES ARE REQUESTED

- 1 Provide a list of any legislation that the Department has: (a) not implemented, or (b) partially implemented. Explain why the Department has not implemented or has only**

partially implemented the legislation on this list. Please explain any problems the Department is having implementing any legislation and any suggestions you have to modify legislation.

Response: Office of the Governor (GOV), Office of the Lieutenant Governor (Lt. GOV), Office of State Planning and Budgeting (OSPB), and Office of Economic Development (OEDIT): These offices do not have any legislation that has not been implemented or is partially implemented.

CEO Response: The Colorado Energy Office (CEO) has one partially implemented bill from previous legislative sessions. Pursuant to H.B. 14-1326, by December 31, 2018, CEO shall study whether the qualifying alternative fuel medium or heavy duty truck classes generate life-cycle emissions materially greater than comparable trucks running on traditional fuels. The office received a General Fund appropriation in FY 2017-18 to complete that study and is currently scoping the project.

OIT Response: H.B. 16-1047 "Interstate Compact - Physician Licensure" has not been fully implemented. The agency requested \$113,300 be carried forward from FY17 to FY18 due to vendor selection delays.

A position related to the FY17 Niche Records Management decision item was not filled in FY17, but has been filled in FY18 and is currently working to support this legislation's objectives. Individuals were interviewed with varying levels of success (including offers made and not accepted). Due to the high level of complexity and the specialization of the application, qualified candidates with the required knowledge were difficult to find. A main problem with recruiting is the background check required by CDPS.

- 2 **Does the Department have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor's Office and dated June 30, 2017 (link below)? What is the Department doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the Department's budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found. <http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2017>**

Response: Office of the Governor (GOV), Office of the Lieutenant Governor (Lt. GOV), Office of State Planning and Budgeting (OSPB), Office of Economic Development (OEDIT)

and Colorado Energy Office (CEO) do not have any high priority outstanding recommendations from the annual report of audit recommendations not fully implemented.

OIT Response: OIT has 9 High Priority Outstanding recommendations; summary details are as follows:

- Implement Service Level Commitments between OIT and agencies: this was implemented, as of May 2017.
- Improving mainframe controls (2 recommendations): in progress and will be complete by the end of December 2017.
- Recommendations for security improvements to GenTax (2 recommendations): both recommendations have been partially implemented. One recommendation will be fully implemented by the end of December 2017; feasibility of a potential solution addressing the other recommendation is being pursued currently.
- SIPA contract improvements (2 recommendations): in progress and is expected to be complete by June 2018.
- CUBS and CATS security improvements (2 recommendations): CUBS and CATS are being replaced as part of the Unemployment Insurance Modernization (UIM) project. This project is going live on 12/18/2017. Recommendations will be implemented by December 2018.

3 If the Department receives federal funds of any type, please respond to the following:

- a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the Department is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the Department by the federal government during FFY 2017-18 or 2018-19.**

Response: None of the offices of the Governor expect any sanctions.

- b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?**

Response: None of the offices of the Governor are expecting any material changes in federal funding with the passages of the FFY budgets.

- c. Does the Department have a contingency plan if federal funds are eliminated?**

Response: Office of the Governor (GOV), Office of the Lieutenant Governor (Lt. GOV), Office of State Planning and Budgeting (OSPB), the Office of Economic

Development (OEDIT), and the Office of Information Technology (OIT) do not expect any material changes and because of this, only a slight expenditure reduction would result.

CEO Response: if the DOE's Weather Assistance Program (WAP) and State Energy Program (SEP) appropriations were eliminated for FY2018-19, programming would continue at a reduced funding level.

- 4 **Is the Department spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the Department is working with other state or federal departments to coordinate the campaign?**

Response: Office of the Governor (GOV), Office of the Lieutenant Governor (Lt. GOV), and the Office of State Planning and Budgeting (OSPB), do not have public awareness campaigns.

CEO Response: For the CEO, the Office uses public communications and outreach strategies to inform the public and stakeholders about CEO's programming. However, the CEO has no public awareness campaigns.

OEDIT Response: OEDIT is spending money on public awareness to meet the goal of raising national and international awareness of Colorado's high-value attributes as they apply to our economy and business climate, in order to support the growth of new business, startups, and existing business expansions in Colorado.

The Marketing Division has worked with all OEDIT divisions to identify a clear and focused audience. This has allowed the marketing team to better target the Colorado brand business message and identify efficient media opportunities to achieve our goals.

Paid Media

To raise awareness of the Colorado brand, the marketing team is utilizing both paid media and earned media. In 2017, a paid media campaign was executed with "World Finance," a quarterly print and online magazine providing comprehensive coverage and analysis of the international business and the global economy, to produce four stories about Colorado's industry clusters. The goal of this campaign is to build awareness of Colorado's healthy business climate and create premium source branded content that OEDIT can also utilize on choosecolorado.com.

Utilizing World Finance, the marketing team was able to reach, at a national and international level, business executives, including those in the C-Suite, and leaders from Colorado's Key Industries. The cost of the campaign was \$32,000 and resulted in 96,982 impressions per issue with over 2.5 million page views per story.

OEDIT is also undertaking an effort to increase web traffic by improving search engine optimization (SEO). This effort has resulted in over 40,000 new visitors to choosecolorado.com.

Earned Media

The OEDIT marketing team works to place stories about the Colorado economy and key industries in local, national and international media outlets. The goal is to deliver Colorado key story lines by continually approaching target journalists with tailored story ideas highlighting specific spokespeople, companies and initiatives from throughout the state.

EARNED MEDIA Results:

- Brand Impressions to date: 413,000,000 / Annual Goal: 1,000,000,000
- Brand mentions to date: 2,189/ Annual Goal 6500
- Based on results of the first 4 months, on track to reach goal
- National Placements – New York Times, Politico, Forbes, Global Trade Magazine

OIT Response: OIT's public awareness campaigns (e.g., cybersecurity awareness, two-step verification, phishing attacks) are through earned and social media, as well as inter-agency communications which have no cost attached to them.

- 5 Based on the Department's most recent available record, what is the FTE vacancy and turnover rate by department and by division? To what does the Department attribute this turnover/vacancy? Do the statewide compensation policies administered by the Department of Personnel help or hinder in addressing vacancy or turnover issues?**

Response: Office of the Governor (GOV) has 2 vacancies, Office of the Lieutenant Governor (Lt. GOV) does not have any vacancies, Office of State Planning and Budgeting (OSPB) has 2 vacancies, Office of Economic Development (OEDIT) does not have any vacancies; and Colorado Energy Office (CEO) has 1 vacancy. The departments' turnover rate for FY 2016-17 was 33% in total. For the Office of the Governor the turnover rate was 30%, Lt Governor Office 36%, Office of State Planning and Budgeting was 34%, Office of Economic Development and International Trade was 35% and Colorado Energy Office was 31%. The department attributes turnover rates primarily to compensation or seeking

professional opportunities outside the state. No; the statewide compensation polices do not apply to us and therefore do not help or hinder us.

OIT Response: FTE Vacancy - In FY17, OIT had a total of 91.8 open FTEs and a vacancy rate of 9.79% (Open positions divided by allocated positions)

Long Bill Line	FTE	Open Positions (Vacant months open divided by 12)	Vacancy Rate (Open positions/allocated positions)
(A) OIT Central Administration	145	20.5	14.14%
(B) IT Infrastructure (EAB)	128	9.906	7.74%
(C) Network (EAC)	96	14.71	15.32%
(D) Information Security (EAD)	37	3.08	8.32%
(E) Applications (EAE)	366.5	29.7	8.10%
(F) End User Services (EAF)	165	13.92	8.44%
TOTAL	937.5	91.8	9.79%

The FY17 turnover rate for OIT is 12%. Based on exit survey data, aside from retirement which is OIT’s largest percentage of reasons, individuals left for growth opportunity and pay.

