2014

Annual 2014 CDOT Stewardship and Oversight Agreement Report

Colorado Department of Transportation

FINAL – February 25, 2015

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2014 Annual CDOT Stewardship and Oversight Agreement Report

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SECTION 1. PURPOSE

This report serves as the principal instrument by which the Colorado Department of Transportation (CDOT) informs the Federal Highway Administration (FHWA) of its performance across a number of mutually agreed upon indicators associated with the administration of the Federal Aid Highway Program (FAHP). These indicators are established in the April 2013 version of the FHWA-CDOT Stewardship Agreement. The aim of performance summary is to ensure that FHWA and CDOT are administering the FAHP in a cost-effective manner that maintains Colorado's national highway network, optimizes operations, improves safety, and provides for national security while protecting and preserving environmental resources.

Performance/compliance indicators, and their associated reporting frequency and targets/baselines, are consistent with those outlined in the 2013 Stewardship Agreement. In the future, as outlined in the 2014 Stewardship Agreement, indicators without a specific target or baseline will be tracked in the "Quality/Results" section, and measures with a quantitative target/baseline will be tracked in the "Performance/Compliance Measures" section. The reporting frequency is updated in the 2014 Stewardship agreement to track fiscal year type (i.e., state, federal or calendar fiscal year) and whether reporting is required more frequently than annually. Some of the targets/baselines and reporting mechanisms have also been updated.

FHWA is the agency responsible for ensuring compliance with federal requirements in the delivery of the FAHP. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the Transportation Equity Act for the 21st Century (TEA-21) of 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 have all increased the role of State Transportation Agencies in approval of projects using Federal Aid funds. While these changes have not altered FHWA's role as the responsible agency, they have affected how FHWA implements those responsibilities. ISTEA, TEA-21 and SAFETEA-LU allow states the flexibility to assume the U.S. Department of Transportation's duties in regards to **designs**, **plans**, **specifications**, **estimates**, **contract awards**, and **inspections** of many Federal Aid projects. On July 6, 2012, President Barack Obama signed a $106 billion federal transportation bill: Moving Ahead for Progress in the 21st Century Act (MAP-21). This bill stipulates that state transportation departments implement the national performance measurement and management program following federal rulemaking, scheduled to conclude in April 2014.

The following program-level performance and compliance indicators derive from a number of functional units across CDOT. Section 2 briefly introduces the various functional program areas and provides tables summarizing CDOT's performance and compliance in each area.

SECTION 2. CDOT PERFORMANCE BY FUNCTIONAL PROGRAM AREA

2.1. ADMINISTRATIVE SERVICES: CIVIL RIGHTS

Introduction

CDOT Manager: Greg Diehl
FHWA Manager: Melinda Urban

The Civil Rights program is responsible for all activities in CDOT related to civil rights programs and requirements under state and federal law. Civil rights programs are an integral part of all aspects of CDOT's ongoing activities. The Civil Rights Stewardship Agreement is a Quality Control and Quality Assurance (QA & QC) approach, which relies on joint FHWA/CDOT team reviews of program activities to accomplish oversight of the program. The plan shifts federal oversight from a project-by-project basis to a program-level basis. Staff from CDOT's Civil Rights & Business Resource Center (CRBRC) work in partnership with each Regional Civil Rights Manager and with the FHWA Civil Rights Specialist to review, evaluate, and improve CDOT's Civil Rights Programs. The partnership between CDOT and FHWA continues to be an important part of ensuring compliance with the letter and spirit of laws and regulations.

Quality/Results

Statewide activities conducted to accomplish elements in Quality Section:

1. Revised the CRBRC website to improve public access to CDOT's civil rights programs. The website can be accessed at www.coloradodot.info/business/civilrights. The website also includes a page in Spanish that notifies the public of its rights against discrimination and provides information about requesting ADA and language accommodations. Links to the discrimination complaint form and procedure were included on the website which continues to provide the Relay Colorado information for access by individuals with hearing impairments.

2. Served 101 participants in the On-the-Job Training Supportive Services (OJT/SS) Program, and 83 program participants were placed in entry-level, OJT or apprenticeship positions. This represents an increase of 17.44% of total participants and a 112.82% increase in placements compared to 2013.

   For 2014, there was an increase from zero to 3 placements for individuals of African American ethnicity; a 140% increase from 20 to 48 placements for individuals of Hispanic/Latino ethnicity; and an increase from zero to 1 placement of a female.

3. Created a Google Drive Portal OJT plan approval spreadsheet to track the status of OJT programs being considered for approval.

4. Created a Google Drive Portal OJT page that stores the current approved OJT program plans and their program approval letters.

5. Supported Construction Career Days in the metro area and Colorado Springs, serving a little over 1000 students. This represents a 50% decrease in participants which was planned in order to screen for participants with a higher level of interest in the industry.

6. Assisted Colorado State University at Pueblo with program development and support for

students attending the Summer Transportation Institute. For the 2014 summer program, 35 students completed the program, representing an increase of 45.83% compared to the 24 students completing the program in 2013.

7. Completed 19 contract compliance reviews, representing an increase of 2 compared to 2013. All reviews were subsequently determined to have been "In Compliance" by CDOT.

8. Exceeded our annual DBE goal of 10.25%, with 11.7% participation for FFY 2014.

9. Provided three webinars with over 100 participants to educate the construction community about the changes to the DBE Standard Special Provision.

10. Collaborated with Engineering Contracts and Audit to improve prequalification procedures and ensure access for small businesses seeking to do work with CDOT.

11. Held three focus groups with engineering and design community to revise current engineering contracts DBE and ESB scoring.

12. Continued to recruit small business for on-line CDOT plan-sheet and small business network service and sponsored free BIDX accounts for qualifying DBE and ESB firms.

13. Launched an online portal for accepting online DBE and ESB certification applications. The new system is expected to improve customer service and enable staff to process applications in a timelier manner.

14. Expanded Connect2DOT services to 14 SBDC locations throughout Colorado.

15. Updated CDOT's Policy Directive 604.0 "Policy on Non-Discrimination" on January 27, 2014. CDOT's non-discrimination policy had not been updated since 2004. The non-discrimination policy was updated to include CDOT's policy related to persons with disabilities, LEP, environmental justice, and the DBE program.

16. Updated CDOT's discrimination complaint procedure and complaint form. These documents were drafted with the intention of serving as a universal complaint form and procedure for all external discrimination complaints. Complaints are screened by CDOT civil rights staff to determine if a complaint falls under Title VI or another civil rights law. CDOT's complaint procedure and complaint form are available in English and Spanish on the CRBRC website.

17. Created a new complaint log for tracking discrimination complaints. The log was placed on a CRBRC Google Drive portal that can be accessed and updated by CRBRC staff and regional civil rights staff. The new complaint log allows CRBRC to track complaint investigations occurring in the regions.

18. Created a new public notice that informs the public of its rights against discrimination and where individuals can file a discrimination complaint. The public notice also informs the public how to request language services and ADA accommodations.

19. Met with each CDOT major program area to understand program procedures and purpose, identify Title VI related issues and improve non-discrimination reviews and reporting.

20. Developed and circulated an LEP survey to regional Right-of-Way, Environmental, and Civil Rights staff.

21. Worked with procurement and engineering contracts staff to better incorporate civil rights contract language into all CDOT contract templates. Once approved, CDOT will incorporate the revised Title VI Assurance and all appendices as appropriate.

22. Worked with the Environmental Programs Branch to improve CDOT's environmental justice analysis in its NEPA documents.

23. Developed subrecipient survey, template Title VI Plan and Local Agency Requirements summary in order to begin subrecipient reviews.

24. Identified a list of ADA subrecipient survey questions that incorporate all of the key ADA compliance areas. The survey is designed to identify training &/or technical assistance needs (delivered several training sessions to subrecipients in partnership with FHWA).

25. AASHTOWare Civil Rights and Labor Compliance system implementation:
    a) Continued quarterly workshops for implementation of Civil Rights and Labor (CRL) module.
    b) Participated in set up and testing of CRL modules.

26. ADA Curb Ramp Inventory Project:
    a) We are nearing completion of the initial phase of the ADA Transition Plan's Curb Ramp Pilot Inventory project. 17,450 ramps with geometrics have been recorded as of 12-1-14. 2063 ramps remain to be measured with a completion date estimated to be the 1st full week of Jan 2015.
    b) Converted 4 ADA GIS field techs to CDOT temporary employees to be able to complete the statewide inventory by collecting data in areas requiring overnight travel.
    c) Conducted initial Case Studies meetings to QA/QC the Curb Ramp database schema which led to the development of additional fields for as-built geometrics and the inclusion of the authorities for the standards/best practices for the geometric data elements.

27. Statewide ADA technical assistance provided:
    a) 143 consults (phone/e-mail/desktop);
    b) 27 assessments (in-field);
    c) and 21 trainings to include several ADA training events targeting local agency stakeholders. Also, the history of ADA training events was added to the external website.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Civil Rights Program:

Table 1 - Performance Measures (Civil Rights)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
107	**DBE participation (as percentage) to date on Federal Aid Highway Program.**	DBE Program	Transport	10.25%	11.7%	Federal FY **Semiannual Reporting**
459	**# of DBE firms receiving supportive services/benefits**	DBE Supportive Services (DBE/SS)	Connect2DOT Program	30	67	Federal FY

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
313	**# of completed Contract Compliance Reviews**	Contractor Compliance (External EEO) Program	Google Drive Portal	18	19	Federal FY
460	**# of OJT hours achieved**	On the Job Training (OJT) Program	Access DB	7,000 hours	*Not Available (Cannot Verify)*	Federal FY
461	**# of persons placed and employed (post-services)**	OJT Supportive Services (OJT/SS)	AIMS CC IGA	40	83	Federal FY
310	**# of completed STA reviews**	Title VI Program	Title VI Assessment	6	6	Federal FY
462	**# of completed subrecipient reviews**	ADA Title II Program	ADA Transition Plan	5	0	Federal FY

2.2. ENGINEERING: APPLIED RESEARCH AND INNOVATION

Introduction

CDOT Manager: Amanullah Mommandi
FHWA Manager: Aaron Bustow

The Research Development and Technology Transfer program at CDOT aims to save Colorado money, time, and lives. The program strives to improve the state's quality of life and environment by developing and deploying new or innovative methods, products or materials in the planning, design, construction and operation of transportation. To meet this purpose, research must be timely, relevant and valid when applied to priority real-world problems, as well as cost-effective and accurately documented and disseminated. Technology must be appropriately transferred to practitioners to be effectively used.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Applied Research and Innovation Branch (ARIB) Program:

Table 2 - Performance/Compliance Measures (Applied Research and Innovation)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
97	**Percent of recommendations implemented**	Percent of recommendations implemented or adopted within two years of final research report, using 5 years of data The research findings and recommendations will impact one or more of the following: improve design and construction methods, improve design and construction specifications, improve planning processes, impact maintenance practice, update manuals, initiate new programs, and provide new technology	Research Work Plan and Report	50%	57%	State FY
412	**Number of projects completed on schedule**	The number of projects completed in the fiscal year on schedule	Research Work Plan and Report	10	14	State FY
415	**Percent of annual SPR funds spent**	Percent of annual fund spent on RD&T (professional services) activities	Research Work Plan and Report	Minimum 50%	67%	State FY
416	**The annual number of classes scheduled by the LTAP Center**	The number of classes scheduled by the LTAP Center	Annual Report	70	67	State FY
417	**The annual number of people trained by the LTAP Center**	The number of people who attended classes offered by the LTAP Center	Annual Report	1400	1497	State FY

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
473	**The annual number of people attending training on the Front Range and Eastern Plains**	The number of people attending training from the Front Range and Eastern Plains	Annual Report	1000	913	State FY
474	**The annual number of people attending training on the Western Slope**	The number of people attending training from the Western Slope	Annual Report	400	584	State FY
475	**The annual number of agencies attending training offered by the LTAP Center**	The number of agencies attending training offered by the LTAP Center	Annual Report	100	126	State FY

2.3. ENGINEERING: ASSET MANAGEMENT

Introduction

CDOT Manager: William Johnson
FHWA Manager: Randy Jensen

The Department's Transportation Performance Branch (TPB) coordinates with the asset program managers, Regional and Division staff, and other agencies to comprehensively manage CDOT's assets. TPB's mission is to empower the Department's strategic planning and decision-making by providing tools that effectively measure, analyze, forecast and communicate to staff and transportation stakeholders the performance of CDOT programs and investment decisions.

Quality/Results

CDOT worked with a consultant to develop and complete its first Transportation Asset Management Plan (TAMP), known as the Risk-Based Asset Management Plan (RB AMP). The document was submitted to FHWA in April, 2014. MAP-21 requires that pavement and bridge be included in DOT TAMP's; however, the RB AMP includes nine assets, including pavement and bridge. The additional assets are: maintenance, buildings, ITS, fleet, tunnels, culverts and rockfall mitigation sites. CDOT's TAMP includes all of the MAP-21 TAMP requirements, which are listed below. It is an initial snapshot of CDOT's asset management program as of the time it was finalized.

MAP-21 requires that each DOTs TAMP include the following:

- Inventory and condition of pavement and bridges on the National Highway System
- Asset management objectives and measures
- Performance gap identification
- Life-cycle cost and risk management analysis
- A financial plan
- Investment strategies

The organizational structure supporting Asset Management at CDOT is multi-level. At the highest level there is the Transportation Commission Asset Management Committee that formulates general transportation policy and advises and makes recommendations to the Governor and the General Assembly on issues related to transportation policy and CDOT's budgets and programs. At the middle level there is an Oversight Committee comprised of the Deputy Director, the Chief Engineer, the Chief Financial Officer, the Director of the Division of Transportation Development, and a Regional Transportation Director, who are responsible for making decisions on asset management strategy, goals, and objectives. Lastly, a Working Committee includes asset managers and Regional and Division staff. The Working Committee and the Oversight Committee work together on the RB AMP, asset management implementation, and emerging issues. CDOT has advanced significantly in the last year due to the efforts of these groups.

The performance gap analysis identified 28 gaps, of which the top ten were recommended for work in Phase 2 of the project, which is underway today. The top ten gaps in asset management at CDOT identified were:

- Developing and documenting the budget distribution, project selection and project tracking process
- Integrating risk analysis into planning and programming processes
- Developing strategies to manage project and program delivery risks
- Establishing a framework to evaluate alternative strategies for agency risks

- Analyzing budget tradeoffs across asset programs
- Improving project scoping and optimization
- Incorporating life-cycle analysis into decision-making
- Clarifying the role of performance target-setting
- Implement a strategic management framework to reflect on progress
- Communicating the benefits of TAM

Phase 2 began in July 2014 and the consultant efforts on these items are expected to wrap up in June 2015.

The RB AMP states the Department's goal for asset management, which is: **The overall goal of CDOT's asset management program is to minimize life-cycle costs for managing and maintaining the department's assets subject to acceptable levels of risk**. Work is underway now to enhance the risk register by identifying additional risks along mitigation strategies.

Performance/Compliance Measures

CDOT has developed a Risk-Based Asset Management Plan to meet MAP-21 requirements. The Department is producing no performance measures.

2.4. ENGINEERING: CONTRACTING, ENGINEERING ESTIMATES AND OTHER PROJECTS

Introduction

CDOT Manager: John Eddy
FHWA Manager: Shaun Cutting, Randy Jensen

The Contracts and Market Analysis Branch is responsible for preparing contracts for construction projects, professional consulting services, and intergovernmental agreements. The Branch also is charged with providing engineering cost estimates for projects before bidding, bid-collusion detection, materially unbalanced bid detection and AASHTOWare Project (formerly Trns*Port) software support. The Programs in the Branch include Engineering Contracts, Consultant Audit, Engineering Estimates and Market Analysis and AASHTOWare Project Support (formerly Programs and Project Analysis).

The Branch includes the following functional groups and assigned responsibilities:

Engineering Contracts Unit – The Engineering Contracts unit provides two different types of services – construction contracting and professional services contracting. The construction contracting staff conducts the contracting process for construction projects including contractor prequalification, advertisement for bids, opening of paper and electronic bids, award and execution of the contract, and issuance of the notice to proceed once signed by the Chief Engineer. The professional services contracting staff conducts the contracting process for professional services (engineers, architects, surveyors and industrial hygienists), including consultant prequalification, issuance of the Request for Proposals (RFP), facilitation of the selection process, contract negotiations, and execution of the contract.