Statewide compensation policies are not hindering OIT’s ability to compensate appropriately; OIT’s budget remains the greatest hindrance. OIT does not have the budget to pay incoming or existing

- 6 **Please provide an update on the Department’s status, concerns, and plans of action for increasing levels of cybersecurity, including existing programs and resources. How does the Department work with the Chief Information Security Office (CISO) in the Office of Information Technology (OIT)? Have your information technology infrastructure and policies been audited for cybersecurity capabilities? If so, was the audit completed by the legislative auditor or an outside entity? Do you have dedicated cybersecurity personnel? How do your cybersecurity staff interact with the CISO in OIT? What unique security issues does your Department have? Do you handle private or sensitive data? What unique cybersecurity processes or tools do you use to protect this data?**

Response: The Office of Information Security, under the leadership of the state CISO provides security governance, security architecture, risk management, compliance assessment support, and security operations functions for all executive branch agencies (with a few exceptions, such as: CDE, Department of State, Department of Law, Lottery).

Agencies, except those mentioned as exceptions, do not have dedicated cybersecurity personnel.

The Office of Information Security has input into the 5-year plans for each Department, and has worked to prioritize projects benefiting each Department, such as: the Enterprise Firewall Refresh project, new quarterly security awareness training, two-step verification, and an enterprise security log collection and correlation engine.

Additionally, the Office of Information Security, within OIT, produces a quarterly risk report card, in which they measure risk for each Department, and have specific goals set, for reducing risk.

Annually, the CISO develops an enterprise information security plan, utilizing input from the Governor's goals, the 5 year plans for each department, and the OIT playbook. The information security plan includes communication and information resources that support the operations and assets of each department.

The Office of Information security, within the Office of Information Technology (OIT) implements enterprise-wide security controls, meant to secure sensitive data for each department. Some of these controls are: ensuring encryption is in place to secure data in transmission, utilizing Zix to encrypt sensitive data in email, implementing specific configuration and technologies to encrypt data in storage. Additionally, OIT has implemented two-step verification to add a layer of protection to email, contacts, and data stored within G-Suite. Each department implements additional procedures, such as training, data retention and access control policies, implemented at a department level to further protect and secure sensitive data. These local security procedures augment technical controls implemented by OIT to enhance the department's continued security health.

OIT supports all of the audits that occur for each department. OIT maintains a register of outstanding technology recommendations for each department, and works individually with the department to prioritize and secure funding to implement the recommendations. In addition to performing remediation, OIT continues to implement controls and improve processes in an attempt to proactively (rather than reactively) improve security.

CEO Response: In terms of programming related to cybersecurity, under state's emergency operations plan (SEOP), CEO and PUC are co-lead entities for Emergency Support Function (ESF) #12, under the umbrella of the Division of Homeland Security and Emergency Management (DHSEM), which is responsible for overall emergency management. The strategy and specific tasks of the Colorado Energy Assurance Emergency Plan (CEAEP)

support the federal government's National Incident Management System (NIMS), which covers all forms of emergencies and deals with energy under its ESF #12. For ESF #12, CEO is the lead agency in assuring the state's liquid fuel supplies such as gasoline, diesel, aviation fuel, and propane. In addition, CEO is responsible for developing, implementing, and periodically updating the CEAEP. In 2016, CEO updated the CEAEP and performed extensive revisions including an expansion of content on cyber security.

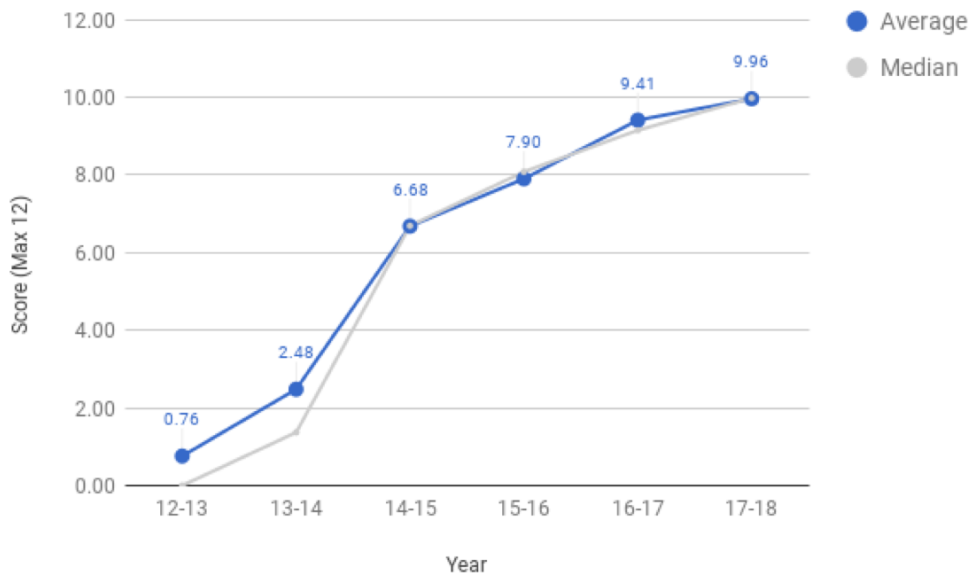
7 What impact do the SMART Act and Lean processes have on your budget requests? Could they be used more effectively?

Response: The SMART Act requires the Governor's Office to establish a performance management system for managing state agencies. The statute also requires that such system include continuous process improvement and employee training. Thus, the Performance Management and Operations Team (joint COO/OSPB team) meets its responsibilities in three categories: performance management; process improvement; and talent development as described in more detail below. All three categories have a direct impact on the budget and effective utilization of resources.

Performance Management

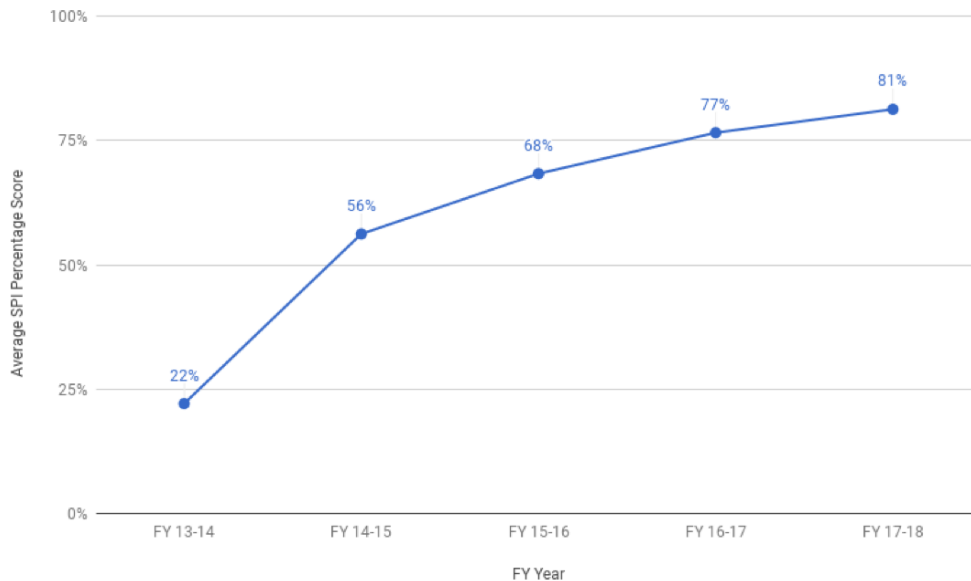
- Governor's Dashboard: During FY2016-17, the Governor launched a public dashboard of key goals and metrics. Colorado is now one of only a few states with a transparent performance management system. The dashboard reports on the progress of the Administration's cross-agency Working Groups. These Cabinet-level Working Groups in Health, Energy & Environment, Economic & Infrastructure Development, and Workforce & Education set joint-goals and regularly evaluate performance against those goals.
 - This year each Working Group established a subgroup of Subject-Matter Experts (SMEs) that meet regularly to review data on the shared goals, and drive cross-agency collaboration below the Cabinet level.
- Department Performance Plans: During FY2016-17, Departments continued to improve the quality of their performance plans as noted in the chart:

YoY performance plan average scores



- Note: The quality scoring matrix includes factors such as whether the plan identifies the customer, sets a clear strategy, and includes measurable input, outputs, and outcomes. Previous plan average scores were rescored for consistency.
- In addition, our Team began to track new data regarding Department performance plans. For the FY 2017-18 plans, note the following:
 - 82% performance plan goals are quantitative
 - 40% performance plan goals are outcome goals (vs lead or tracking measures)
 - 71% departments have at least one goal to improve customer service
 - 100% departments identify their customer in the performance plan
 - 100% departments posted SMART Act-compliant plans by July 1 deadline
- Linking budget to performance: To facilitate the Committee's review of budget linked to performance, OSPB's FY 2018-19 budget summary document incorporates all departments' progress on their Strategic Policy Initiatives (SPIs).
 - As with the overall performance plans, the quality of Department SPIs continued to increase in quality year over year as well.