Engineering Estimates and Market Analysis (EEMA) – The EEMA unit prepares engineering cost estimates of construction projects prior to bidding, performs materially unbalanced bid and bid collusion analyses on submitted bids, and prepares cost estimates for added work on active construction projects.

AASHTO Ware Project Support (formerly Programs and Projects Analysis) – The AASHTO Ware Project Support Unit is responsible for user support with the AASHTOWare project suite of software used for construction project management, including training, technical assistance, and reporting.

Quality/Results

1. Contract performance:
   - 123 construction contracts awarded ($522.6 million), 95% of which were awarded within 30 days of bid opening. No issues of non-compliance to report.
   - 26 Consultant selections, 56% of contracts executed within desired 17 weeks.
   - CDOT continues with the implementation of the contracting SRM-PPS module of SAP which when fully implemented will provide the following benefits:
     - Standardized contract templates
     - More efficient contract preparation timelines
     - A more streamlined procurement process for front–end user (consultants and project managers).
     - CDOT continues with the evaluation of the Consultant Contracting process as a part of a LEAN project. Objectives are more fairness and transparency of contract awards and streamlining of the contract approval processes. Numerous recommendations

have been assessed and changes implemented. The Lean project will continue into 2015 with the implementation of new consultant scoring and selection tools. Closure is anticipated by July 1, 2015

2. Trns*Port/AASHTOWare Training to the Regions:
   - 9 Payroll classes.
   - 8 SiteManager/web Trns*port classes.

3. Site Manager utilization reviews:
   - No problems encountered nor any outstanding issues.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Contracts and Market Analysis Program:

Table 3 - Performance/Compliance Measures (Contracts and Market Analysis)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
239	**Percent of projects awarded without a justification letter and CE approval**	Percent of awarded low bids within +15% to -20% of Engineer's Estimate on projects over $250,000	CDOT Branch Work Plan, Chief Engineer Objectives	85%	86%	State FY
463	**Percent of projects awarded within set percentage of Engineer's Estimate**	Percent of awarded low bids within +/- 10% of Engineer's Estimate on ALL projects	CMA Branch Work Plans	55%	68%	State FY **Quarterly reporting**
241	**Percent of projects awarded within set timeline of bid opening (CDOT oversight and FHWA oversight)**	Percent of projects awarded within 30 days of bid opening	CMA Branch Work Plans, Chief Engineer Objectives	95%	94%	State FY
246	**Percent of professional services contracts executed within set timeline**	Percent of professional services contracts executed* within 17 weeks * Executed defined by date of Advertisement to date of Controller Signature	CMA Branch Work Plans, Chief Engineer Objectives	85%	56%	State FY

2.5. ENGINEERING: ENVIRONMENT

Introduction

CDOT Manager: Jane Hann, Vanessa Henderson and Tom Boyce
FHWA Manager: Stephanie Gibson

The FHWA/CDOT Environment program is focused on avoiding, minimizing and mitigating potential adverse impacts of the transportation system on the people and the environment of Colorado in accordance with National Environmental Protection Act (NEPA) and other applicable environmental legislation, regulations and policy direction. This is accomplished by ensuring:

1. Environmental issues are identified early;
2. Appropriate impact analyses are performed in a timely manner;
3. Adequate documentation is submitted and reviewed as scheduled;
4. Required authorizations are received from the governing entities for all projects and maintenance activities in accordance with the laws, environmental policies, letters of agreement and rules governing the environment; and
5. Mitigation tracking.

Timely compliance with environmental requirements is critical for advancing projects. The Regions, with assistance from the Project Development Branch and the Division of Transportation Development (DTD), are charged with the responsibility of project development, construction, and maintenance of the Colorado transportation system in a manner that will preserve the social and natural environment.

Quality/Results

1. Environmental Protection Agency (EPA) Environmental Impact Statement (EIS) Ratings – CDOT worked on two Draft EIS documents during this calendar year, but only one went out for public review during this year. The I-70 East Supplemental Draft EIS received an EPA rating of EC-2, which means "Environmental Concerns, Insufficient Information".

2. Completion Time for Environmental Documents – During the 2014 calendar year, one Supplemental Draft EIS, one Record of Decision (ROD), four Environmental Assessments (EAs), and four Findings of No Significant Impact (FONSI) were finalized. In August 2014, the I-70 East Supplemental Draft EIS was signed. This project started in August 2003 and the Draft EIS was signed in October 2008. The Pueblo Freeway ROD was signed in August 2013, which was 22 months after the Final EIS (FEIS) was signed.

   The Grand Avenue Bridge EA was signed in October 2014, which was 41 months after the project started in May 2011. The State Highway 9, Iron Springs, EA began in August 2012 and was signed in May 2014. This was a pilot project that used, and refined, a streamlined EA format developed by the FHWA Colorado Division and CDOT. This streamlined EA (EA Template) is a table-based format that concisely covers impacts and mitigation. It is most applicable to simpler EAs with only one alternative in addition to the No Action Alternative. This format, in combination with Planning and Environmental Linkages (PEL) studies, has enabled CDOT to notably streamline the EA process. The FONSI for the State Highway 9, Iron Springs, project was signed in December 2014, which was seven months after the EA was signed. The FONSI also used a streamlined format (FONSI Template).

   Two projects have subsequently used this template EA format. The US 50 West, Pueblo, EA began in December 2013 and was signed six months later in June 2014. The FONSI, which used

the FONSI Template, was signed in September 2014, three months later. The Federal Boulevard, 7th to Howard Place, EA began in February 2014 and was signed 8 months later in October 2014. Prior to both EAs, a PEL study had been conducted on each corridor that provided background information and basic information on resources and impacts and could have helped shorten the timeline for these template EAs.

Traditionally, the average number of pages for an EA was about 160 pages. With the new template, this number has been reduced to an average of 57 pages, which shortened the review time of these documents. Additionally, the average time from project start to publication of a traditional EA is about 49 months. The average time for the above two EAs was 7 months. The State Highway 9, Iron Springs, EA is not included in the time because it was pilot testing, and refining, the template EA format and also had more complicated circumstances, including needing to discuss and disclose impacts for a non-traditional No Action Alternative (previously selected alternative from a ROD), United States Forest Service (USFS) coordination, and natural resource analysis needs with limited survey windows. This took 21 months.

In addition to the two FONSIs listed above, two others were signed during 2014. The US 24 West FONSI began after the EA was completed in May 2013 and was signed 17 months later in October 2014. The US 287 at Lamar Reliever Route FONSI, which began after the EA was completed in August 2013, was signed in November 2014, 15 months later.

Figure 1 below shows the EAs and EISs, 59 in all, that have occurred since 1999. The figure lists the length of time for each project and graphically displays projects that occurred simultaneously. PELs are not added in this chart at this time, but data from the PEL program is considered in the following discussion. The bullets below summarize the observations regarding this data.

- Regarding Workload: The number of EAs/EISs ongoing each year from 1999 were 9 in 1999, 18 in 2000, 17 in 2001, 19 in 2002, 23 in 2003, 28 in 2004, a different 28 (some were completed and some were added from the previous year's list) in 2005, 26 (+1 PEL) in 2006, 27(+3 PELs) in 2007, 20 (+3 PELs) in 2008, 16 (+3 different PELs) in 2009, 15 in 2010, 14 in 2011, 10 (+4 PELs) in 2012, 11 (+6 PELs) in 2013, and 16 (+7 PELs) in 2014.
- When SAFETEA-LU came into existence in 2005, there were 28 EAs/EISs in process, 18 of these were completed that year or in the next 2 years. Four new EAs were also started that year.
- In 2007, the first PEL document began (was called Linking Planning and NEPA at that time, which was the precursor to PEL). After that, no new EISs were started. Maybe this is a coincidence, maybe this had to do with the recession of 2008, or maybe these large studies are now being initiated under the PEL process. Between 2007 and 2009, 4 PEL projects were completed. There was a two year hiatus after that, then in 2012 4 PELs were started, in 2013 2 were started, and in 2014 5 were started.
- In 2010, the first Every Day Counts Initiative was proposed by FHWA. One of the streamlining ideas for getting legal assistance and FHWA HQ help on documents that had been under study for 11 years was applied to the I-70 Mountain Corridor Draft Programmatic EIS. The Draft Programmatic EIS was revised and completed that year and the Final Programmatic EIS was completed the next.
- Average number of EA/EIS/PEL projects worked in any one year = 20 (above this average occurred collectively between 2003 and 2009 but the number of documents worked in a year is dropping since 2009 to the mid-teens and is currently at 23 for 2014 which includes 12 EA/FONSIs, 4 EIS/RODs, and 7 PELs active during the year.)
- Average number of months to a FONSI = 38. The trend from 2001 to 2014 has been a decrease in the number of months to a signed FONIS from approximately 50 months to approximately 20 months.

- Average number of months to a FONSI from 1992 to 2001 = 44.
- Average number of months to a Final EIS signature for projects started between 1999 and 2014 = 71; but without the I-70 Mountain Corridor EIS that was 128 months and the I-25 through Pueblo EIS that was 108 months, the average number of months for the other Final EISs was 35 months although that trend is slightly increasing as time goes on.
- Average number of months from FEIS to ROD = 6.5
- Average number of months to a completed PEL = approximately 20
- Average number of months to a signed EA using the Template EA = 7 months. Note that this only includes the two EAs after the template was created and does not include the pilot project, SH 9, Iron Springs where the template was revised.

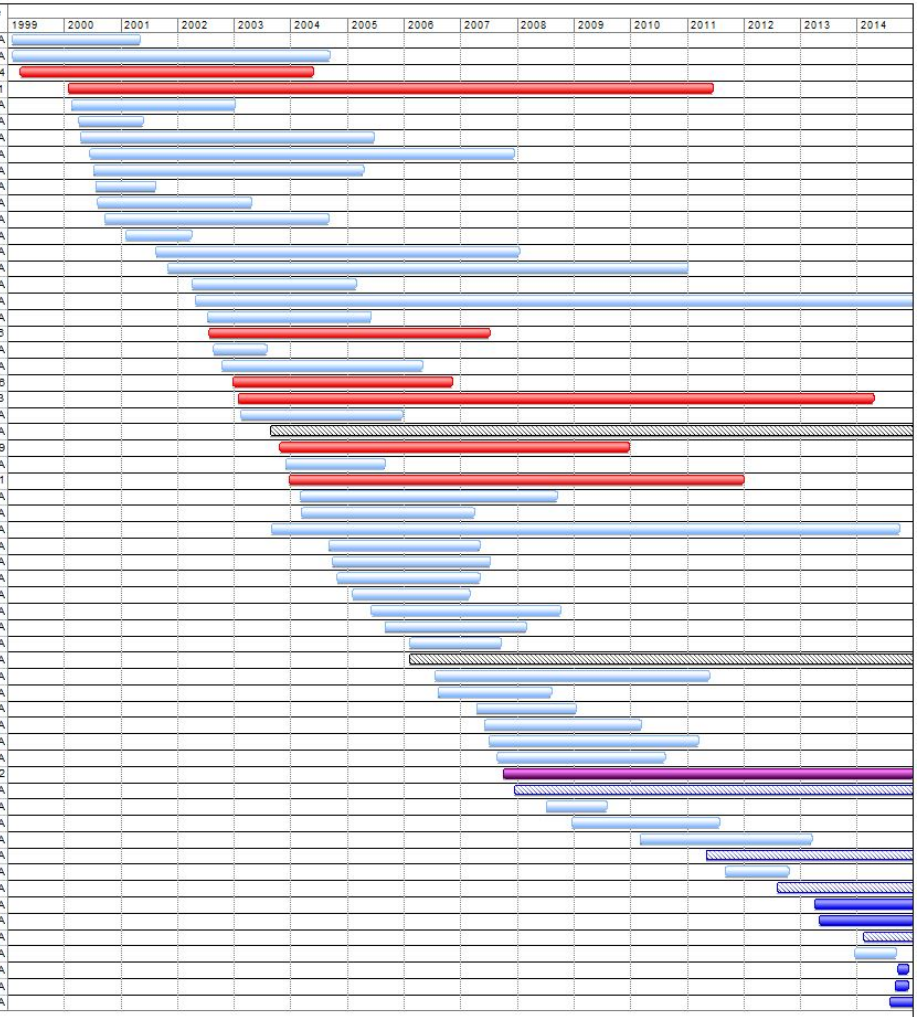
Priority projects that shortened timeframes:

- T-REX construction = driven by Governor Owens/Tom Norton
- SH 85 and 120th extension signed in May 2003 = 9 months also driven by Tom Norton
- US 36 = Quick Final EIS/ROD driven by Tiger Grant opportunity and Governor Ritter/Russell George
- I-70 Mountain Corridor Programmatic EIS rewrite driven by Governor Ritter/Russell George (finished up by Governor Hickenlooper/Don Hunt)
- Twin Tunnels East-Bound EA= 13 months driven by Governor Hickenlooper/ Don Hunt

Appendix A: Environment Section, Other Notable 2013 Regulations and Accomplishments to Compare for Track Trends contains more information on other accomplishments such as the timeline for when the NEPA Manual guidance was available, regulations such as SAFETEA-LU, politics such as Governors and their campaign platforms, and policies such as going after grants and partnerships that require NEPA documentation up front that could also affect the length of a NEPA document.

Figure 1 – CDOT EAs and EISs from 1999 to Present

ID	Task Name	Document Type	Start	EA/DEIS Signature Date	FEIS Signature Date
1	I-225 North of Parker Road to North of 6th Ave	EA/FONSI	Thu 1/28/99	Tue 10/17/00	NA
2	I-25 North Colorado Springs	EA/FONSI	Mon 2/1/99	Mon 3/29/04	NA
3	SH 9	EIS/ROD	Tue 3/23/99	Fri 5/31/02	Thu 3/4/04
4	I-70 Mtn Corridor	EIS/ROD	Tue 1/25/00	Tue 8/10/10	Thu 2/24/11
5	I-25, 136th Ave Interchange	EA/FONSI	Thu 2/17/00	Wed 5/15/02	NA
6	Northwest Parkway, I-25 Interchange	EA/FONSI	Mon 4/3/00	Mon 2/12/01	NA
7	I-70 Eagle County Airport Interchange	EA/FONSI	Fri 4/14/00	Mon 8/30/04	NA
8	Woodmen Road	EA/FONSI	Wed 6/14/00	Fri 12/16/05	NA
9	I-25, 144th Ave Interchange, Adams County	EA/FONSI	Fri 7/7/00	Wed 1/12/05	NA
10	I-70, Hogback Parking Facility	EA/FONSI	Wed 7/19/00	Wed 2/14/01	NA
11	Nottingham Ranch Road (Post Blvd), I-70	EA/FONSI	Wed 8/2/00	Fri 1/11/02	NA
12	I-70, SH 58 Interchange	EA/FONSI	Mon 9/18/00	Wed 7/3/02	NA
13	South Simms St - US 285 Interchange	EA/FONSI	Mon 1/29/01	Thu 9/6/01	NA
14	SH 402, US 287 to I-25 Interchange	EA/FONSI	Mon 8/13/01	Mon 7/23/07	NA
15	Powers Blvd	EA/FONSI	Mon 10/29/01	Tue 5/4/10	NA
16	I-25, Crystal Valley/Dawson Ridge Pkwy	EA/FONSI	Tue 4/2/02	Mon 9/20/04	NA
17	SH 287 Reliever Route in Lamar	EA/FONSI	Thu 4/25/02	Thu 8/15/13	NA
18	SH 285, Foxton to Bailey	EA/FONSI	Fri 7/12/02	Wed 8/11/04	NA
19	Valley Highway	EIS/ROD	Tue 7/23/02	Tue 4/19/05	Thu 12/7/06
20	120th Ave Extension, SH 85 and Quebec	EA/FONSI	Mon 8/19/02	Tue 5/27/03	NA
21	US 34 Business Route, SH 257 to 71st Ave	EA/FONSI	Fri 10/11/02	Tue 9/13/05	NA
22	US 160 Durango to Bayfield	EIS/ROD	Tue 12/24/02	Tue 9/13/05	Fri 5/12/06
23	I-25 Through Pueblo	EIS/ROD	Mon 1/27/03	Fri 10/21/11	Thu 8/15/13
24	US 550, Improvements from State Line to CR 220	EA/FONSI	Wed 2/12/03	Wed 7/27/05	NA
25	I-70 East Corridor	Ongoing EIS	Tue 8/19/03	Wed 10/29/08	NA
26	US 36	EIS/ROD	Tue 10/21/03	Mon 7/23/07	Fri 10/30/09
27	SH 121, Wadsworth Blvd/Grand Ave	EA/FONSI	Fri 11/28/03	Mon 5/9/05	NA
28	North I-25	EIS/ROD	Mon 12/22/03	Fri 10/31/08	Fri 8/19/11
29	SH 7, Cherryvale Rd to 75th St	EA/FONSI	Mon 3/1/04	Fri 5/30/08	NA
30	I-225, Colfax Avenue Interchange	EA/FONSI	Tue 3/9/04	Thu 10/20/05	NA
31	US 24, I-25 West to Manitou	EA/FONSI	Wed 8/27/03	Wed 5/16/12	NA
32	US 34 Madison Ave to Larimer County	EA/FONSI	Wed 9/1/04	Wed 4/4/07	NA
33	I-70, E-470 Interchange Complex	EA/FONSI	Fri 9/24/04	Tue 11/7/06	NA
34	DAR, US Army Pueblo Chemical Depot	EA/FONSI	Tue 10/26/04	Tue 1/16/07	NA
35	I-70/32nd Ave Interchange (Cabela's)	EA/FONSI	Tue 2/1/05	Mon 10/23/06	NA
36	South Broadway	EA/FONSI	Wed 6/1/05	Wed 3/26/08	NA
37	SH 88, Federal Blvd, Alameda Ave to 6th Ave	EA/FONSI	Mon 8/29/05	Wed 11/14/07	NA
38	I-25, SH 16, East Entrance to Fort Carson	EA/FONSI	Thu 2/2/06	Thu 7/12/07	NA
39	US 50 East	Ongoing EIS	Fri 2/3/06	NA	NA
40	I-70 East Eagle Interchange	EA/FONSI	Tue 7/18/06	Fri 9/3/10	NA
41	I-70, I-70B West	EA/FONSI	Tue 8/8/06	Wed 3/19/08	NA
42	56th Ave Quebec to Havana	EA/FONSI	Thu 4/12/07	Thu 9/4/08	NA
43	6th Ave/Wadsworth	EA/FONSI	Fri 6/1/07	Mon 6/29/09	NA
44	I-25, North Meadows Extension to US 85 and I-25	EA/FONSI	Mon 7/2/07	Tue 3/23/10	NA
45	I-70, Parachute West Interchange	EA/FONSI	Fri 8/24/07	Tue 1/5/10	NA
46	US 550/160 Supplemental EIS	EIS/Ongoing ROD	Mon 10/1/07	Mon 10/3/11	Tue 7/3/12
47	South Bridge - Glenwood Springs	EA/Ongoing FONSI	Fri 12/14/07	Tue 10/8/13	NA
48	Central Park Blvd	EA/FONSI	Thu 7/3/08	Thu 6/4/09	NA
49	I-25 Dillon Drive	EA/FONSI	Thu 12/18/08	Wed 1/26/11	NA
50	I-25 Arapahoe Road	EA/FONSI	Wed 3/3/10	Wed 8/29/12	NA
51	Grand Ave Bridge	EA/Ongoing FONSI	Mon 5/2/11	Sat 10/18/14	NA
52	Twin Tunnels	EA/FONSI	Thu 9/1/11	Thu 6/28/12	NA
53	SH 9 Iron Springs	EA/Ongoing FONSI	Wed 8/1/12	Tue 5/6/14	NA
54	C-470 I-25 to Kipling Revised EA	Ongoing EA	Tue 4/2/13	NA	NA
55	I-76 and Bridge Street	Ongoing EA	Wed 5/1/13	NA	NA
56	Federal Blvd, 7th to Howard Place	EA/Ongoing FONSI	Tue 2/11/14	Wed 10/8/14	NA
57	US 50 West, Pueblo	EA/FONSI	Mon 12/16/13	Wed 6/4/14	NA
58	6th Ave Parkway Extension	Ongoing EA	Fri 9/19/14	NA	NA
59	US 287 over BNSF	Ongoing EA	Mon 9/1/14	NA	NA
60	Sterling S Curve	Ongoing EA	Fri 8/1/14	NA	NA



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3. Number of Active and Completed NEPA Documents –The following table displays the number of active and completed NEPA documents for a given year.

Table 4– Number of Completed NEPA Documents Compared to Number of Active NEPA documents

Year	Categorical Exclusions (Cat Exs)		Environmental Assessments (EAs)		Findings of No Significant Impacts (FONSIs)		Environmental Impact Statements (EISs)		Records of Decision (RODs)	
	Completed	Active	Completed	Active	Completed	Active	Completed	Active	Completed	Active
2012	189	470	3	7	1	0	2	6	1	0
2013	266	682	2	7	1	3	1	3	0	1
2014	217	757	4	9	4	7	0	2	1	2

During the 2014 calendar year, there were 16 active EA/EIS projects:

- Four of these were EIS/RODs. There were two ongoing EISs (I-70 East and US 50 East) and two ongoing RODs (I-25 through Pueblo and US 550/160) statewide. At the end of the 2014 calendar year, both EISs are still active and one of the active ROD has been signed (I-25 through Pueblo).
- There were a total of 12 active EA/FONSI projects this year. Four of these EAs have been signed (Grand Ave Bridge, SH 9 Iron Springs, US 50 West Pueblo, and Federal Blvd – 7th to Howard Place), two of which are in the FONSI preparation stage. The other two projects already have a signed FONSI (SH 9 Iron Springs and US 50 West Pueblo). At the beginning of the year, there were three additional active FONSIs (SH 287 Reliever Route in Lamar, US 24 – I-25 west to Manitou, and South Bridge in Glenwood Springs), the first two of which have been signed. Three more EAs started this year (6th Ave Parkway Extension, US 287 over BNSF, and Sterling S-Curve).

Also during the 2014 calendar year, there were 757 active Cat Ex processes statewide for both federal and non-federal projects. This combined number of Cat Ex processes is representative of workload. Approximately 217 federal Cat Ex processes were completed, and an additional 35 non-federal Cat Ex clearances were completed in 2014 but are not included in the table above since FHWA is only interested in the federal actions.

4. Percent on time for clearance actions by EPB – Performance was consistently higher than the target each quarter. Even though the number of requested clearance actions varies each quarter and each state fiscal year, the percent on-time numbers were 98% even though there was an 11% increase in the number of clearance requests from the year before, and 30% increase the year before that for a total increase of 41% in clearance requests over the last two years. The Branch had 3035 clearance action requests in FY 2014. Of particular note, document review for the year, including NEPA documents during the flood efforts, all met their deadlines 100% of the time even though CDOT's lead NEPA Manager and wetland specialist were reassigned for up to 6 weeks for the flood effort at the end of CY 2013. This all happened with 25 major NEPA documents that came in for review during the 2014 fiscal year, as opposed to 18 in the 2013 fiscal year, and 24 documents in 2012 fiscal year. Please note that those on-time numbers occurred even during the quarter of the greatest flood support requirements which required a lot of overtime by the

environmental staff. Additionally, the training evaluation scores have been 89% for 2014, comparable for the last few years where the average was 90%.

5. Wetland impact and replacement ratios – CDOT has consistently achieved and occasionally exceeded the target of 100% replacement of wetlands impacted by its projects. This number includes jurisdictional as well as non- jurisdictional. Technically speaking, the Department is exceeding the minimum requirements imposed by the USACE.

6. Water Quality Measure – This measure addresses the Consent Order requirement of developing and implementing a program to ensure that water quality findings on projects are addressed promptly after they are identified. Due to the importance of the measure, the CDOT Chief Engineer has adopted it as one of his Chief Engineer Objectives even though the Consent Order and associated Notice of Violation was closed in this past calendar year. The result for this year is 91%, similar to last year's 92%. There was a steady increase over the past two previous years, and this year is holding at a fairly good number. The previous three years' performance include: FY 2011 was 84%; FY 2012 was 88%, and FY 2013 was 92%. These numbers should continue to improve for FY 2015 with additional training that is being given for CDOT and for contractors required by the end of 2014. Already, the inspectors from the Colorado Department of Public Health and Environment have noticed improvements on those projects that have certified Transportation Erosion Control Supervisors that have completed CDOT's training program.

The following performance indicators demonstrate the health of the Environment Program:

Table 5 - Performance/Compliance Indicators (Environment)

SAP #	Indicator	Description	Reporting Mechanism	Target/Baseline	2014 Actual	Reporting Frequency
625	**Completion time for environmental documents**	The time to complete an EA from 45 days after the date of the initial Coordination Letter through the FONSI date and the time to complete an EIS from Notice of Intent (NOI) to Record of Decision (ROD)	A list of all EAs and EISs completed in the calendar year identifying the length of time along with a project description as added to previous years data	Track trend	See text under Completion Time for Environmental Documents	Calendar FY **Quarterly reporting**
104, 381, 382	**Active and completed NEPA documents**	Projects that were active at any point in the year, and projects for which NEPA actions were completed	A list or table indicating number of active and completed NEPA documents in the calendar year divided by class of action (CE, EA, EIS) as added to previous years data	Track trend	See Table 2 above	Calendar FY **Quarterly reporting**

Performance/Compliance Measures

The following performance measures demonstrate the health of the Environment Program:

Table 6 - Performance/Compliance Measures (Environment)

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	2014 Actual	Reporting Frequency
424	**Environmental Protection Agency (EPA) EIS ratings**	The rating that EPA provides on draft EIS documents	A list of DEIS documents completed in the calendar year identifying the EPA rating along with a project description	0, No EU ratings[1]	No EU ratings, One EC-2 rating	Calendar FY **Quarterly reporting**
102	**Percent on time for clearance actions by EPB**	Percent of the clearance actions sent from Regions to EPB that were completed on time as negotiated by the regions	Environmental clearances, document and project reviews, and plan development/reviews completed by EPB prior to deadlines, quarterly	90%	98%	State FY **Quarterly reporting**
103	**Wetland impact and replacement ratios**	Ratio of replacement area to impacted area (statewide aggregate)	Identify and document replacement ratio by calendar year	A minimum of 1:1 wetland replacement	100% (1:1)	Calendar FY
99	**Water quality measure**	RECAT (or equivalent in new MS4 permit) findings resolved or addressed within 48 hours of midnight following the finding	Chief Engineer Objective	95-100%	91%	State FY

[1] EPA rates EIS documents from best to worse as: LO (Lack of objections), EC (Environmental Concerns, EC-1= adequate EC-2= insufficient information), EO (Environmental Objections), and EU (Environmentally Unsatisfactory). The EU Rating means that the proposed action must not proceed as proposed; the others can proceed, some with modifications but they can be mitigated.

2.6. ENGINEERING: HYDRAULICS

Introduction

CDOT Manager: Al Gross
FHWA Manager: Matt Greer

The Hydraulic program addresses statewide issues involving design of hydraulics structures that include: bridges, culverts, inlets, manholes, channels/ditches and water quality basins. The program is responsible for working with the Regions to ensure that hydrologic and hydraulic design is implemented consistently according to CDOT Drainage Design Manual standards and criteria. The program is also responsible for creating and reviewing drainage/water related policy and procedural directives along with relevant and applicable standards and specifications.

Quality/Results

Staff Branches Activities:

1. Organized and conducted a 1-day annual meeting with all Region Hydraulic Engineers in April 2014 in Golden. Purpose was to provide water quality and drainage related information to Regions. Consisted of various presentations internally from CDOT Environmental, Landscape and Research and externally from various pipe manufacturer's and drainage consultants.

2. Met individually with each Region Hydraulic Engineer to discuss projects they are working on and any issues and concerns.

3. Administered the Bridge Scour Plan of Action (POA) project. Current phase involves overseeing consultants for the design and implementation of 27 high priority scour critical structure repairs.

4. Supported the emergency and permanent flood recovery efforts for design and repair of 60 structures in Regions 4 and 1. Involved site inspections, meetings, reviewing consultant design plans and reports.

5. Supported the RAMP Staff Bridge bi-monthly meetings. Involved coordinating and communicating with the RAMP team and Regions to implement bridge preventative and bridge scour work into Region projects.

6. Supported Applied Research and Innovation Branch by participating in multiple research involving water and drainage related projects.

7. Supported the Transportation Engineering Training Program (TETP) – Transportation Core Curriculum for the Hydraulic training.

8. Supported the Environmental Programs Branch by participating in various committees, meetings and helping to develop and conduct training.

Regions' Activities:

9. Regions are working with the RAMP Staff Bridge and Staff Hydraulics group in coordinating their projects with bridge preventative maintenance and scour work.

10. Regions are working with Staff Bridge and Staff Hydraulics to coordinate the emergency repair work for minor structures.

Performance/Compliance Measures

The following performance measures demonstrate the heath of the Hydraulics Program:

Table 7 - Performance/Compliance Measures (Hydraulics)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
236	**Update the Scour Plan of Action (POA) for all scour critical bridges**	The percentage of scour critical bridges (NBI Item Code 113 Code 2, 3 or U) that have had plan of actions updated after 2008.	Staff Bridge annual asset management reports	100%	100%	State FY **Quarterly reporting**

2.7. ENGINEERING: PAVEMENT AND MATERIALS

Introduction

CDOT Manager: Bill Schiebel
FHWA Managers: Donna Harmelink

The Materials and Geotechnical Branch is responsible for ensuring quality in the products used for construction and maintenance of the transportation system. The Branch is responsible for the specifications, test procedures, and associated testing of materials to ensure compliance with CDOT standards and specifications and FHWA Regulations. The Programs in this Branch include Soils/Geotechnical, Geohazards, Concrete and Physical Properties, Asphalt Pavements, Pavement Management, and Pavement Design.

Quality/Results

1. There were 10 courses offered and nine courses delivered. Over 45 students during 8 classes were trained in the use of SiteManager Materials with an overall score of 4.60 out of 5.0.and 25 students in one class were trained in Pavement ME Design. Other training included QC/QA for HMA and PCCP, New Tester Training and Materials for Managers. 27 ACI certification/training courses and 1 Concrete Paving Inspector class was offered via the Colorado Ready Mixed Concrete Association. Also, 22 LabCAT certification courses and 5 Asphalt Inspector certification courses were offered via RMAEC. 11 Soil and Embankment certification and Inspector certification courses were conducted by WAQTC.

2. Three manuals were updated and improved. They include the Field Materials Manual, the Pavement Design Manual and the Laboratory Manual of Test Procedures.

3. The Materials Advisory Committee met five times and identified and resolved issues. Numerous specification and procedural improvements were part of the effort.

4. The CDOT, AZDOT, NMDOT, UTDOT Four Corners peer exchange meeting was conducted in May 2014. This meeting brought materials engineers from the Four-Corners state DOT's together for collaboration and problem-solving on shared technical issues.

5. The Central Laboratory maintained 102 tests in the American Association of State Highway and Transportation Officials (AASHTO) Accreditation Program. Twenty eight proficiency samples were tested, with an average of 3.85 out of 5.0 rating.

6. The Central Laboratory quality review of each of the five Region Laboratories and remote testing facilities was conducted and reported on May 12, 2014

7. The reports of the round-robin proficiency testing with the Regions, consultants and contractors were completed for asphalt, concrete compressive strength, sulfates in soil, and soils.

8. For those performing acceptance testing, certifications were completed for 269 people in asphalt, 408 people in concrete and 154 people in soils. A total of 849 people were certified. This list of certified testers is updated on a quarterly basis.

9. The Pavement Management Technical Committee met five times during the year. The annual report to the Transportation Commission documented the improvements made to the pavement-management system model and the recently gathered condition data.