YoY SPI average percentage scores



- Note: SPI average percentage scores include factors such as 1 and 3-year targets, input, output, and outcome metrics, baselines, and strategies and operations.
- Colorado recognized as nationwide leader in performance management:
 - Lt. Governor & COO Donna Lynne won the 2017 Navigator Award by Route Fifty for making Colorado state government more customer-focused.
 - Harvard Kennedy School awarded Colorado a technical assistance grant for performance improvement, noting our leadership commitment to effective government. A Fellow from the Kennedy School's Government Performance Lab is now imbedded in the Governor's Office and helping advance this work.

Process Improvement

- **Lean:** Our statewide Lean program made significant advances over the past year, including a 44% year over year growth in Lean projects and 25% increase in the number of Departments participating. Lean projects are delivering results for Coloradans; among Lean projects targeting time savings (the most common type of improvement metric), the State has reduced the process time as experienced by the customer by 50 percent on average. For more details, please see OSPB's response to the Lean RFI submitted separately.
- **Customer service:** Departments across the state are improving how they collect and act on customer feedback. For example, The Usability Lab at HomeAdvisor conducted

a two-day study on Colorado Peak’s mobile app and desktop services, resulting in a comprehensive report on changes to improve the user experience when accessing sensitive information on crucial benefits.

- **Behavioral economics:** Conducting select behavioral economics trials within programs that have demonstrated interest and support for this work on customer’s economic decision making. Leading Economist, Richard Thaler, recently received the Nobel Prize in Economics for his work in behavioral economics that has far reaching implications for public policy.

Talent Development

- Performance Management Academy
 - Continuing the success of prior years, the Spring 2017 Performance Management Academy received a 97% satisfaction score from participants.
 - The Fall 2017 Academy (on-going) is targeting Division Directors of the state’s largest operational divisions.
- CO Talent Challenge: Lean training for State employees
 - Successful procurement through innovative performance-based contract that is likely first in the nation -- Press release
 - Sign-ups on-going through DPA Center for Organizational Effectiveness

8 Does your Department use evidence-based analysis as a foundation for your budget request? If so, please provide a definition for your use of “evidence-based,” indicate which programs are “evidence-based,” and describe the evidence used to support these programs.

Response: As a Department, the Governor's Office serves an administrative function and our budget request does not contain the type of "programming" commonly applicable to evidence-based analysis. However, the Governor's Office often uses evidence-based analysis to review and support other Executive Department budget requests. The Research and Evidence-Based Policy Initiatives Team in the Governor's Office helps to support OSPB analysts and departments in the budget process by reviewing research literature and/or running benefit-cost analyses when relevant. "Evidence based" does not have a standardized definition, but The Governor's Office looks at the rigor of the research to determine the level of evidence.

9 Please identify how many rules you have promulgated in the past two years (FYs 2015-16 and 2016-17). With respect to these rules, have you done any cost-benefit analyses pursuant to Section 24-4-103 (2.5), C.R.S., regulatory analyses pursuant to Section 24-4-

103 (4.5), C.R.S., or any other similar analysis? Have you conducted a cost-benefit analysis of the Department's rules as a whole? If so, please provide an overview of each analysis.

Response: Office of the Governor (GOV), Office of the Lieutenant Governor (Lt. GOV), Office of State Planning and Budgeting (OSPB), Office of Economic Development (OEDIT) and Colorado Energy Office (CEO) do not promulgate rules.

OIT Response: 8 CCR 1501-9 (Colorado Rules Regarding Electronic Transactions by Colorado Governmental Agencies) - There was no Cost-Benefit Analysis required for this rule. Effective Date: 3/20/2017.

10 Describe the expected fiscal impact of proposed changes to PERA made by both the Governor's Office and the PERA Board of Directors. In addition to direct budgetary impacts, please describe any anticipated secondary impacts of an increase in employee contribution rates. For instance, does the Department anticipate a need to increase employee salaries to compensate for the increase in PERA contributions?

Response: The proposed changes to PERA made by the PERA Board of Directors include a 2.0 percentage point increase in employer contributions from 20.15% to 22.15%, which will have a direct budgetary impact on the department. DPA will provide a statewide estimate for this impact. PERA's proposal makes this change starting January 2020, thus it will affect the department's budget starting with FY 2019-20. The PERA Board proposal also includes a recommendation for contributions to be made on gross pay rather than net pay, which increases the salary base upon which the annual contribution is calculated for both employers and employees. This would have a direct impact on the department's budget as well as employee take home pay. OSPB and DPA are looking into whether this impact can be estimated, and if so, a statewide response will be provided by DPA. The PERA Board proposal also includes a 3.0 percentage point increase in employee contributions—from 8.0 percent to 11.0 percent of pay—beginning in January 2020. Without an increase in employee salaries, these changes would reduce take home pay for state employees beginning in FY 2019-20.

The Governor's proposed changes to PERA will not have a direct budgetary impact on the department, with the exception of maintaining the PERA Board's recommendation for employee and employer contributions to be made on gross pay rather than net pay. As mentioned above, this would increase the salary base upon which the annual contribution is calculated for both employers and employees. OSPB and DPA are looking into whether this impact can be estimated, and if so, a statewide response will be provided by DPA. The

Governor's proposal includes a 2.0 percentage point increase in employee contributions—from 8.0 percent to 10.0 percent of pay—beginning in January 2019, a year earlier than the PERA proposal. The Governor's budget request includes an across-the-board salary survey increase of 3.0 percent for most state employees beginning July 1, 2018. With the proposed increase in employee contributions, this will average to a take home pay increase of 2.0 percent for the fiscal year. The proposed salary survey increase results in an increase of \$234,841 total funds, and \$138,023 General Fund for FY 2018-19 for the department.

11 Senate Bill 17-267 required Departments, other than Education and Transportation, that submit budgets to OSPB to propose a budget that is 2.0 percent below the total funds budget in FY 2017-18. Please highlight the following regarding the 2.0 percent reduction:

- **Where these reductions can be found in the Department's request;**
- **What programs are impacted by the reduction; and**
- **Total amount of the reduction.**

Response: The Governor's Office of State Planning and Budgeting (OSPB) requested a one-time reduction of \$64,325 cash funds (Marijuana Tax Cash Fund dollars) in its Evaluation and Support line item. The proposed reduction of \$64,325 is 12.9 percent of the line item (represents two percent of OSPB's budget) and translates to the elimination of one grant for FY 2018-19. Remaining funds are expected to be adequate to support three grants.

In the course of its statutory duties, the Office of State Planning and Budgeting complied with the provisions of S.B. 17-267. A provision of the bill required OSPB's consideration of proposed two percent reductions for certain principal department budgets. OSPB found the process to be useful. In recommending the budget request, especially in the General Fund, while considering each department's budget reduction items, OSPB also took into account the various pressures on spending and needs throughout the state. Additionally, S.B. 17-267's provisions informed decision making in the request, in particular the recommendation for a decrease in the Budget Stabilization factor in the School Finance Act as well as the recommendation to increase the statutory reserve in the General Fund. With respect to the two percent target of General Fund spending as defined in the bill, these two items exceeded the suggested target.

12 Please provide the following information for the Department's custodial funds and continuously appropriated funds:

- **Name of the fund;**

- **Amount of funds received;**
- **Whether the revenues are one-time or multi-year;**
- **Current cash fund balance;**
- **Source(s) of the funds;**
- **A list of FY 2015-16 and FY 2016-17 expenditures from these funds;**
- **Expected uses of the funds in FY 2017-18 and FY 2018-19; and**
- **Legal authorization and restrictions/limitations on the Department's use of these funds.**

Response: We are discussing this with JBC staff and further guidance is forthcoming.

- 13 **What is the Department's process for engaging in (or disputing) federal land, environmental, jurisdictional, and/or water policy issues? How do you coordinate with other departments, the Governor's Office, local governments, and/or citizens?**

Response: State agencies take the lead in engaging on management of their own state lands, and with the federal government related to federal land management planning processes and policies. State agencies coordinate with the Governor's office staff, as appropriate, to make staff aware of challenges and to coordinate when there are comments from multiple departments. In addition, the Governor's Office has, at times, coordinated meetings among interested local governments on federal land-use processes that implicate a broader geographic area than a field office or forest. Most recently, that has included work on greater sage grouse planning and conservation, methane capture from coal mines in the North Fork Valley, and Gunnison sage grouse conservation.

CEO Response: CEO works on policy issues related to energy production and consumption. As a non-regulatory agency, CEO convenes public and private sector stakeholders to discuss energy production projects, their impacts, and any regulatory barriers. CEO also participates in cross-department working groups as issues arise. CEO is also a resource for education and information to local communities and the public.

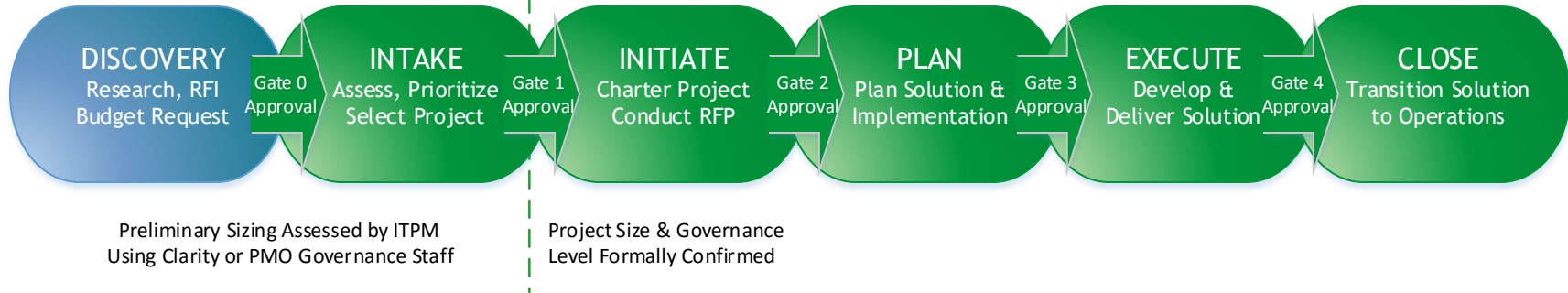
OIT Response: As it pertains to DTRS, OIT's normal interaction with federal agencies regarding federal lands is limited to existing DTRS sites. This is inclusive of, but may not be limited to, lease renewal, special use permit renewal, tower replacement, building improvements, etc. OIT complies with all federal regulations at the DTRS sites. OIT regularly engages in meetings with federal and local governments when researching possible locations for the addition of a tower site on federal land.

Ideation

Portfolio Manager
Sponsor | TAC | ITSC

Project Delivery

Project Manager
Executive Steering Committee | Executive or Local Governance Committee



PROJECT LIFECYCLE METHODOLOGY (PLM) OVERVIEW | EGC/LGC/AGILE PROJECTS

Version 1.7 September 2017



COLORADO

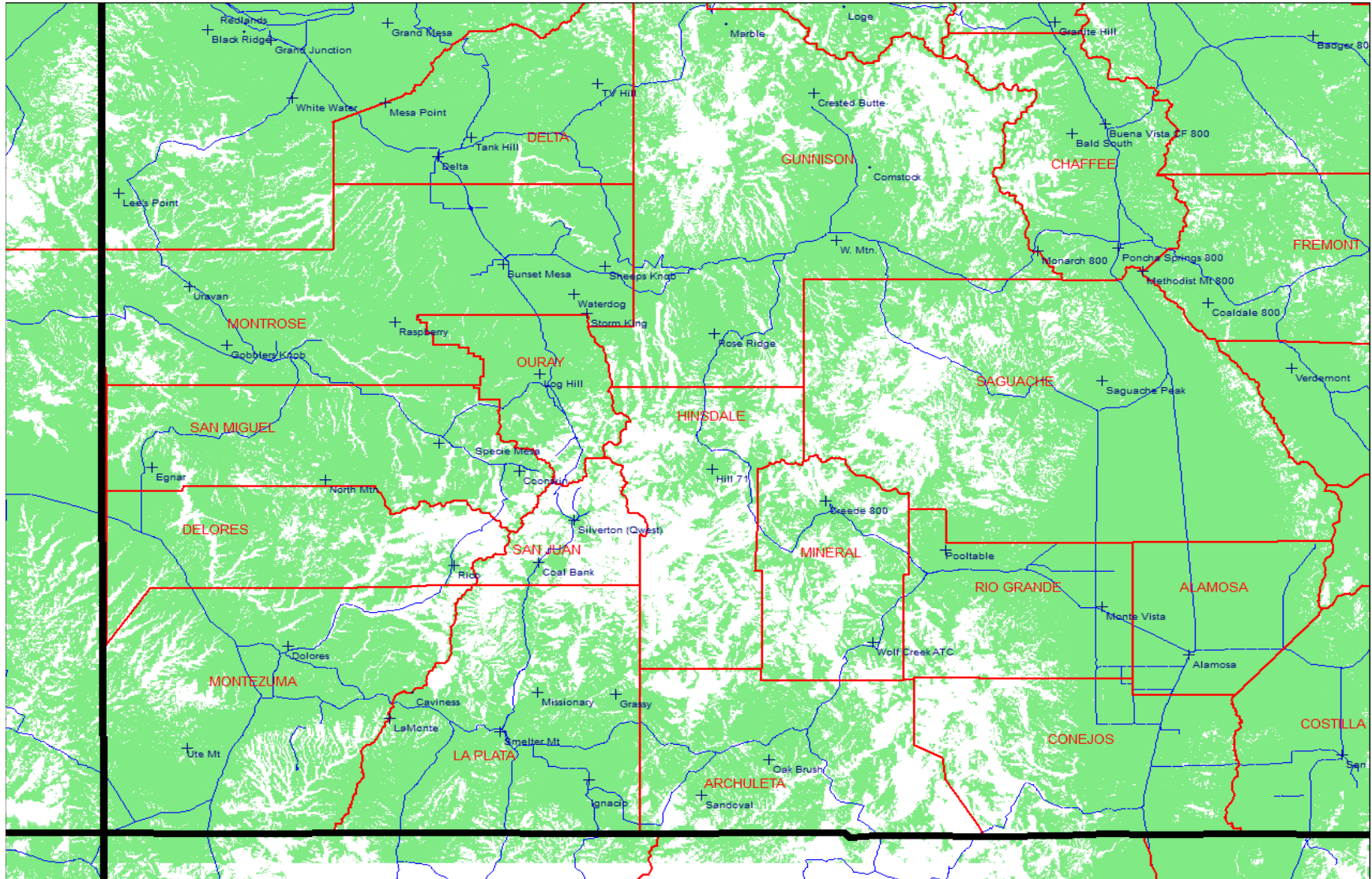
Customer Office

Governor's Office of Information Technology

Please note that a significant change at any stage of the project requires review/approval.