10. Pavement Management transitioned from a Remaining Service Life metric to a Drivability Life metric, which is a customer-facing measure that incorporates pavement surface distresses, smoothness, and safety. 2014 is considered a transition year between Remaining Service Life and Drivability Life.

11. The FY 2014 annual rockfall report was completed on August 19, 2014.

12. The scope of the Rockfall Program was modified to include rockslides, landslides, debris flow, sink holes and embankment distress. With the increase in scope the Program name was changed to the Geohazards Program, which is incorporated into CDOT's Asset Management Structure. Performance measures and targets are being developed with the goal of full implementation in 2015.

13. Partnering with Industry: The Asphalt Industry Forum (AIF)/Colorado Asphalt Pavement Association (CAPA) and the CDOT/American Concrete Paving Association (ACPA) Coop each met 4 times to identify and resolve issues. Monthly meetings are held with ACPA and CAPA to discuss industry concerns and enhancements regarding CDOT's Life Cycle Cost Analysis procedures. Completed task force and specification efforts include Performance Based Concrete, Updated Cement, Fly Ash and Pozzolans, CP 52 Note 1 – Asphalt Mix Design.

14. The use of CP-59 to document and approve WMA technologies and contractors continued in 2014. The total number of approved technology now stands at 11 and contractors at 13.

15. The triennial audit of CDOT's final materials documentation and Independent Assurance program was performed on 12 CDOT and 9 Local Agency projects. Eight recommendations were made to enhance the quality on CDOT's documentation processes along with five recommendations for Local Agency projects. One recommendation was made to improve the Independent Assurance program on CDOT and Local Agency projects. Approximately, 70 percent of the recommendations have been completed. Most notably, the Buy America requirements have been modified to comply with FHWA guidelines and a training class has been delivered to Local Agency personnel on proper documentation for materials related items.

The following performance indicators demonstrate the health of the Pavement and Materials Program:

Table 8 - Performance/ Compliance Indicators (Pavements and Materials)

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
253	**Percent of resurfacing projects matching recommendations of the Pavement Management Systems annual review**[1]	Percent of resurfacing projects recommended by the Pavement Management System for each State fiscal year	Pavement Management Systems Work Plan	Track trend	63%	State FY

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
255 & 259-264	**Percent of surface treatment funds planned for pavement preservation within each region**[1]	Percent of surface treatment funds planned for pavement preservation within each region (per Chief Engr Policy Memo 18)	Pavement Management Systems Work Plan	Track trend	Statewide: 7.2% R1: 3.5% R2: 15.9% R3: 5.9% R4: 5.4% R5: 6.0%	State FY

[1] Due to the ongoing Pavement Management transition from the Remaining Service Life metric to the Drivability Life metric, these indicators can be calculated, but should be considered for information only. It is expected that full reinstatement of specific targets will be included in the 2015 annual report. Previous targets were 70% of resurfacing projects matching recommendations of the Pavement Management Systems annual review and 5% of surface treatment funds planned for pavement preservation within each region.

The FY2015 Surface Treatment Plan (STP) of projects is a mixture of established project delivery commitments aligned with the old RSL philosophies and new projects aligned with the new DL philosophies.. PMS Match status represents simple comparison of the final FY2015 STP to current DL PMS recommendations, and is therefore below target and historic levels. Next year's report expects to have a project matching percentage in the 80s.The percent of planned preventive maintenance for this year, achieves historic targets.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Pavement and Materials Program:

Table 9 - Performance/ Compliance Measures (Pavements and Materials)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
254	**Percent of NHS pavements within Colorado with an IRI less than 95**	Percent of NHS pavements within Colorado have a good ride quality as defined by an IRI less than 95	Pavement Management System	52%	56%	State FY

2.8. ENGINEERING: PLANNING

Introduction

CDOT Manager: Jeff Sudmeier, Erik Sabina, William Johnson
FHWA Manager: Bill Haas

There are 3 Branches within DTD that directly contribute to Performance Based Planning and Programming as outlined in MAP-21. They are the Multimodal Planning Branch (MPB), the Information Management Branch (IMB), and the Transportation Performance Branch (TPB).

The Multimodal Planning Branch (MPB) within DTD oversees the planning process that includes both statewide and regional planning activities. MPB administers and coordinates regional and statewide planning through the 15 TPRs, of which there are five Metropolitan Planning Organizations (MPOs) and ten non-urban planning regions. In addition, MPB consults with two Indian Tribes and various federal land management, wildlife and regulatory agencies on the development of the long-range transportation plan. The TPRs (MPOs and non-urban) develop long-range regional transportation plans, which are the basis for Colorado's long-range Statewide Transportation Plan. The five MPOs also develop transportation improvement programs (TIPs) and the non-urban planning regions participate in CDOT's Project Priority Programming Process (4P) to prioritize projects for the Statewide Transportation Improvement Program (STIP). The Colorado Transportation Commission approves the Statewide Transportation Plan and the STIP, and the STIP is forwarded to FHWA/FTA for approval. The MPB is also responsible for administering the Bike/Pedestrian programs and the Safe Routes to School and non-infrastructure Congestion Mitigation and Air Quality (CMAQ) programs.

Highway information is prepared and submitted by the Information Management Branch within DTD. This Branch has two sections: GIS and Mobility.

- The GIS/Data Management section is responsible for information management and data dissemination functions that contribute to the development of projects, transportation plans and state/federal reports. CDOT program areas are supported with GIS applications, planning information, data analysis, mapping services, database programming and data integration.
- The Mobility section is responsible for traffic data collection, processing, analysis and dissemination. They are also responsible for the inventory of the state highway system, HPMS and road mileage certification, management of special studies, travel demand model technical support, and freight planning.

The TPB collects and reports on performance in many areas of CDOT and prepares the CDOT Performance Plan for the legislature. This branch leads several interdisciplinary work groups in order to set performance measures and targets, to make sure data can be collected to support those measures and is of good quality, and develops performance models to help predict future levels of performance based on expected revenues.

Quality/Results

The DTD Work Program follows the state fiscal year. As of June 30, 2014, FY 2014 obligations and expenditures for MPB, IMB and TPB combined were 47.47% and 21.51%. Both IMB and MPB have multi-year work program items so not all funds will be obligated or expended in any

given year. All FHWA required items with a FY 2014 action were completed during the fiscal year.

DTD administers purchase orders with the state's non-urban TPRs and with those TPRs that include both MPO and non-urban areas. These purchase orders provide funds for TPR planning activities, and are used primarily as reimbursement for travel and meeting expenses related to the transportation-planning process. All TPR purchase orders were executed on time this year, by the beginning of state FY 2014.

DTD also administers Consolidated Planning Grant (CPG) contracts with each of the state's five MPOs. A target has been established to fully execute new two-year CPG contracts by October 1, the start of the federal fiscal year. Based on process improvements done in the previous year all new two-year CPG contracts were processed by October 1, 2013 and executed shortly thereafter. Additional amendments follow during the two-year cycle to add remaining funds from the prior two-year contract, and to add funding for the second year of the contract.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Planning Program:

Table 10 - Performance/Compliance Measures (Planning)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
379 -380	**Work program progress**	Percent of funds encumbered or expended compared to the estimate of encumbrance for fiscal year	Feedback on annual review and tracking of percent complete on projects Progress on the work program is in the FY Accomplishments Report	90% of planned amount	69% (21.5% encumbered 47.5% expended)	State FY
10	**TPR coordination**	CPG and Rural PO	Contracts executed by deadline	100% of contracts executed on time	100%	Federal FY
630	**Accuracy and Timeliness of HPMS and other transportation data submitted**	Annual HPMS Report Card Score from FHWA HPMS Review	Annual HPMS Report Card Score	120	125	State FY

2.9. ENGINEERING: PROGRAM AND PROJECT DELIVERY - DESIGN AND CONSTRUCTION

Introduction

CDOT Manager: Neil Lacey (Design) and John Eddy (Construction)
FHWA Manager: Shaun Cutting and Randy Jensen

The CDOT Area Engineers Program is responsible for assisting the five (previously 6) CDOT Regions to maintain uniform administration and management practices in construction, design and contract administration. In addition, the Area Engineers are responsible for providing technical assistance to the Regions and various local agencies.

Quality/Results

1. There were 314 Change Orders submitted. Of those 314 (90%) were complete as submitted, 24 (8%) needed revision, and eight (2%) needed supplemental documentation. There were no Major Change Orders (requiring FHWA approval) greater than $250,000.

2. The Liquidated Damages table was revised in FY 2014. The next revision is scheduled for review in FY 2016, revised bi-annually.

3. There were 6 claims filed in FY 2014. The claims were filed only after the dispute resolution process was exhausted.

Status of FY14 Claims		**< $250,000**	**>$250,000**
Claims Open Beginning FY14	3	3	0
New Claims FY14	6	6	0
Claims Resolved FY14	8	8	0
Claims Carrying Over FY15	1	1	0

4. Dispute Status FY 2014

Status of FY14 Disputes		**< $250,000**	**>$250,000**
Disputes Open Beginning FY 14	11	9	2
New Disputes FY14	17	16	1
Disputes Resolved FY14	12	11	1
Disputes Carrying Over FY15	16	15	1

5. There are 5 active Certifications and 13 active statewide FIPIs.

6. Four Joint CDOT/CCA Specifications Committee meetings were held, and 52 standard special provisions and sample project special provisions were issued. There were 6 revisions to the M-Standard Plans.

7. CDOT reported FY13 Value Engineering and VECP savings to FHWA in February 2014, and will submit the FY14 report when it is due.

8. No Post Construction Reviews were performed.

9. FHWA agreed to postpone IRR's for FY 2014 on October 3, 2013, based on the priority of CDOT and FHWA staff needed for major flood recovery projects in Regions 2 and 4.

10. The Area Engineers and FHWA Operation Engineers conducted 19 Residency Visits with all of the regional design/construction residencies and traffic units.

11. Two Area Engineer/FHWA Program Delivery Team Leader Meetings were held in FY 2014.

12. The Project Development and/or Contracts and Market Analysis Branches were represented at the following committee meetings:
    - CDOT/CCA Specifications Committee - 4 of 4 meetings
    - CDOT/ACPA Coop - 4 of 4 meetings
    - CDOT/CAPA Coop - 4 of 4 meetings
    - PDAC - 4 of 4 meetings
    - MAC - 5 of 6 meetings
    - LART - The Local Agency Roundtable (LART) has reconvened and set a priority for early next year to begin the update/re-write of the LA Manual. The group will likely meet monthly during this exercise, sometimes with all present, sometimes with some members present and others attending virtually. The group will also engage FHWA regarding the pending LPA programmatic assessment.
    - RE Committee – 6 of 12 Meetings
    - Water Quality Advisory Committee – 4 of 4 Meetings
    - Innovative Contracting Advisory Committee – 4 of 4 meetings

13. Twenty-four construction projects and 12 maintenance project traffic control reviews were conducted in FY 2014, of which one was a nighttime review. Statewide average construction and maintenance project scores were 93.5% and 93.3%, respectively. The final report was submitted to FHWA on September 24, 2013.

14. The status of implementation of Quality Assurance Reviews is:
    - FY 2010 – Construction Project Staffing – Staffing matrix completed in FY 2012 and is currently an active resource for project staffing decisions made within the Regions.

    QARs have been replaced with Joint Process Reviews beginning in FY 2014. All prior remaining QARs have been completed and recommendations implemented.

15. Seven Construction Bulletins and nine Design Bulletins were issued. The Construction Manual was revised and issued on March 31, 2014.

    The TETP conducted training courses in numerous subject areas (number of classes held): Transportation Core Curriculum (1), Intro to Context Sensitive Solutions (1), CPM Scheduling for Design and Construction (6), Design Work Hour Estimation (1), Construction Project Administration (2), Reading Structural Plans (1), Applied Roadway Design (1), Managing Contract Time (1), CDOT Lighting Design (1), Disputes and Claims Resolution (1), Interchange Planning and Design (2), Pipeline Model & Cost Planner Training (3), Clear Writing for Engineers Day 1 (3), Clear Writing for Engineers Day 2 (1), Train the Trainer (1). In addition to these instructor-led training courses there are four e-learning courses: Survey Basics for Engineers, Budget Management for Project Engineers, Plan Checking and Design Project Administration. 26 instructor-led courses were held in FY 2014 with a total of 369 participants, four e-learning courses and several training resource

recordings also available for viewing. The average course rating for all instructor-led courses held in the fiscal year was 4.56.

The following performance indicators demonstrate the health of the Design and Construction Programs:

Table 11 - Performance/ Compliance Indicators (Design and Construction)

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
465	**Revisions under Advertisement**	Percent of projects that have one or more Revisions under Advertisement	CDOT Work Plan	Establish baseline and track trend	51.3%	State FY
466	**Constructability reviews**	Number of projects that include a constructability review during the design phase	CDOT Work Plan	Establish baseline and track trend	5	State FY
323	**Number of major change orders**	Number of change orders which required FHWA approval	CDOT Work Plan	Establish baseline and track trend	none	State FY
328	**Number of change orders approved by CDOT**	Number of change orders which did not require FHWA approval	CDOT Work Plan	Establish baseline and track trend	314	State FY **Quarterly reporting**
324	**Number of claims paid out after DRB process followed**	Claim dollars disputed divided by total contract dollars	CDOT Work Plan	Establish baseline and track trend	0.06%	State FY
325	**Number of disputes filed each year**	Contract dollars disputed divided by total contract dollars	CDOT Work Plan	Establish baseline and track trend	0.23%	State FY

Performance/Compliance Measures

The following performance measures demonstrate the health of the Design and Construction Programs:

Table 12 - Performance/ Compliance Measures (Design and Construction)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
464	**Value Engineering (VE) Reviews**	The percentage of projects over $40 million in which a Value Engineering Assessment was completed	CDOT Work Plan	100%	100% (based on 2 projects)	State FY
345	**Time to close a project from final acceptance to project closure in FMIS**	Average # of days to close a project	CDOT Work Plan	200 days	362	State FY

2.10. ENGINEERING: RIGHT-OF-WAY

Introduction

CDOT Manager: Neil Lacey and Christine Rees
FHWA Manager: Randy Jensen and Shaun Cutting

The acquisition of private property for public use is governed by a host of state and federal rules and regulations. The Right-of-Way (ROW) program has overall responsibility for the acquisition of real property on Federal Aid projects. This responsibility includes assuring that acquisition and disposals are made in compliance with the legal requirements of the state and federal laws and regulations.

The ROW program is part of the CDOT Project Development Branch. The project development process can be divided into five process categories or work activities:

1. Surveying;
2. Appraisals/Review;
3. Acquisition;
4. Relocation; and
5. Post-Project Development.

Quality/Results

1. All of the required actions in the FHWA ROW Required Actions List assigned to ROW were completed in fiscal year 2014.

2. There are numerous State ROW Manual changes that will be updated as a result of changes in FY 2014, as well as continuous enhancements and clarification to existing material. Said updates will be completed as staffing is available. Certification of changes by FHWA will follow.

3. There were no requests for waivers.

4. The FHWA Annual Acquisition and Relocation Statistics report was submitted to the State and FHWA on or before November 15, 2013.