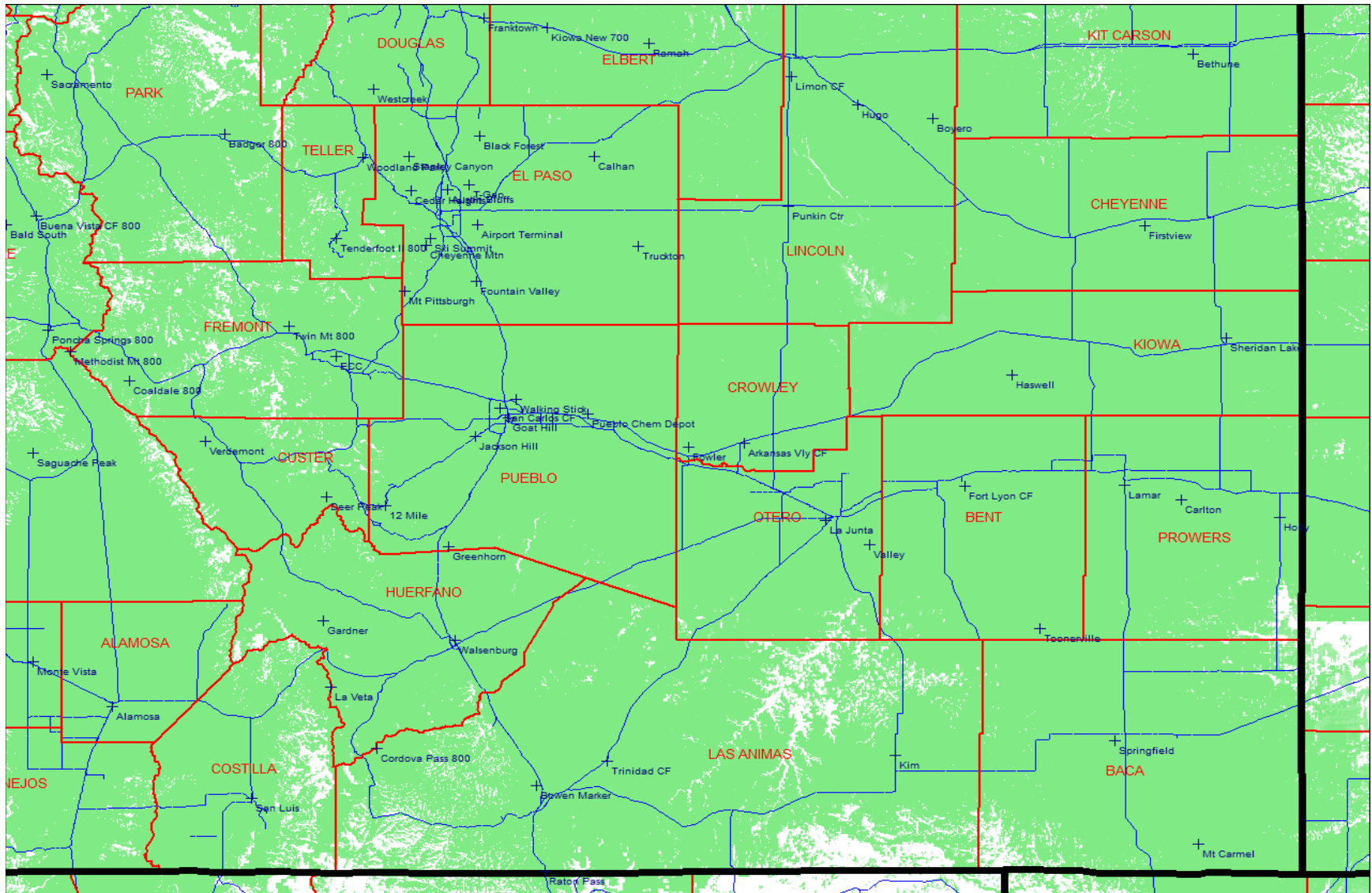
PROJECT PHASES AGILE STEPS	DISCOVERY Gate 0 Approval		INTAKE Gate 1 Approval		INITIATE Gate 1 Approval		PLAN Gate 3 Approval		EXECUTE Gate 4 Approval		CLOSE	
	Required for Major Projects Submitting a Budget Request				Product Strategy		Product Backlog		Plan Deploy Demo Sprint Dev Test		Product Acceptance	
PROJECT ACTIVITIES	<p>Activities</p> <ul style="list-style-type: none"> Business Case High Level Business Requirements High Level Technical Requirements OIT/TAC Review Conduct Market Research Conduct Request for Information (RFI) Compile Solution Options & Estimated Costs 	<p>Activities</p> <ul style="list-style-type: none"> Intake Project Request Request BA Support In Clarity PPM: <ul style="list-style-type: none"> Assess Implementation, Arch, Security Risk Assign Project Size Assign Governance Level Assign Generic Charge Code/Kronos Code if applicable Initiate RQS in CORE TAC Estimation (LOE) ITSC Agency Prioritization <p>EGC Projects</p> <ul style="list-style-type: none"> Scope Architecture <p>Agile Projects</p> <ul style="list-style-type: none"> Possible Agile project? PM knows Agile? Iterative delivery ok for project? 	<p>Activities</p> <ul style="list-style-type: none"> Complete Project Charter Verify Funding In Clarity PPM: <ul style="list-style-type: none"> Set Up Charge Code Set Up Named Roles Define High Level Solution Design High Level Solution Plan Procurement (Solicit, Evaluate, Negotiate, Select) RQS Tech Approval in CORE <p>EGC Projects</p> <ul style="list-style-type: none"> Initiate IV&V Vendor Selection Conversation <p>Agile Projects</p> <ul style="list-style-type: none"> Define Product Strategy: Product Vision, Objectives Team, Delivery Process 	<p>Activities</p> <ul style="list-style-type: none"> In Clarity PPM: <ul style="list-style-type: none"> Set Up Risk, Issue, Decision, Change Logs Initiate Status Reporting Define Solution (BRD) Design Solution Conduct Security Planning** Complete Project Plan Plan Implementation <p>EGC Projects</p> <ul style="list-style-type: none"> Procure IV&V Vendor Plan Architecture <p>Agile Projects</p> <ul style="list-style-type: none"> Build Product Backlog Create Product Roadmap 	<p>Activities</p> <ul style="list-style-type: none"> Develop Solution Test Solution Request Security Scans Conduct Security Scans Finish Implementation Plan Request for Change (RFC) Accept Solution Deploy Solution Decommission Legacy Systems <p>EGC Projects</p> <ul style="list-style-type: none"> Conduct IV&V CAB Review & Approval <p>Agile Projects</p> <ul style="list-style-type: none"> Conduct Sprint Planning, Sprints, Reviews, and Minor & Major Deployments 	<p>Activities</p> <ul style="list-style-type: none"> Conduct Lessons Learned Update Applications Inventory Transfer CMS (Contracts) to Service Owner/Program Manager Close Project in Clarity 	<p>Cross-Phase Activities/Tools: Manage Scope, Schedule, Cost, Resources, Risk, Issues, Team, Vendors, Org Change Mgmt, Stakeholder Engagement, Meetings, Agendas, Actions, Communication, Status</p> <p>Project Plan Extension Tools: Risk Management Plan, Organization Chart, RACI, Change Control Plan, Testing Plan, Disaster Recovery, Communications Plan, Training Plan, Software Configuration Plan</p>					
GATE DELIVERABLES	<ul style="list-style-type: none"> Consolidated Results of RFI/Market Research Scope of Work (SOW) Solution Options (Internal & External) Estimated Solution Costs Budget Request Signed by Business Sponsor & ITD <p>Gate 0 - Outcome</p> <ul style="list-style-type: none"> Budget Request Delivered to OSPB & JTC Email Project Stakeholders 	<ul style="list-style-type: none"> Project Request Form Clarity Activities Above Preliminary Scope Statement - Save in Charter High Level Business Requirements (HLBR) - If Applicable EGC: Architecture Scope Form <p>Gate 1 - Outcome</p> <ul style="list-style-type: none"> Email Project Stakeholders Letter to State Controller 	<ul style="list-style-type: none"> Project Charter High Level Business Requirements (HLBR) - If Applicable High Level Solution Design Procurement Plan - If Applicable Agile: Product Strategy <p>Gate 2 - Outcome</p> <ul style="list-style-type: none"> Email Project Stakeholders 	<ul style="list-style-type: none"> Contract Issuance/RQS buyer approval - If applicable Business Requirements (BRD) System Security Plan (SSP)** Project Plan, Schedule, Budget, Org Change Mgmt Implementation Plan EGC: Architecture Plan EGC: IV&V Vendor Procured Agile: Product Backlog <p>Gate 3 - Outcome</p> <ul style="list-style-type: none"> Email Project Stakeholders 	<ul style="list-style-type: none"> Solution Acceptance Form EGC: Authorization to Operate (ATO) Letter <p>Gate 4 - Outcome</p> <ul style="list-style-type: none"> Email Project Stakeholders 	<ul style="list-style-type: none"> CMS (Contracts) Project Review Lessons Learned EGC: Final IV&V Report Agile: Final Product Acceptance <p>** High Security Projects</p>						

SW Colorado DTRS Coverage Map – November 20, 2017

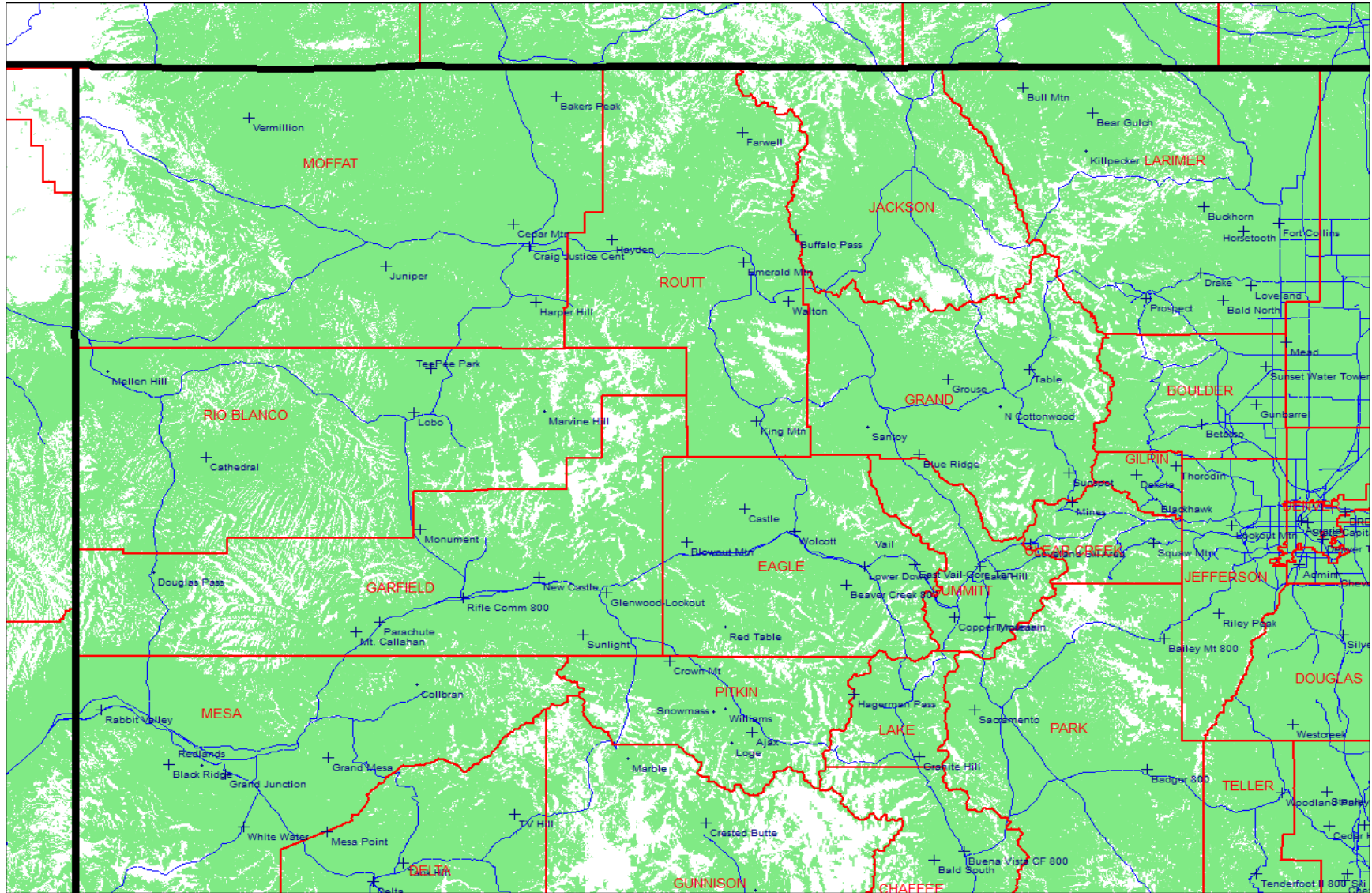


Map Legend: + = existing DTRS site Green = DTRS coverage White = degraded or no coverage Solid Blue line = State, US or Interstate highway

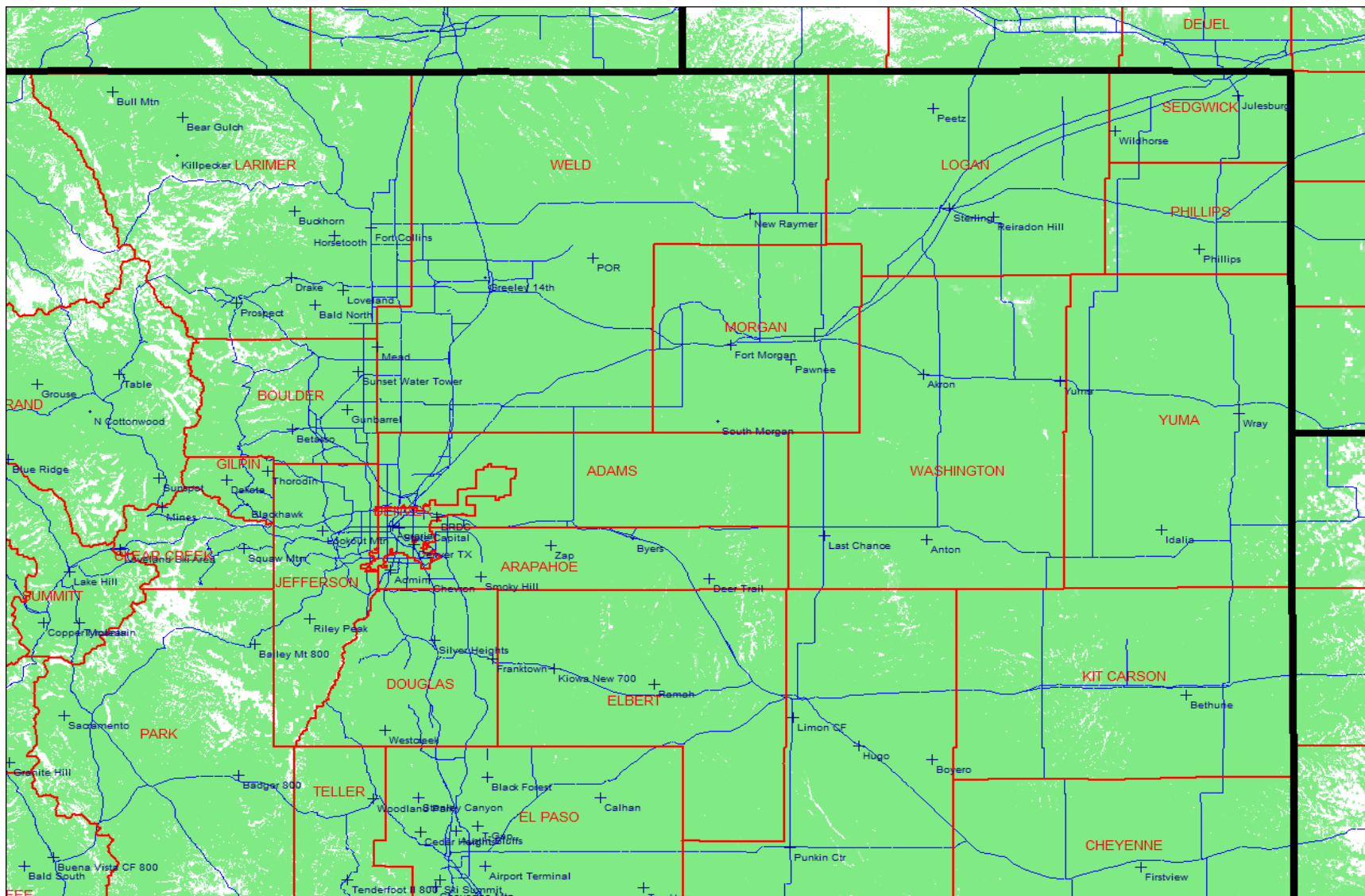
SE Colorado DTRS Coverage Map – November 20, 2017