5. ROW airspace authorizations issued:

Table 13 - FY 2010 – FY 2014 Airspace Authorizations

Region	FY 2010 Interstate Airspace	FY 2010 Non-Interstate Airspace	FY 2011 Interstate Airspace	FY 2011 Non-Interstate Airspace	FY 2012 Interstate Airspace	FY 2012 Non-Interstate Airspace	FY 2013 Interstate Airspace	FY 2013 Non-Interstate Airspace	FY 2014 Interstate Airspace	FY 2014 Non-Interstate Airspace
1	0	4	2	3	1	8	0	5	1	4
2	1	2	1	0	0	0	0	0	0	2
3	1	14	0	1	2	7	1	3	1	3
4	1	2	0	10	0	16	0	17	0	11
5	0	1	0	1	0	1	0	5	0	5
6	2	0	1	2	0	0	0	1	N/A	N/A
Total	**5**	**23**	**4**	**17**	**3**	**32**	1	31	**2**	**25**

6. Access break and ROW disposals completed:

Table 14 - FY 2010 – FY 2014 Access Break and ROW Disposals

Region	FY 2010 Less Than FMV or Interstate Access Break or Disposal	FY 2010 Non-Interstate FMV Access Break or Disposal	FY 2011 Less Than FMV or Interstate Access Break or Disposal	FY 2011 Non-Interstate FMV Access Break or Disposal	FY 2012 Less Than FMV or Interstate Access Break or Disposal	FY 2012 Non-Interstate FMV Access Break or Disposal	FY 2013 Less Than FMV or Interstate Access Break or Disposal	FY 2013 Non-Interstate FMV Access Break or Disposal	FY 2014 Less Than FMV or Interstate Access Break or Disposal	FY 2014 Non-Interstate FMV Access Break or Disposal
1	1	2	1	1	0	2	0	0	0	3
2	1	2	2	0	0	0	3	0	3	0
3	2	0	2	0	2	0	0	0	2	1
4	0	4	2	9	0	7	2	2	1	1
5	3	0	1	0	0	2	0	1	0	0
6	3	0	1	0	3	0	3	1	N/A	N/A
Total	**10**	**8**	**9**	**10**	**5**	**11**	**8**	**4**	**6**	**5**

Table 15 - FY 2010 – FY 2014 Access Line Crossing License

Region	FY 2010 Interstate Access Line Crossing License	FY 2010 Non-Interstate Access Line Crossing License	FY 2011 Interstate Access Line Crossing License	FY 2011 Non-Interstate Access Line Crossing License	FY 2012 Interstate Access Line Crossing License	FY 2012 Non-Interstate Access Line Crossing License	FY 2013 Interstate Access Line Crossing License	FY 2013 Non-Interstate Access Line Crossing License	FY 2014 Interstate Access Line Crossing License	FY 2014 Non-Interstate Access Line Crossing License
1	4	0	1	0	4	0	6	0	3	0
2	1	0	2	0	0	0	1	0	0	0
3	1	0	2	0	2	0	0	0	0	0
4	1	0	2	0	0	1	1	2	2	0
5	0	0	1	0	0	0	0	0	0	0
6	4	0	1	0	0	0	0	1	N/A	N/A
Total	**11**	**0**	**9**	**0**	**6**	**1**	**8**	**3**	**5**	**0**

7. Project Development's Traffic Engineering Branch Sign removal activities FY 2014.

Table 16 - FY 2010 Sign Removal Activities

FY 2010	**Illegal Sign Removal Summary (Estimate based on FY 2009 data)**						
Region	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	TOTAL
Written Notice	0	18	1	2	0	7	28
Personal Contact	18	33	7	20	11	27	116
Encroachment on ROW	2008	2456	150	1155	60	268	6097
TOTAL	**2026**	**2507**	**1177**	**1177**	**71**	**302**	**6241**

Table 17 - FY 2011 Sign Removal Activities

FY 2011	Illegal Sign Removal Summary (Estimate for Region 3 only)						
Region	**Region 1**	**Region 2**	**Region 3**	**Region 4**	**Region 5**	**Region 6**	**TOTAL**
Written Notice	3	6	1	0	6	48	64
Personal Contact	23	12	7	31	16	8	97
Encroachment on ROW	965	873	150	3494	55	247	5784
TOTAL	**991**	**891**	**158**	**3525**	**77**	**303**	**5945**

Table 18 - FY 2012 Sign Removal Activities

FY 2012	Illegal Sign Removal Summary (Estimate based on the last four fiscal years)						
Region	**Region 1**	**Region 2**	**Region 3**	**Region 4**	**Region 5**	**Region 6**	**TOTAL**
Written Notice	2	11	1	11	2	20	47
Personal Contact	19	26	5	20	11	18	99
Encroachment on ROW	1601	1782	151	1465	5	276	5280
TOTAL	**1622**	**1819**	**157**	**1496**	**18**	**314**	**5426**

Table 19 - FY 2013 Sign Removal Activities

FY 2013	Illegal Sign Removal Summary (Estimate based on the last four fiscal years)						
Region	**Region 1**	**Region 2**	**Region 3**	**Region 4**	**Region 5**	**Region 6**	**TOTAL**
Written Notice	1	10	0	0	2	19	32
Personal Contact	19	25	50	2	11	18	125
Encroachment on ROW	19	1440	1170	996	42	332	3999
TOTAL	**40**	**1477**	**1223**	**1002**	**60**	**375**	**4117**

Table 20 - FY 2014 Sign Removal Activities

FY 2014	Illegal Sign Removal Summary (Estimate for Regions 1 & 3)						
Region	**Region 1**	**Region 2**	**Region 3**	**Region 4**	**Region 5**	**Region 6**	**TOTAL**
Written Notice	19	7	1	5	0	N/A	32
Personal Contact	33	37	5	20	27	N/A	122
Encroachment on ROW	1720	868	151	2692	1786	N/A	7217
TOTAL	**1772**	**912**	**157**	**2717**	**1813**	N/A	**7371**

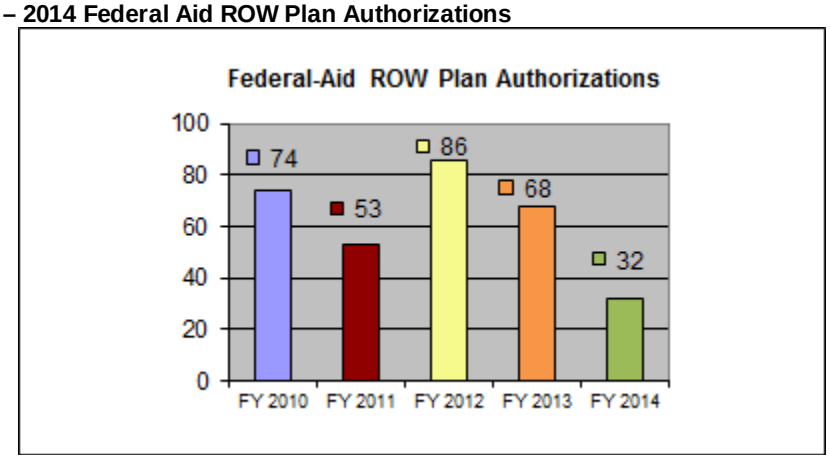
8. On-going monitoring regarding the Uniform Act was performed on every project for which Federal participation was sought. All forms were fully completed, and three or more levels of review were done prior to issuance of any funds.

9. CDOT authorized 32 ROW Plans for Federal Aid participation projects and 35 ROW Plans for non-participation projects, for a total of 67.

Table 21 - FY 2010 – 2014 CDOT Authorized 32 Plans for Federal Aid Projects

ROW Plans Authorized	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Federal Aid Projects with ROW	74	53	86	68	32

Figure 2. FY 2010 – 2014 Federal Aid ROW Plan Authorizations



10. Quality Control (QC) is performed in four functional areas within the ROW process: a ROW plan authorization review, appraisal review, relocation determination approval, and a settlement package checklist. This is CDOT's process for all FY 2014 projects. CDOT has checklists and forms required for every key transaction.

11. Staff also conducted a systematic file review process. Scheduled file review in FY 2014 included the review of Region 4 files by Region 3. The results of the review was satisfactory, and was documented and reviewed with all Regions at the quarterly ROW Managers' Meetings. In addition to the QC focus of this effort, many best practices are shared and implemented by Regions, improving efficiencies and consistency Statewide.

The following performance indicators demonstrate the health of the Right-of-Way Program:

Table 22 - Right-of-Way Program Performance

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
319	**Conditional Clearances**	Percentage of Federal-aid projects with conditional ROW certifications	The number of Federal-aid construction projects that had conditional clearances versus the total number of Federal-aid construction projects	Track trend	17%	December each year
320	**Condemnations**	Percentage of parcels acquired using condemnation	Uniform Act relocation Assistance and real Property Acquisition Statistical report as required by 49 CFR, Appendix B	Track trend	< 0.5%	December each year
321	**Appeals**	The number of appeals filed each year	A list of appeals	Track trend	2	December each year
322	**Fair Market Value settlement rate**	The percentage of parcels settled at FMV	The number of parcels that settled at FMV versus the total number of parcels acquired	Track trend	72%	December each year

Additional detail on the performance indicators is provided below:

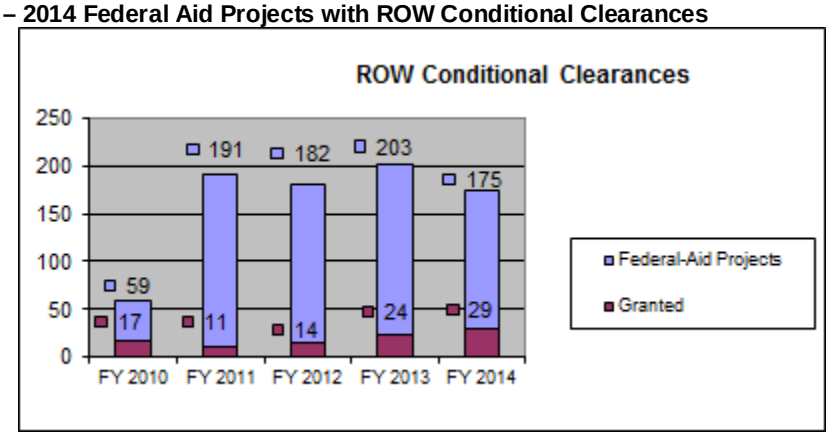
1. Conditional Clearances - Percentage of Federal Aid projects with conditional ROW certifications was: 17%.

Table 23 - FY 2010 – 2014 Federal Aid Projects with ROW Conditional Clearances

ROW Conditional Clearances	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Federal Aid Projects with ROW	59	191*	182*	203*	175*
Conditional Clearances (granted)	17	11	14	24	29
Percentage of Conditional Clearances	29%	6%	8%	12%	17%

* FY 2011, FY 2012, 2013, & 2014 Clearances include a large number of LPA projects.

Figure 3. FY 2010 – 2014 Federal Aid Projects with ROW Conditional Clearances

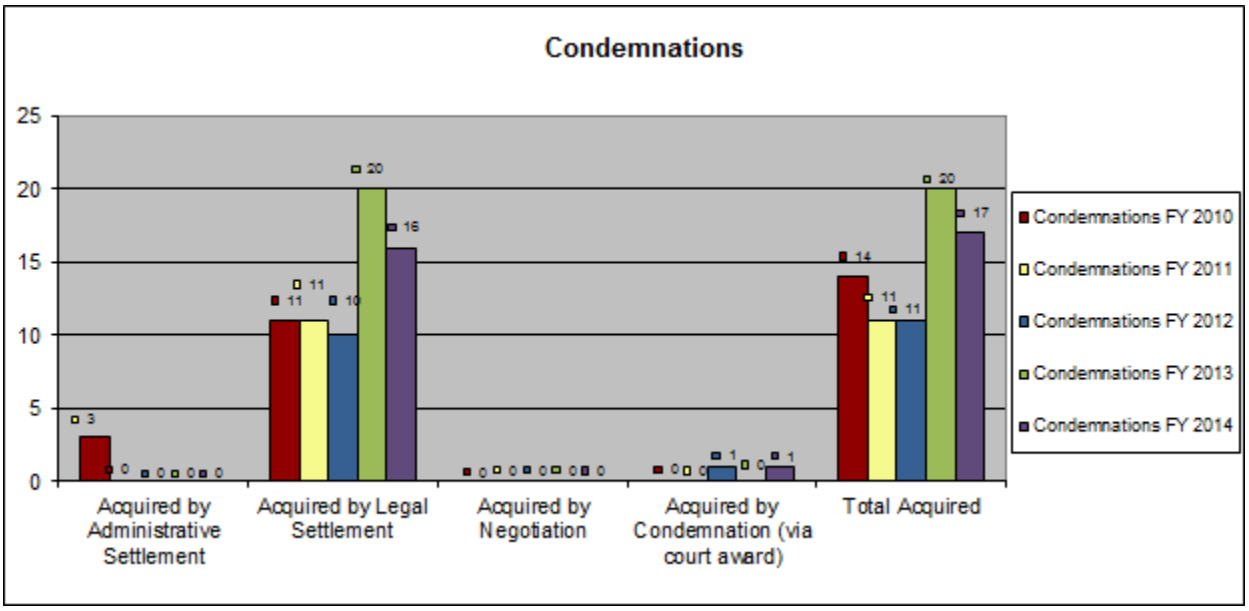


2. Condemnations – In FY 2014, 279 acquisitions were conducted. 17 of these acquisitions/cases were forwarded to the Office of the Attorney General for the initiation of condemnation proceedings. 1 of said parcels was acquired by condemnation (via court award).

Table 24 - FY 2010 – FY 2014 Condemnations – Cases Settled

Condemnations – Cases Settled	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Total Number of Acquisitions (Acq)	169	215	252	264	279
Parcels Acquired by Region Administrative Settlement/Percentage of Total Acq	3 / 2%	0 / 0%	0 / 0%	0 / 0%	0 / 0%
Parcels Acquired by Legal Settlement/Percentage of Total Acq	11 / 7%	11 / 5%	10 / 4%	20 / 8%	16 / 6%
Parcels Acquired by Negotiation /Percentage of Total Acq	0 / 0%	0 / 0%	0 / 0%	0 / 0%	0 / 0%
Parcels Acquired Using Condemnation (via court award)/Percentage of Total Acq	0 / 0%	0 / 0%	1 / < 0.5%	0 / 0%	1 / < 0.5%
TOTAL (Cases)	**14**	**11**	**11**	**20**	**17**

Figure 4. FY 2010 – FY 2014 Condemnations

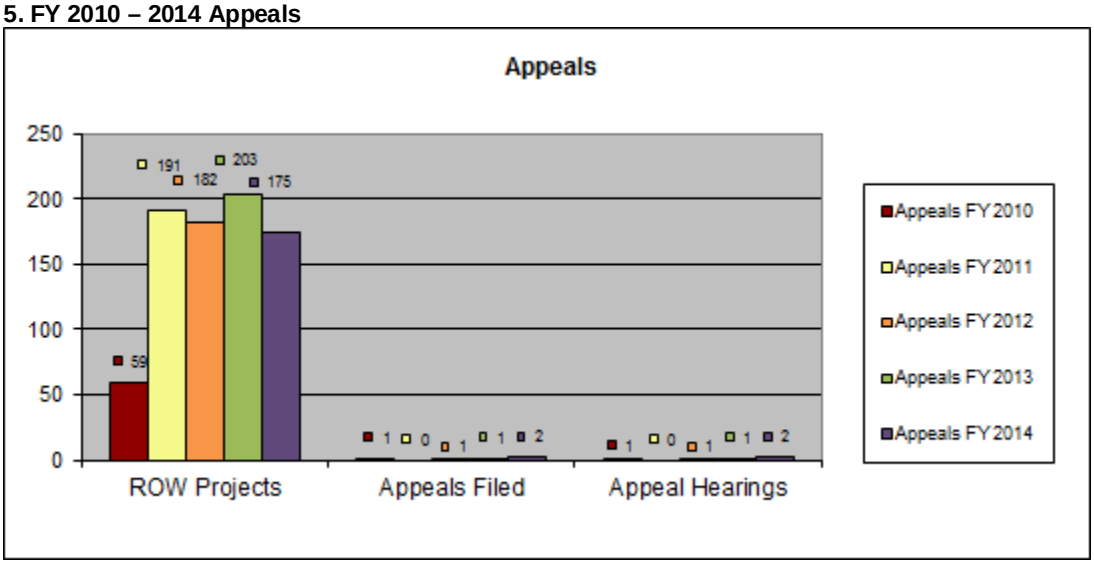


3. Appeals – 2 relocation appeals were filed.

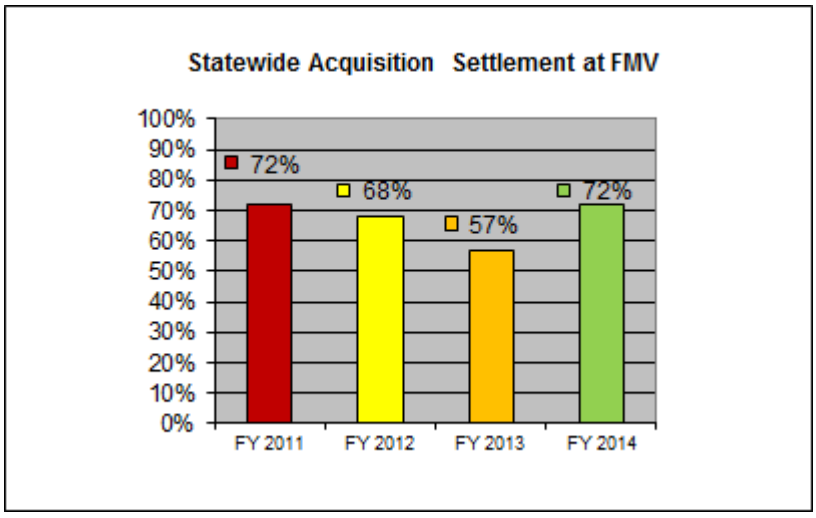
Table 25 - FY 2010 – FY 2014 Appeals

Appeals	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Appeals Filed	1	0	1	1	2
Appeals that went to Hearings	1	0	1	1	2

Figure 5. FY 2010 – 2014 Appeals



4. Statewide acquisition settlement at FMV: 72%



Performance/Compliance Measures

The following performance measures demonstrate the health of the Right-of-Way program:

Table 26 - Performance/Compliance Measures (ROW)

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	2014 Actual	Reporting Frequency
426	**ROW customer survey**	ROW appraiser and agent customer service rating	ROW customer service survey by Region	Achieve very good or better in all categories	4.5	State FY

Additional detail on the performance measure is provided below:

Mid FY 2010, CDOT ROW began the process of surveying the public impacted by ROW acquisition and/or relocation. That survey was a Quality Assurance Review (QAR) effort, and although it was conclusive, CDOT has decided to continue these efforts in order to assure continued high quality customer service to the public. To date, the rate of return on this survey is an impressive 47%. Following are statewide results of said survey for FY2011, FY2012, FY2013 and FY2014.

Figure 6 - FY 2011, 2012, 2013, 2014 ROW Customer Survey

Colorado Department of Transportation: Right of Way Customer Service Survey (FY 2011 Information Summary - STATEWIDE)

Appraiser — **Average Ratings**

How well did the Appraiser explain the appraisal process to you? 4.33 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

How well did the Appraiser work with you when your appraisal visit was conducted? 4.20 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were your questions answered in a clear and timely manner? 0.97 **

Yes	*No*
96.77%	3.23%

Acquisition Agent

How well did the Acquisition Agent explain the project as it related to your property? 4.67 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were you comfortable with the amount of time you had to consider the offer for your property? 0.98 **

Yes	*No*
97.92%	2.08%

Were your questions answered by the Acquisition Agent in a clear and timely manner? 0.97 **

Yes	*No*
97.26%	2.74%

Relocation Agent

How well did the Relocation Agent explain the project as it related to your property? 4.85 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were you comfortable with the amount of time you had to consider your Relocation offer? 1.00 **

Yes	*No*
100.00%	0.00%

Were your questions answered by the Relocation Agent in a clear and timely manner? 1.00 **

Yes	*No*
100.00%	0.00%

* Excellent = 5, Very Good = 4, Good = 3, Fair = 2, Poor = 1
** Yes = 1, No = 0

Colorado Department of Transportation:
Right of Way Customer Service Survey
(FY 2012 Information Summary - STATEWIDE)

Appraiser — **Average Ratings**

How well did the Appraiser explain the appraisal process to you? — 4.12 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

How well did the Appraiser work with you when your appraisal visit was conducted? — 4.08 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were your questions answered in a clear and timely manner? — 0.96 **

Yes	*No*
95.83%	4.17%

Acquisition Agent

How well did the Acquisition Agent explain the project as it related to your property? — 4.59 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were you comfortable with the amount of time you had to consider the offer for your property? — 0.98 **

Yes	*No*
97.83%	2.17%

Were your questions answered by the Acquisition Agent in a clear and timely manner? — 0.97 **

Yes	*No*
96.94%	3.06%

Relocation Agent

How well did the Relocation Agent explain the project as it related to your property? — 4.57 *

Excellent	*Very Good*	*Good*	*Fair*	*Poor*

Were you comfortable with the amount of time you had to consider your Relocation offer? — 1.00 **

Yes	*No*
100.00%	0.00%

Were your questions answered by the Relocation Agent in a clear and timely manner? — 0.90 **

Yes	*No*
90.00%	10.00%

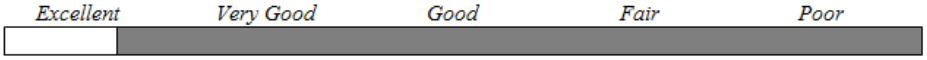
* Excellent = 5, Very Good = 4, Good = 3, Fair = 2, Poor = 1
** Yes = 1, No = 0

Colorado Department of Transportation:
Right of Way Customer Service Survey
(FY 2014 Information Summary - STATEWIDE)

Appraiser — **Average Ratings**

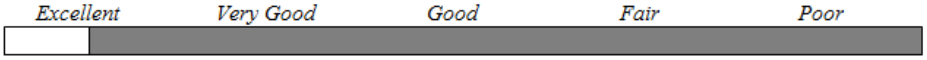
How well did the Appraiser explain the appraisal process to you? — 4.39 *

Excellent | *Very Good* | *Good* | *Fair* | *Poor*



How well did the Appraiser work with you when your appraisal visit was conducted? — 4.53 *

Excellent | *Very Good* | *Good* | *Fair* | *Poor*



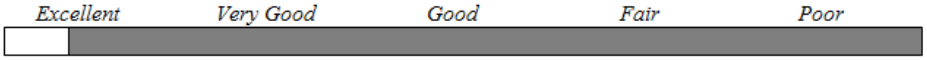
Were your questions answered in a clear and timely manner? — 1.00 **

Yes	*No*
100.00%	0.00%

Acquisition Agent

How well did the Acquisition Agent explain the project as it related to your property? — 4.65 *

Excellent | *Very Good* | *Good* | *Fair* | *Poor*



Were you comfortable with the amount of time you had to consider the offer for your property? — 0.97 **

Yes	*No*
96.97%	3.03%

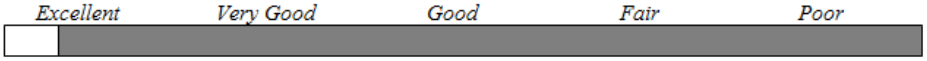
Were your questions answered by the Acquisition Agent in a clear and timely manner? — 0.97 **

Yes	*No*
97.47%	2.53%

Relocation Agent

How well did the Relocation Agent explain the project as it related to your property? — 4.71 *

Excellent | *Very Good* | *Good* | *Fair* | *Poor*



Were you comfortable with the amount of time you had to consider your Relocation offer? — 1.00 **

Yes	*No*
100.00%	0.00%

Were your questions answered by the Relocation Agent in a clear and timely manner? — 0.98 **

Yes	*No*
98.28%	1.72%

* Excellent = 5, Very Good = 4, Good = 3, Fair = 2, Poor = 1
** Yes = 1, No = 0

Did your program area encounter problems with the Stewardship Agreement (i.e. lack of understanding, etc.)?
No.

2.11. ENGINEERING: STRUCTURES

Introduction

CDOT Manager: Mark Nord
FHWA Manager: Matt Greer

The Structures program is responsible for working with the Regions to ensure structures are properly designed, constructed and maintained throughout the State. Structures include: bridges, culverts that span more than 20 feet, overhead sign structures, luminaires and traffic signal poles, retaining walls, and sound walls. The staff of the Structures program develops and publishes structural designs, policies and standards including construction specifications. The staff also evaluates new products and materials for bridge construction. The Structures program provides vital services: bridge management and inspection, fabrication inspection, construction assistance, bridge rating and bridge overloads.

Quality/Results

Staff Branches Activities:

1. The division bridge engineer participated in the Department's quarterly bridge inspection and asset management meetings and the biweekly Staff Bridge unit leader meetings. Issues with the Department's structures program and needed improvements are identified and addressed at these meetings.

2. The scour plan-of-action updates for both On-System and Off-System bridges have been substantially completed for those bridges that were identified as scour critical. Off-System bridges that did not have sufficient foundation information or lacked plans were left as scour critical. Any additional foundation investigations will be prioritized with the effort described in #3 below.

3. Progress has been made on scour evaluations for the Off-System bridges that are not identified as scour critical but do not have adequate documentation in the bridge record to support the Item 113, Scour Critical Bridges, coding.

4. Funds continue to be applied to On-System bridge preventative maintenance activities per the risk based asset management plan.

5. The LRFD Box Culvert Standard Plans are being optimized in response to an update in the BRASS-Culvert program used to design the box culverts. In addition, the designs and LRFR load ratings are being updated to include the notional rating load.

6. The Span-Wire Signal standard plans were released.

7. The project is proceeding that is using Highways for Life grant dollars used to collect data on the first Interstate multi-span structure to utilize GRS abutments.

8. Staff Bridge staff continue to support the Flood Recovery Office.

Regions' Activities:

9. The Branch has been working with maintenance personnel to complete implementation of the essential repair tracking report. This has included meeting with the maintenance superintendents and working with Region personnel assigned to bridge maintenance.

10. Regions and Staff Bridge coordination with RAMP Maintenance bridge projects.

11. Regions bridge maintenance scheduling essential repair work.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Structures Program. CDOT updates the bridge reporting data annually in April.

Table 27 - Performance/ Compliance Measures (Structures)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
411	**Decrease the number of scour critical bridges**	Reduce the number of scour critical bridges per year over the last 5 years	Staff Bridge annual asset management reports	Downward trend	2014 - 168 2013 - 182 2012 – Not Det. 2011 - Not Det. 2010 – 216 2009 - 215	State FY
214	**Decrease the structurally deficient deck area**	Decrease the structurally deficient deck area per year over the last 5 years	Staff Bridge annual asset management reports	Downward trend (Always less than 10% per MAP-21)	2014: 214 2013: 214 2012: 238 2011: 251 2010: 258	State FY
216	**Decrease the structurally deficient deck area on the NHS**	Decrease the structurally deficient deck area on the NHS per year over the last 5 years	Staff Bridge annual asset management reports	Downward trend	2014: 133 2013: 126 2012: 124 2011: 128 2010: 136 2009: 135	State FY
238	**Reduce the backlog of essential repair activities recommended by Staff Bridge**	Percent of pending essential repairs based on the number of high priority (orange & yellow) repair recommendations pending	Staff Bridge annual asset management reports	15% or less	31.5%	State FY
237	**Reduce the quantity of bridge expansion joints that are leaking**	Repair or replace joints noted as leaking or damaged per inspection reports	Staff Bridge annual asset management reports	Downward trend	2014: 54,021 2013: 51,640 2012: 48,436 2011: 48,494 2010: 46,534	State FY
467	**Decrease the number of structures with sub-standard vertical clearance**	Bridges under 16'-0" represent an increased risk of vehicle impact and restrict commerce. Remove or mitigate where possible.	Staff Bridge annual asset management reports	Downward trend	2014: 58 2013: 51	State FY

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
468	**Decrease the number of load restricted bridges**	Decrease the number of structures that cannot safely move commerce	Staff Bridge annual asset management reports	Downward trend	2014: 4 2013: 87	State FY
469	**Bridges requiring hydraulic reports**	Drainage report provided with new structure design where applicable	Completion of Hydraulic Report Form	100%	0	State FY
470	**Bridge Inspection Metrics Report**	Percentage of the 23 metrics in compliance	FHWA's Metric Compliance Report	100%	65.2%	State FY
471	**Document support of Item 113 coding on the off-system scour critical bridges**	Obtain as much information on foundations of the off-system structure to justify item 113 coding	Staff Bridge annual asset management reports	Upward trend	269	State FY
472	**Perform new load ratings on off-system structures that contain advanced deterioration**	Rerate structures with components > 35% loss w/o repair	Staff Bridge annual asset management reports	Upward trend	6	State FY

2.12. FINANCIAL MANAGEMENT: FINANCIAL MANAGEMENT

Introduction

CDOT Manager: Maria Sobota and Jon Caldwell
FHWA Manager: Andre Compton

The financial management process spans the entire Federal Aid program, from the authorization to proceed with preliminary engineering, though construction and debt retirement. Oversight is performed in the areas of accounting processes, both at the headquarters and regional business offices. Monitoring obligation limitation and discussions on Federal Aid financing tools available is provided in an advisory role. Review and input is provided to the audits performed by and for CDOT to ensure proper usage of Federal Aid funds.

Quality/Results

1. In FY2014 Federal funds were fully obligated. The number of projects closed during the year was 411. CDOT is among the best state transportation departments in regards to the number of days it takes to close a project, at 239 days. This is calculated by FHWA as the days between the last payment of federal funds and the FHWA closure signature. Inactive projects are still a focus; closing fully expended projects is a component of the inactive universe.

2. CDOT outperformed the inactive project goal. Inactive projects for FY2014 were 0.1%; the FHWA goal is to be below 2%.

The following performance indicators demonstrate the health of the Financial Management Program:

Table 28 - Performance/ Compliance Indicators (Financial Management)

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
120	**Determine if there is a trend of the local agencies using a larger share of federal funds or if the local agencies are constructing an increased number of projects**	Percent of projects authorized for construction this year executed by local agencies or sub-grantees	SAP	Track trend	32%	State FY
123	**Amount of Federal Aid funds obligated versus total available per fiscal year**	Percent of STIP projects obligated in the same year promised	STIP Obligation Report	Track Trend	83.18%	State FY

Performance/Compliance Measures

The following performance measures demonstrate the health of the Financial Management Program:

Table 29 - Performance/Compliance Measures (Financial Management)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
155	**Number of Design and/or Right-of-Way (ROW) projects that were paid for with federal funds and have not advanced to the construction phase within the time limits in CFR 620.112(c) 1 and 2 (Design 10 yr, ROW 20 yr)**	**(1)** Determine all projects that have completed Design or Right-of-Way but have not gone to construction; **(2)** If projects have not gone to construction, determine which were constructed under another project number **(3)** If there are projects that have exceeded the CFR time limit, but a reasonable justification is made by CDOT and FHWA approves, the reason will be documented with a projected construction date. Otherwise FHWA will be entitled to a credit for the federal funds expended on the project; **(4)** Begin to move ahead by measuring projects at eight years for design and fifteen for ROW to ensure projects are constructed; **(5)** Data fields need to be populated in PSAM module of SAP to enable an automated reporting at any time	FMIS (Fiscal Management Information System) and CDOT systems for projects authorized as part of the annual project	Less than 5%	<0.5% of federal obligation (2 projects total)	State FY

2.13. OPERATIONS: MAINTENANCE AND OPERATIONS

Introduction

CDOT Manager: David C. Wieder
FHWA Manager: Randy Jensen

CDOT has within its Central Office a Division of Highway Maintenance, and a Staff Maintenance Branch. In support of the Transportation Commission's stated Investment Categories of Program Delivery, Mobility, System Quality, and Safety, the Staff Maintenance Branch has two primary functions:

1. Providing policy and guidance for the state maintenance program; and

2. Maintaining operational oversight for the administration of the maintenance program for the eight maintenance sections. The Branch Management provides a liaison contact that assists and oversees the successful completion of the Methods of Operations.

Quality/Results

In FY 2014, the Staff Maintenance Branch coordinated the review of 764 road survey segments, and many during and post-storm surveys to establish the level of service provided. The target and achieved levels of service were:

Table 30 - FY 2014 MPA Performance

MPA	LOS Target	LOS Achieved
100 - Planning, Training & Scheduling	C-	C-
150 - Roadway Surface	B-	B-
200 - Roadside Facilities	B-	B-
250 - Roadside Appearance	B-	B-
300 - Traffic Services	C+	C+
350 - Structure Maintenance	C	C
400 - Snow and Ice Control	B	B
450 - Rest Areas, Buildings and Grounds	C	C
500 - Tunnel Maintenance	C+	C+
Overall	B-	B-

This year, CDOT was able to achieve all of our targeted Levels of Service.