NW Colorado DTRS Coverage Map – November 20, 2017



NE Colorado DTRS Coverage Map – November 20, 2017



Archuleta County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Chromo Area	Chromo Mtn	BLM	Yes	Sandoval
Navajo Reservoir	Tiffany Peak or a Cell site location in NM	Looks to be Private	? / Cell site has Power	Smelter

Delta County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 92 Crawford Area	Young's Peak	BLM	Yes	Sheep's Knob

Eagle County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
I-70 Vail Pass Digital in Some areas	Vail Pass Rest Area	CDOT	Yes	CDOT Fiber
Hwy 24 Camp Hale area	Tennessee Pass	?	Yes	

Garfield County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
The town of Carbondale	Carbondale Fire Station	Carbondale Fire	Yes	Sunlight

Gunnison County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Little Blue Canyon	Fitzpatrick Mesa		Yes	Water Dog
Hwy 50 East of Gunnison	Los Ochos	Cell company	Yes	Monarch
Hwy 133 McClure Pass	McClure Pass site New	Forest Service	No	2 hops

Hinsdale County

Get commercial power to Hill 71 will improve overall coverage in the county

Jackson County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Willow Creek Pass	?			
Poor Coverage throughout the county	Walden	State/County	Yes	Buffalo Pass

LaPlata County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 550 North of Durango	Hermosa Water Tanks	?	Yes	Missionary
Hwy 160 the Bayfield Area	Bayfield	Private Mr Mankins	Yes	Smelter or Missionary

Mesa County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 141 Gateway to Whitewater	Far Pond		No	Black Ridge
I-70 Debuque Canyon	New Grand Mesa Site	GJRCC	Yes	GJ SOB
Hwy 65 just off of I-70	New Grand Mesa Site			

Moffat County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
NW Corner of the County	Zenobia	Dinosaur National Park	no	

Montezuma County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 145 South of Rico	?			
Town of Cortez	Cortez Police Dept.	Cortez PD	Yes	Dolores

Montrose County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 141 North of Uravan to Mesa County	Blue Mesa	BLM	no	Gobblers Knob

Ouray County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Red Mtn Pass	Blowout	Private	Yes	Log Hill

Pitkin County

Once all sites are in and running we will know if we are lacking any coverage

Rio Blanco County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 64 Between Meeker and Rangely	Stadtman Mesa	Rio Blanco	Yes	Lobo

Saguache County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Hwy 114 from Gunnison County over Cochetopa Pass	Cochetopa Dome	Gunnison National Forest	No	Los Ochos

San Miguel County

Poor Coverage Area	Possible Site	Site Owner	Commercial Power	Microwave Path
Ophir Area	?			
Top of Lizard Head pass South	Top of Lizard Head Pass	Forest Service	Along the road	?

DTRS Site Needs

10/24/2017

<u>County</u>	<u>Sites</u>	<u>Size</u>	<u>Basic Location</u>
Boulder	4	6 packs	Allenspark(Taylor Mtn), S Boulder(Davidson Mesa), Ward, DT Boulder
Lake County	2	6 Pack, 8 Tac	Climax atop Fremont Pass, Mosquito Pass (NEW)
Fremont	4	8 Tac's, 6 Pack	Beaver Creek Watershed, Talahassee Rd, Mt. Baldy, Copper Gulch
Hinsdale	1	6 Pack	Hwy 149 to Gunnison (Cellular Site)
Summit	1	6 pack	Keystone Ski or similar
SE Region	3	7 Tac, 6 Packs	NW of Gardiner, East Spanish Peak, SW of Agular
NE Region	1	6 pack	Hwy 34 & I-25 (Andy B.)
Larimer	1	6 Pack	Red Mtn. Site- North of Wellington, West of I-25 (Has Bldg., Tower, Generator already)
Park	2	6 Pack, 8 Tac	Guffy, Kenosha Pass
Kit Carson	1	6 Pack	Flagler
Grand	1	1 6 pack	Lake Ridge(grand Lake)
Total	21		

OIT Budget Requests

FY2018-19



COLORADO

**Governor's Office of
Information Technology**

Serving people serving Colorado

**Suma Nallapati
Secretary of Technology & CIO
November 2017**

OIT: Our Impact by the Numbers



400+ IT projects



900+ employees



Support 1300 locations



30,000 customers



OIT's FY18 Wildly Important Goals



75% *Customer Satisfaction Index Score*

100%  *Digital customer touch points*

97.5% *Environment with security tools*

85% *Rural Broadband Coverage*

25%  *Employee Support & Collaboration*



Accomplishments Tied to Funding

On Time & On Budget



Veterans' Internship Program



Network Refresh



Two-Step Verification



Enterprise Wireless



Active Directory Consolidation



Infrastructure Refresh



Our Budget Request Includes:



Broadband/FirstNet - 2 FTE (existing)

DTRS - Software upgrade, infrastructure

Data Center - Infrastructure refresh & review

CBMS/PEAK - Base adjustment request

Microsoft ELA - Consolidation & compliance

Voice & Data Services - Increase from demand

HCPF Security - Covering security gaps

Broadband & FirstNet



Digital Trunked Radio System





Staff Salaries: Not able to compete with private sector

IT Spend: Business processes shifting to technology solutions, creating need for greater visibility of use of state dollars and enterprise solutions

Organizational Structure



Suma Nallapati
Secretary of Technology
& State Chief Information Officer

David McCurdy
Chief Technology
Officer

- Agency & Enterprise Applications. Services, Development & Support
- CBMS
- Chief Data Officer
- Data Centers
- Data Services
- Deskside Support
- Digital Transformation
- GIS
- Google Apps
- Mainframe, System & Server Administration
- Network & Voice Services
- Public Safety Communications Network (DTRS)
- Security Operations & Access Control
- Broadband mapping, planning, outreach
- FirstNet

William Chumley
Chief Customer
Officer

- Agency IT Directors
- Business Portfolio
- Human Resources
- IT EcoSystem & Customer Service Portal
- Project Management
- Service Desk
- Major Incident/Change Management

Brenda Berlin
Deputy CIO &
Chief Financial
Officer

- Budget
- Contracts
- Finance
- Legislative Affairs
- Payroll
- Performance Management Strategy Development & Execution
- Procurement
- Vendor Services

Deborah Blyth
Chief Information
Security Officer

- Office of Information Security
- Security Governance
- Risk & Compliance
- Security Architecture Planning & Review

Tauna Lockhart
Chief
Communications
Officer & PIO

- Agency Communications
- CBMS Communications
- Internal Communications
- IT Economic Development
- Marketing & Branding
- Media Relations

QUESTIONS



OFFICE OF THE GOVERNOR
FY 2018-19 JOINT BUDGET COMMITTEE HEARING AGENDA

Wednesday, November 29, 2017
9:00 am – 11:00 am

9:00-9:15 INTRODUCTIONS AND OPENING COMMENTS

9:15-9:35 OFFICE OF THE GOVERNOR / OFFICE OF STATE PLANNING AND BUDGETING

- 1 How does the Governor's Office coordinate land management issues with state agencies and the federal government? Does the Office have a formal role for this coordination? If not, should it have a role? How would that role function?
- 2 Please describe the purposes for which federal funds from the Jobs and Growth Tax Relief Reconciliation Act of 2003 are allowed to be expended. Are these purposes still being performed by the Governor's Office?
- 3 Why has the Colorado Advisory Council for Persons with Disabilities consistently reverted back funds from their annual appropriation for the past three years? Additionally, how have expenditures in the past three years aligned with the General Assembly's intention for the appropriations to be used for the development and/or dissemination of marketing materials to Colorado television and radio stations? Are there recommended solutions for ensuring that advertising materials are disseminated to television and radio stations, digital outlets, and newspapers?
- 4 The Office of State Planning and Budgeting submitted a request to reduce cash funds that are used to benefit multiple state agencies and programs as part of the 2.0 percent plan. Was the 2.0 percent reduction plan intended to reduce non-General Fund sources of money? Was the 2.0 percent reduction plan intended to include money that is provided to other state agencies as agency-to-agency grants?
- 5 Please explain the role of the Office of State Planning and Budgeting in coordinating with the State Architect on agency building and construction plans? Is there an FTE located in the Office for this purpose?

9:35-10:00 COLORADO ENERGY OFFICE

- 6 Please provide an overview of how the Office has been reorganized in the past year. As part of this response, please include information on the different functions each unit performs.

- 7 Please explain how the existing grant money from the American Recovery and Reinvestment Act of 2009 (ARRA) can be used by the Office.
- 8 Is it possible to use existing money from ARRA in combination with state General Fund to cover the gamut of the Office's statutory obligations while lessening the impact on the General Fund?
- 9 What is the Office's role in regards to the Clean Power Plan?

10:00-10:55 OFFICE OF INFORMATION TECHNOLOGY

- 10 To which functions and programs are each of the Office of Information Technology's 963.5 FTE assigned?
- 11 How much did the state spend for information technologies in FY 2016-17 across all agencies? Please include operating budget and capital construction budget totals, as well as figures for non-executive branch agencies.
- 12 Please provide a status of Secure Colorado, including what steps have been completed, what steps are pending completion, and what is required to complete the pending steps.
- 13 How many staff in the executive branch are assigned to information technology security functions? What are the challenges associated with hiring these individuals?
- 14 How does the Office of Information Technology work with agencies to assist them in rolling-out new or replacement information technology systems? Is there a set project plan that the Office of Information Technology follows when developing and implementing new or replacement information technology systems?
- 15 If the HRWorks FY 2017-18 emergency supplemental request and FY 2018-19 request are not approved by the General Assembly, what is "plan B"?
- 16 Please explain the challenges faced by the "24/7" facilities in time tracking and how these challenges are addressed. As part of this response, please indicate how the proposed HRWorks solution addressed the risk of fraud in the time tracking process.
- 17 Please provide an update on the FirstNet alternative plan RFP process. As part of this response, if possible given procurement rules, please share with the Committee any information related to the financial risks and rewards associated with the FirstNet alternative plan.

- 18 Please provide a broad vision of how the state's land mobile radio systems, including DTRS, have the potential to merge with long-term evolution technology (LTE) in the future. Are there opportunities to share assets between DTRS and FirstNet LTE?
- 19 Please provide an estimate of DTRS coverage in Colorado. As part of this response, the Office of Information Technology may wish to provide a map to illustrate coverage.
- 20 Is there federal funding available to state and local governments to build out DTRS sites on federal public lands?
- 21 Given that the need for new DTRS sites outweighs the proposed funding amount of \$2.0 million put forth in JBC staff's recommendation, how would the Office of Information Technology prioritize locations to receive funding?
- 22 Does the Office of Information Technology (or any other state agency) own any satellite phones for first responders? If so, in what instances are these phones deployed?
- 23 What other options did the Office of Information Technology consider prior to submitting a capital construction information technology project budget request for FY 2018-19 to remodel its existing data center? What are the pros and cons of remodeling versus building new versus leasing?

ADDENDUM: OTHER QUESTIONS FOR WHICH SOLELY WRITTEN RESPONSES ARE REQUESTED

- 1 Provide a list of any legislation that the Department has: (a) not implemented, or (b) partially implemented. Explain why the Department has not implemented or has only partially implemented the legislation on this list. Please explain any problems the Department is having implementing any legislation and any suggestions you have to modify legislation.
- 2 Does the Department have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor's Office and dated June 30, 2017 ([link below](http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2017))? What is the Department doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the Department's budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found.

<http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2017>
- 3 If the Department receives federal funds of any type, please respond to the following:
 - a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the Department is already aware. In addition, please provide a detailed

- description of any sanctions that MAY be issued against the Department by the federal government during FFY 2017-18 or 2018-19.
- b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?
 - c. Does the Department have a contingency plan if federal funds are eliminated?
- 4 Is the Department spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the Department is working with other state or federal departments to coordinate the campaign?
 - 5 Based on the Department's most recent available record, what is the FTE vacancy and turnover rate by department and by division? To what does the Department attribute this turnover/vacancy? Do the statewide compensation policies administered by the Department of Personnel help or hinder in addressing vacancy or turnover issues?
 - 6 Please provide an update on the Department's status, concerns, and plans of action for increasing levels of cybersecurity, including existing programs and resources. How does the Department work with the Chief Information Security Office (CISO) in the Office of Information Technology (OIT)? Have your information technology infrastructure and policies been audited for cybersecurity capabilities? If so, was the audit completed by the legislative auditor or an outside entity? Do you have dedicated cybersecurity personnel? How do your cybersecurity staff interact with the CISO in OIT? What unique security issues does your Department have? Do you handle private or sensitive data? What unique cybersecurity processes or tools do you use to protect this data?
 - 7 What impact do the SMART Act and Lean processes have on your budget requests? Could they be used more effectively?
 - 8 Does your Department use evidence-based analysis as a foundation for your budget request? If so, please provide a definition for your use of "evidence-based," indicate which programs are "evidence-based," and describe the evidence used to support these programs.
 - 9 Please identify how many rules you have promulgated in the past two years (FYs 2015-16 and 2016-17). With respect to these rules, have you done any cost-benefit analyses pursuant to Section 24-4-103 (2.5), C.R.S., regulatory analyses pursuant to Section 24-4-103 (4.5), C.R.S., or any other similar analysis? Have you conducted a cost-benefit analysis of the Department's rules as a whole? If so, please provide an overview of each analysis.
 - 10 Describe the expected fiscal impact of proposed changes to PERA made by both the Governor's Office and the PERA Board of Directors. In addition to direct budgetary impacts, please describe

any anticipated secondary impacts of an increase in employee contribution rates. For instance, does the Department anticipate a need to increase employee salaries to compensate for the increase in PERA contributions?

- 11 Senate Bill 17-267 required Departments, other than Education and Transportation, that submit budgets to OSPB to propose a budget that is 2.0 percent below the total funds budget in FY 2017-18. Please highlight the following regarding the 2.0 percent reduction:
 - Where these reductions can be found in the Department's request;
 - What programs are impacted by the reduction; and
 - Total amount of the reduction.

- 12 Please provide the following information for the Department's custodial funds and continuously appropriated funds:
 - Name of the fund;
 - Amount of funds received;
 - Whether the revenues are one-time or multi-year;
 - Current cash fund balance;
 - Source(s) of the funds;
 - A list of FY 2015-16 and FY 2016-17 expenditures from these funds;
 - Expected uses of the funds in FY 2017-18 and FY 2018-19; and
 - Legal authorization and restrictions/limitations on the Department's use of these funds.

- 13 What is the Department's process for engaging in (or disputing) federal land, environmental, jurisdictional, and/or water policy issues? How do you coordinate with other departments, the Governor's Office, local governments, and/or citizens?