Performance/Compliance Measures

The following performance measures demonstrate the health of the Maintenance and Operations Program:

Table 31 - Maintenance and Operations Program Performance

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
271	**Maintain the transportation system at the adopted annual MLOS grade**	Annual MLOS adopted target grades for major Activity Groups 150, 200, 250, 300, 350, and 400	MLOS actual grades from annual survey	Statewide MLOS target achieved +/- one step	B-	State FY
270	**Maintain the snow and ice service MLOS grade at the adopted annual grade**	Annual MLOS grade for snow and ice removal	MLOS reporting	Statewide MLOS target achieved +/- one step	B	State FY

2.14. OPERATIONS: TSM&O - SAFETY AND TRAFFIC ENGINEERING

Introduction

CDOT Managers: Darrell Lingk and Charles Meyer
FHWA Manager: Dahir Egal

The Traffic and Safety Engineering Branch (the Branch) is responsible for developing and maintaining the Highway Safety Improvement Program, or HSIP, (as defined by 23 CFR 924) for CDOT and is focused on reducing fatalities, serious injuries, and the associated human and economic loss resulting from crashes on the transportation system.

The Branch administers the FHWA HSIP, which includes high-risk rural roads. They work with Region Traffic Engineers and local agencies to identify and construct cost-effective projects that improve safety on Colorado's roadways. This is accomplished by assessing the nature and magnitude of safety problems on roadways in a Region, county or town and providing adequate information to support the development of an investment strategy to resolve the problems. Finally, a cost-benefit analysis is employed to ensure that the most beneficial and cost-effective safety projects are selected for implementation by the Regions.

Statistically-based and consistent with the Highway Safety Manual (HSM), the Branch applies advanced safety performance functions (SPF) and diagnostic analysis to identify statewide locations of high crash concentrations with potential for crash reduction. This analysis is applied to the above HSIP programs as well as nearly every project in the state by means of project-safety assessments done during the early planning and design phases.

The Branch also acts as the State's repository for state highway traffic crash information. On average, 100,000 crash records are reported in a calendar year. The Branch administers both NHTSA and FHWA funding to improve the accuracy, completeness, timeliness, and availability of the data after receiving the statewide crash records from the Department of Revenue. The Branch serves on and carries out the strategic plan of the STRAC (Statewide Traffic Records Advisory Committee), made up of representatives from the Colorado Departments of Transportation, Revenue, Public Health and Environment, Human Services, Public Safety, as well as the Judicial Department. Crash data serves as the foundation in planning safety mitigation projects and programs.

State agencies rely on crash data to meet the requirements of MAP-21, which includes timeliness, accuracy, uniformity, integration, and accessibility of data suitable for problem identification and countermeasure analysis. CDOT has put forth significant effort over the last year to cultivate a crash data set that possesses these attributes. CDOT remains committed to improving its safety data and has established a goal that crash data processing backlogs are kept to a minimum of no more than four months at all times.

The Office of Transportation Safety (OTS) administers the state's traffic safety program funded by the National Highway Traffic Safety Administration (NHTSA).

The OTS and the Branch are responsible for developing and maintaining the FHWA-mandated Strategic Highway Safety Plan. This strategic safety plan is the roadmap for developing the annual Colorado Integrated Safety Plan (ISP). The ISP is a comprehensive program and project plan for addressing both behavioral and engineering safety issues. The ISP meets the annual safety program planning requirements of the NHTSA. The goal of the program is to reduce traffic deaths on Colorado's highways. Primary focuses of the program include reducing impaired driving related traffic

deaths, motorcycle and pedestrian fatalities and increasing adult seat-belt use. Public information and outreach activities are coordinated through the program, as are training and education services. The ISP also lists programs and projects for building and improving roadway infrastructure to improve roadway safety.

CDOT also understands the importance of the SHSP to Colorado's safety stakeholders and spent most of 2014 meeting with safety stakeholders around the state to gather thought on Colorado's SHSP and then re-writing the plan to reflect new priorities and, most importantly, a new vision and associated goals for Colorado in transportation safety. The SHSP is being presented for adoption by the stakeholder state agencies and once adopted, FHWA and CDOT will ensure that SHSP implementation efforts are developed and tracked for each emphasis area identified.

Quality/Results

1. Traffic Fatalities – The mission of both the OTS and the Branch is to "reduce the incidence and severity of motor vehicle crashes and the associated human and economic loss". One measurement of traffic fatalities is the number of fatalities that occur per 100 million vehicle miles traveled (VMT). While CDOT has continued to deliver programs that engineer safer highways, educate the driving public, recommend traffic safety legislative enhancements, and conduct high-visibility enforcement of the State's driving laws, the fatality rate has leveled off in 2013 to 1.02, slightly above the 0.96 in 2010 and 2011. While fatalities remain lower than the past decade, reduction has leveled in 2012 (474 fatalities) and 2013 (481 fatalities). Trends in 2014 show a 5% reduction to date from 2013.

   Below is a snapshot of how fatalities have changed from previous year in certain areas. Over the past year, the SHSP stakeholders reviewed such trends and recommended emphasis areas based upon these trends or concerns about these areas in Colorado. Note: some of the fatalities below are accounted for in multiple categories.

	2012	2013	Percent Diff
• Aging Road Users (over 65) Fatalities	265	289	9%
• Run off road crash fatalities	201	214	6%
• Intersection related fatalities	112	118	5%
• Speed related fatalities	162	150	-7%
• Unrestrained fatalities	161	181	12%
• Impaired driving crash fatalities	155	176	14%
• Overturning crash fatalities	91	76	-16%
• Motorcycle crash fatalities	79	87	10%
• Pedestrian crash fatalities	72	50	-31%
• Head-on crash fatalities	41	46	12%
• Rear-end crash fatalities	26	32	23%
• Wildlife crash fatalities	2	7	250%

   Many of the most serious transportation-safety challenges continue to be driver behavior related - impaired driving, the lack of occupant protection compliance (seat belts), motorcycle safety. The OTS aggressively addresses these challenges by supporting projects, programs and other measures to educate the public and raise awareness. Public information programs and high-visibility enforcement have served to raise the awareness of the public of the risks of driving and their responsibilities as drivers. Grassroots organizations, state partnerships and local community efforts also have had a significant impact.

2. Strategic Highway Safety Plan (SHSP) – The SHSP will be signed for adoption in December of 2014 by several state agencies and forward to FHWA for acceptance. Numerous safety stakeholder and executive and steering committee meetings were held around the state throughout 2014 to discuss crash analysis data and trends and gather diverse input for the Plan. Most importantly, the Steering and Executive Committees decided the Plan needed clearly defined performance measures and targets in safety for the next five years. The Plan articulates those targets for statewide fatalities, fatality rate, serious injuries, serious injury rate, and for emphasis areas. 2015 will take this plan into the implementation phase to ensure that the stakeholder groups continue to meet and deliver the action items from the Plan in order to meet reduction targets.

3. HSIP – In Colorado FY 2014, the Branch delivered $26.8 million in HSIP funding to the Regions and Local Agencies around the state for 40 projects. These projects will have a cumulative safety benefit of $64.6 million over the next 20 years, for an overall B/C of 2.41. Examples of these projects include Median Cable Rail, Auxiliary Lanes, Rumble Strips, Roundabouts, Intersection Improvements, Signing and Pavement Marking Upgrades, Highway Lighting, Traffic Signal Upgrades, Interchange Ramp Improvements, Managed Lanes, and Roadway Realignments. In FY 2015, the Branch and Regions are programming the remaining qualifying HSIP projects that were solicited in 2012. A solicitation for FY 2016 and 2017 HSIP projects is anticipated in late 2014.

4. Work Zone Safety and Mobility Process Review – The WZSM Process Review was completed in December 2014. In conjunction with annual Work Zone Traffic Control Reviews, the Process Review Task Force surveyed WZ stakeholders to gauge the effectiveness of WZ policies, procedures, specifications and practices. The Process Review Team made a number of recommendations, one of which is to establish a separate ongoing task force to oversee and follow up on implementation of the Process Review findings.

5. Crash Data – For 2014, the Branch has consistently processed crash records and made them available within 4 months of receiving them from DOR. All 2011 through 2014 records, both on- and off-highway system crash records, are processed and now available for analysis by statewide stakeholders.

   The only remaining backlog is for the 2008-2010 off-system crash records, which is being systematically reduced. Having completed the review and correction of 2011 off-system records, the task is now working on 2010 records.

   CDOT has employed a Traffic Safety Data Improvement Project to make crash data processing more efficient and to eliminate the off-system back-log. Efficiencies will include finding automated ways to conduct quality checks, analyzing the frequency of errors in crash coding, and recommending methods to reduce those common errors.

6. CDOT Re-organization – CDOT underwent re-organization in July 2013, placing the HSIP program in a newly created Division – the Transportation Systems Management and Operations Division. Because operations and safety are so integral to each other, the synergies of these two programs working together is promising for improving both system performance and safety.

7. Rail Highway Grade Crossing Program – As a result of the re-organization, the Rail Highway Grade Crossing Program was transferred to the Project Development Branch. The RR Program is revising its process for selecting RR crossing safety projects by redeveloping its hazard index and applying it to Colorado's 4,000 crossings. Currently the program has $13M contracted and/or under construction in grade-separation and at-grade crossing improvements.

8. Work Zone Safety and Mobility – Traffic Control Reviews – These reviews continue to be conducted annually by Area Engineers visiting select projects throughout the state. Their findings are used to improve WZ standards, specifications, practices and policies.

9. Colorado Safety Legislation and Statutes
    - Primary Seat Belt: Colorado does not have a primary seat-belt law.
    - Drug Offender DL revocation: This actually comes from the Governor's Office to FHWA, not through OTS.
    - Repeat Offender Law: Colorado is in compliance.
    - Zero Tolerance Law: Colorado is in compliance.

Performance/Compliance Measures

The following performance measures demonstrate the progress of the Traffic and Safety Engineering Program.

As application of MAP-21 becomes clearer, performance measures will be updated to be in alignment with recommendations of MAP-21 and AASHTO Standing Committee on Performance Measures recommendations for program measures. For example, MAP21 requires three common measures for FHWA and NHTSA (fatalities, fatality rate, and injuries) with an additional measure by FHWA, injury rate. MAP-21 will further define injury – whether it is only serious injuries or will also include non-incapacitating injuries. Nonetheless, see below table for progress in 2013.

Table 32 - - Performance/ Compliance Measures (Safety and Traffic Operations)

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2013 Actual[1]	Reporting Frequency
343	**Reduce the total number of fatalities**	Total number of fatalities (5 year average)	Colorado Highway Safety Program Annual Report/Quarterly	Reduce previous 5 year annual average by 12 fatalities	2013 (5 Year Avg): 463 Reduction from 2012: 14	Calendar FY
434	**Reduce total fatalities per VMT**	The fatality rate per 100 million VMT (5 year average)	Colorado Highway Safety Program Annual Report	5 year average of 1 per 100 million VMT	2013 (5 Year Avg): 0.99 Reduction from 2012: 0.03	Calendar FY **Quarterly reporting**
435	**Reduce total number of serious injuries**	Total number of serious injuries (5 year average)	Colorado Highway Safety Program Annual Report	Reduce 5 year annual average by 100 serious injuries	2013 (5 yr Avg): 12,395 2012: 12,830 Reduction from 2012: 435	Calendar FY
436	**Reduce the total serious injuries per VMT**	Reduce the total serious injuries per 100 million VMT (5 year average)	Colorado Highway Safety Program Annual Report	Reduce 5 year annual average rate to less than 25	2013: 26.56 2012: 27.39	Calendar FY
336	**Reduce alcohol-related fatal crashes**	Alcohol-related fatal crashes as a percentage of overall fatal crashes	Colorado Highway Safety Program Annual Report	Less than 45%	40.1%	Calendar FY

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	2013 Actual[1]	Reporting Frequency
376	**Reduce crash data processing time**	Number of months crash data processing is backlogged	Colorado Highway Safety Program Annual Report/Quarterly	Less than 6 months	3 months	Calendar FY **Quarterly reporting**
476	**Implement proven safety countermeasures**	Countermeasure Index Reporting score	Colorado Highway Safety Program Annual Report/quarterly	3 or better	5	Calendar FY **Quarterly reporting**
477	**Rural road fatality rate**	Per MAP21, if rate increases over previous two year period, HSIP funds must be reallocated to rural roadways	Colorado Highway Safety Program Annual Report/Quarterly	Reduce fatalities from previous two year average	2013: 1.64 2012: 1.56 2011: 1.53 Increase of rate of 0.095 over average of past two years	Calendar FY
478	**Older driver fatalities and serious injuries**	If older driver fatalities and serious injuries per capita for drivers and pedestrians over 65 increase over previous two years, state shall set strategies in SHSP to change trend.	Colorado Highway Safety Program Annual Report/Quarterly	Reduce fatalities and serious injuries from previous two year average	2013: 289 2012: 265 2011: 232 Increase of 40.5 over average of past two years	Calendar FY

[1] Data is not official for a year after the end of the calendar year. Therefore, these are 2013 actuals.

2.15. OPERATIONS: TSM&O - INTELLIGENT TRANSPORTATION SYSTEM (ITS)

Introduction

CDOT Manager: Saeed Sobhi
FHWA Manager: Richard Santos

The overall purpose of the ITS program is to use technology to enhance operations of the transportation system by implementing advanced traveler information, advanced traffic and incident management and other applications that improve mobility and safety of the system for all travelers. Over the last decade, rapidly changing technology has impacted the implementation of operational applications and how technology can be used to improve operational effectiveness. Advances in wireless communications, connected vehicles, more and better transportation data, traveler information, and smarter roadways have significantly improved the capability of ITS to affect operations on a greater level and at the same time the ability to deliver more sophisticated, focused and real-time operational services. Some examples of these services and applications are: Adaptive Traffic Signal Control, Dynamic and Integrated Ramp Metering Access System Control, Freeway to Freeway Ramp Metering, Personalized Traveler Information using the CDOT Mobile App including push notification, geo-fencing and targeted information, Active Traffic Management, Managed Lanes, Peak Period Shoulder Lanes and others. ITS is one of the primary, if not the foremost, transportation tools that can provide high-levels of quantifiable and visible operational benefits on the entire transportation system more rapidly and at a lower cost than other traditional transportation applications. In essence, all of this is done to improve safety, reduce traffic delays and congestion and increase system reliability so that the transportation system can operate as effectively and efficiently as possible.

Quality/Results

To accomplish the elements identified above, the ITS Branch works with numerous stakeholders, both within and outside of the department, to engage broad-based and representative participation. Working with these stakeholders the ITS Branch participated in the development of the Statewide Transportation System Management & Operations (TSM&O) Plan (draft form), and will co-sponsor the TSM&O Region Implementation and TSM&O Corridor Plans. The ITS Branch is also preparing to update the ITS Statewide Architecture that provides direction and identifies priorities to ensure systematic implementation, technological integration and jurisdictional coordination. The ITS Branch has also developed, and is in the process of implementing, TSM&O performance measures to evaluate and quantify specific activities and applications to ensure optimum effectiveness and applicability to similar operational situations.

Performance/Compliance Measures

The following performance measures demonstrate the health of the ITS program:

Table 33 - Performance/Compliance Measures (ITS)

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
266	**Percent of congested corridors implemented with incident management plans**	Congested corridors (v/c > 0.85 on interstates and freeways) implemented with incident management plans as a percentage of all identified congested corridors	ITS Work Plan Performance Measures	32%	67%	Calendar FY

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	2014 Actual	Reporting Frequency
352	**Percent of identified congested corridors where ITS solutions implemented**	Congested corridors (centerline miles at the > 0.85 level) where ITS solutions have been implemented as a percentage of all congested corridors	ITS Work Plan Performance Measures	78%	68%	Calendar FY
268	**Percent of identified congested corridors with ramp metering implemented**	Congested corridors (v/c > 0.85 on interstates and freeways) with ramp metering implemented as a percentage of all identified congested corridors	ITS Work Plan Performance Measures	54%	51%	Calendar FY
383	**Duration of Peak Period (morning and evening for I-70 West and I-25 South)[1]**	Identify the peak period for I-70 West Golden to Frisco and I-25 South Lincoln to Colorado Springs and monitor durations	ITS Work Plan Performance Measures	Establish a baseline for FY 2014	1	State FY
384	**Number of incidents lasting over 90 minutes on I-70 West**	Measure the number of incidents lasting over 90 minutes on I-70 between Golden and Vail and look for trends to improve clearance times	ITS Work Plan Performance Measures	Establish a baseline for FY 2014	84	State FY
385	**Average Incident Closure time on I-70 West and I-25 South[2]**	Measure the number of incident closures on I-70 between Golden and Vail and I-25 between Lincoln and Colorado Springs and monitor the length of the closures and look for trends to improve	ITS Work Plan Performance Measures	Establish a baseline for FY 2014	2	State FY
347	**COTRIP Web page views[3]**	Measure the number of page views in COTRIP and other pertinent data and look for trends to improve information consumption by the public	ITS Work Plan Performance Measures	1.75 billion hits	54.5 million page views	Calendar FY
386	**Courtesy Patrol Assists[4]**	Measure the number of Courtesy Patrol Assists in the metro Denver area and report by type	ITS Work Plan Performance Measures	11,634 assists	15,394	Calendar FY

[1] Duration of I-70 peak period is: Friday (westbound) 3:00PM to 6:00PM, Saturday (westbound) 6:00AM to 9:00AM and Sunday (eastbound) 10:00AM to 8:00PM. Duration of I-25 peak period is: Monday through Friday (northbound) 6:00AM to 8:00AM and (southbound) 4:00PM to 6:00PM and is intermittent on certain segments within this section.

[2] Average incident closure time on I-70 is: 78 minutes. Average incident closure time on I-25 is: 93 minutes.

[3] Page views are the total number of different pages viewed, and is one measurement that is used to determine web usage.

[4] The Courtesy Patrol operates in the Denver Metro area on selected routes such as; US 6, I-25, US 36, I-70 and C 470, Monday through Friday during morning and afternoon peak periods. The assists include, but not limited to, the following services: accident, flat tire, fuel transfer, jump start, passenger transfer, and tow to drop site, used phone and water transfer.

2.16. OPERATIONS: TSM&O – REAL-TIME TRAFFIC INCIDENT AND MANAGEMENT BRANCH

Introduction

CDOT Manager: Currently Vacant
FHWA Manager: Richard Santos

The role of the Real-Time Traffic Incident and Management Branch (Real-Time Branch) has transitioned from primarily being a traffic information center (collecting and disseminating statewide traveler information) to becoming a Traffic Management Center (actively managing traffic conditions and implementing appropriate operational measures). The Real-Time Branch was established to facilitate the Department's commitment to place a higher strategic emphasis on delivering statewide operations and to align and consolidate critical Traffic Incident, Event and Corridor Management functions with other traffic and traveler operational activities.

The Real-Time Branch is still responsible for the dissemination of real-time statewide traveler information, which is done via the COTRIP website, 511 automated IVR phone system, Gov Delivery, Variable Message Signs (VMS) on the roadways (about 350 statewide) and coordination with other state and local Traffic Management Centers. The Real-Time Branch assists in the development of all Traffic Incident Management Plans (TIMP) (currently there are 26 TIMPs statewide) for the purpose of managing traffic operations in a coordinated manner among pertinent jurisdictions during an incident. The Real-Time Branch recently hired two Incident Management Commanders and an I-70 Mountain Corridor Manager to focus on the two highest-priority congested corridors that were identified in the Front Range/Denver metro area. The Real-Time Branch provides first-responder training to law enforcement, fire and emergency responders, and is working with those stakeholders to develop corridor-specific incident management scenarios to incorporate into Situational Awareness incident management systems to facilitate and coordinate improved operational response, resources and efforts. The Real-Time Branch has taken over dispatch responsibilities for the Heavy Tow/I-70 Courtesy Patrol and the Mile-High Courtesy Patrol, and has incorporated performance metric reporting requirements that will provide CDOT with meaningful, and much needed, incident performance information. Directly dispatching the vehicles will also result in quicker response to incidents, better communication during the incident and higher levels of service provided.

Quality/Results

To accomplish the elements identified above, the Real-Time Branch works with numerous stakeholders, both within and outside of the department, to engage broad-based and representative participation. Real-Time Branch works directly with numerous stakeholders, including state and local traffic and transportation engineers and maintenance personnel, law enforcement, fire and emergency responders to develop corridor TIMPs and corridor-specific incident management scenarios to incorporate into Situational Awareness incident management systems. Real-Time Branch works directly with FHWA as it pertains to the delivery of first-responder training to ensure federal standards are met. The Real-Time Branch is also responsible to ensure that federal guidelines pertaining to VMS message requirements are in compliance. The Real-Time Branch is responsible for the development of procedures, processes and protocols concerning dissemination of traveler information to ensure quality and timeliness of the information.

Performance/Compliance Measures

The ITS Branch has program responsibility to administer and report performance measures for both the Real-Time Branch and the ITS Branch. Therefore, performance measures related to the Real-Time Branch are shown within the ITS Performance/Compliance Measures in Section 2.15.

SECTION 3. RISK RESPONSE STRATEGIES

Overview of the Risk Response Process

Each year, the Quality Improvement Council identifies at least ten risks to the Federal-Aid Highway Program (FAHP) and develops a risk statement for each. In March, the risks are prioritized based on likelihood and impact. Additional considerations include resources available to review them and identified champions. A minimum of three CDOT/FHWA joint process reviews are chosen, and QIC champions develop risk response strategy recommendations by April of the following year. Reports outlining risk response strategy recommendations and other associated products are added to the QIC SharePoint Process Review Library, and QIC champions track the implementation status of these recommendations using the QIC SharePoint Process Review Status List.

The QIC can also identify other FAHP-related risks or opportunities to track that are not prioritized as joint process reviews because: they are not a CDOT/FHWA joint risk; they are in the process of developing specific products (as opposed to recommended implementation strategies); they represent an opportunity to improve the FAHP, as opposed to a risk to the FAHP; they are a lower priority risk due to a lower potential impact and/or likelihood; or resources are not yet available to commit to a detailed review. More information on this process is available in the QIC Guidelines, which is available on the QIC SharePoint site.

The remainder of this section includes:

- Overview of joint process reviews and other risk response strategies being tracked from May 2014 through April 2015. The overview includes the risk statement, target outcome/expected products and contacts (non-QIC member leads are in italics).
- Risk response strategy recommendations finalized in 2014.
- Recommendations from 2011-2013 in which implementation is underway or completed.

FHWA/CDOT Joint Process Reviews (May 2014 - April 2015)

Contractor Capacity for Increased Low Volume Road Thin Treatments

- **Risk Statement:** CDOT may not be doing enough to ensure there is sufficient industry interest in, understanding of, and capacity for delivering construction resources for thin surface treatments.
- **Target Outcome/ Expected Products:**
  - Long Term Surface Treatment Program (STP) Plans.
  - Sufficient STP project detail to facilitate industry planning.
  - Industry commitment evident in bidding interest and competition.
  - New industry capability in Colorado for thin treatments.
- **Contacts:** CDOT: *Michael Stanford*, Bill Schiebel; FHWA: Randy Jensen, *Donna Harmelink*

Bridge Asset Management:

- **Risk Statement:** Eligibility criteria/ qualifications are not clear for determining funding for bridge asset management. A process is needed to determine if CDOT is investing per the Asset Management Plan for structures and to document approval justifications from FHWA.
- **Target Outcome/ Expected Products:** Workflow or process so that individuals have an expectation for what is eligible for funding and the approval process and timeframe.
- **Contacts:** CDOT: Mark Nord; FHWA: Randy Jensen

Reducing the Time for Project Closure

- **Risk Statement:** Better financial management is needed to close projects in a more timely manner and release remaining funds. Projects stay open with remaining funds in them for long periods of time (1-2 years or longer). This has been occurring in Region 2 for many years. Impacts of not closing projects include: contractors not receiving funds that CDOT holds and difficulty closing projects due to the loss of information and knowledge of the project if consultants and CDOT staff change.
- **Target Outcome/ Expected Products:**
  - Reduce number of days for closing region 2 projects by 50%.
  - Provide a metric and targets for the Chief Engineer Objectives for project closure for FY14 (types of projects / length of closure).
  - Better relationships with contractors. When paperwork or funds are due years after the project, this causes problems with the contractor and the relationship between them and CDOT.
- **Contacts:** CDOT: *Michelle Malloy*; FHWA: Randy Jensen, Andre Compton

Retention of Core Documents

- **Risk Statement:** CDOT does not have a well-defined document retention strategy. Standardizing the workflow through a uniform process and retention schedule will enable CDOT to have a better supported retention strategy when training and providing information.
- **Target Outcome/ Expected Products:**
  - Central files receives more core documents and/or knowledge that core documents exist.
  - Appropriate document management technology is identified.
- **Contacts:** CDOT: *Heidi Humphreys*, William Johnson FHWA: Andre Compton, Bill Haas

Other Risk Response Strategies (May 2014- April 2015)

Qualifying Federal Funding Applicants

- **Risk Statement:** If the Local Public Agencies do not maintain sufficient organizational capacity then the ability to provide effective oversight of Federal-Aid program will be reduced, increasing CDOT and the CO Division's workload and thereby inhibiting the ability to effectively and efficiently deliver the program. Therefore, there is a need to qualify potential applicants before they apply for Federal funding of projects. Grantees and local agencies do not always have the required resources to successfully execute a project or bill for reimbursement and thus projects end up on the inactive list or require CDOT to allocate scarce resources for oversight. It is important to have a written procedure for qualifying locals and an accounting system that will properly accumulate projects costs, approved indirect rates, and salary additives, etc.
- **Target Outcome/ Expected Products:** To be determined.
- **Contacts:** CDOT: Neil Lacey; FHWA: Shaun Cutting

Local Public Agency (LPA) Project Delivery Process and Oversight

- **Risk Statement:** Based on past quality assurance reviews and project audits, there has been a history of non-compliance with required oversight and documentation procedures. In an effort to minimize the risk of non-compliance there is a desire is to simplify, clearly define, and effectively communicate construction oversight and project documentation procedures and final documentation requirements among CDOT staff and with local agencies.
- **Target Outcome/ Expected Products:**
  - Update the Local Agency Manual
  - Complete enhancements to the web-based project tracking tool "Navigate"

  - Conduct project-specific risk assessments for prioritizing staffing and determining high risk elements
  - Quantifiable benchmarks for future evaluation: 1)Maintain low number and dollar amount of inactive local agency projects and 2) Reduction in number and severity of non-compliance findings
- **Contacts:** CDOT: *Steve Markovetz,* Neil Lacey; FHWA: Shaun Cutting

Improving the Utility Clearance (RR) portion of the overall "Project Development/ Delivery Process"

- **Risk Statement:** The "Utility Clearance" (especially the railroad) portion is frequently mentioned as being long, cumbersome, and difficult. With the acceleration of project delivery, this situation is likely to deteriorate unless an improvement effort is undertaken.
- **Target Outcome/ Expected Products:** To be determined.
- **Contacts:** CDOT: Neil Lacey; FHWA: Bill Haas; *Rick Santos*

Infrastructure Failure - Tunnel Inspections

- **Risk Statement:** If the CDOT is not in compliance with the Tunnel Inspection Program requirements then there could be a loss of funding for the program, a loss of highway structures due to system failure, increased public scrutiny, and a loss of public and congressional trust in the highway system.
- **Target Outcome/ Expected Products:**
  - Develop a tunnel inspection standards and procedures manual.
  - Develop an inventory of all on-system tunnels.
  - Develop a performance/condition goal for tunnel assets.
  - Best return on investment for tunnel assets to meet or progress towards the performance/condition goal (5 year outlook).
- **Contacts:** CDOT*: Stephen Harelson*, Mark Nord; FHWA: Randy Jensen, *Matt Greer*

Contractor Performance Evaluation

- **Risk Statement:** In the absence of evaluation criteria and processes, there are risks that contractors feel no pressure to meet high enough performance standards on projects. Without having an evaluation process in place and applying performance data, poor performing contractors remain eligible to continue doing work for CDOT. Projects may be subject to inferior workmanship and lesser sustainability.
- **Target Outcome/ Expected Products:**
  - Develop contract performance evaluation.
  - Develop processes which better utilize performance evaluation results.
  - Develop clearer procedures ensuring better use of suspension/debarment authorization, where appropriate.
- **Contacts:** CDOT: *Mark Straub*, John Eddy; FHWA: Randy Jensen

<u>Risk Response Strategy Recommendations Finalized in 2014</u>

Expenditure Based STIP - Cash and Program Management

- #1 - Incorporate risk analyses into the forecasts of reasonably available revenues.
- #2 - Establish a financial planning process, called the staging area, in which all aspects of funding projects are planned before they are executed, including: the allocation of funds to projects, the programming of project in the Statewide Transportation Improvement Program (STIP), the allotment of funds to projects in the department's appropriations and the encumbrance of funds.

- #3 - Develop and publish the STIP as a cash-based, eight-year STIP, allocating revenues to projects and programs in the STIP based on forecasts of cash expenditures.
- #4 - Cease using the STIP as CDOT's principal budgeting tool and use the staging area to program projects that, once funding can be reasonably anticipated, may be added to the metropolitan planning organization's transportation improvement plan and the STIP. Streamline the STIP update and amendment processes as the STIP's role as a programming document allows.
- #5 - Manage project within a rolling four-year budget.
- #6 - Streamline program, project and budget reviews and approvals put before the Colorado Transportation Commission as outlined in the draft Policy Directive 703.0. – **COMPLETED IN 2014**
- #7 - Encumber only the cash to be spent in one year under a highway construction contract that is expected to span two or more years.
- #8 - Manage cash towards target balances by controlling cash expenditures, starting with limits on the value of construction contracts that are let in each month.

Risk Based Asset Management Plan

- #1 - Develop and document the budget distribution, project selection and project tracking process
- #2 - Integrate risk analysis into planning and programming processes
- #3 - Develop strategies to manage project and program Delivery Risks
- #4 - Establish a risk framework to evaluate alternative strategies
- #5 - Analyze budget tradeoffs across programs
- #6 - Improve project scoping and optimization
- #7 - Incorporate life-cycle analysis into decision-making
- #8 - Clarify the role of target- setting
- #9 - Implement a strategic management framework to reflect on progress
- #10 - Communicate the benefits of TAM

Risk Response Recommendations Being Implemented or Completed

Bridge Rinsing (2013)

- #1 - Develop a bridge rinsing procedure to hand remove dirt and debris, followed by a high pressure rinse to abutment and pier seats, girder ends above areas hand cleaned, and fracture critical chords on steel trusses. **COMPLETED**
- #2 - Issue a General Statewide Rinsing Permit for rinsing structures. **COMPLETED IN 2014**
- #3 - Develop a process for selecting and prioritizing structures to be hand cleaned and rinsed on a developed frequency cycle. Also, rinsed structures will be tracked, and bridge specific costs tabulated.
- #4 - Expand the statewide rinsing program to include hand cleaning followed by a high pressure rinse in box girders, high pressure rinsing bridge posts and rail, and bridge elements in splash zones that include but are not limited to columns

Workzone Safety and Mobility (2013)

- #1 The 2015 CDOT Process Review should develop questions related to WZSM for maintenance personnel and review the survey/results to further define the questions to be beneficial for the Process Review. **COMPLETED IN 2014**
- #2 Develop a standardized method of documenting and regulating traffic queues and/or delays, based on the CDOT WZSM Procedures, Sec 630.10(3) of the CDOT Standard Specifications for Road and bridge Construction, and the Region's Lane Closure Policies.

- #3 The WZSM Procedures should be updated to be consistent with the current specifications. **COMPLETED IN 2014**
- #4 The CDOT WZSM procedures should be revised to include Traffic control work zone debriefing process. **COMPLETED IN 2014**
- #5 The WZSM Procedures should be updated to ensure that important TMP components are addressed and included in all future significant project TMP's; and to revise current TMP procedures, including TMP evaluation guidelines for all significant projects. **COMPLETED IN 2014**

Construction Scheduling (2011)– ALL COMPLETED

- #1 - Provide training for developmental areas identified (e.g., high incompletion rates in Table 1) tasks.
- #2 - Utilize OFMB work load analysis to hire consultants:
- #3 - Utilize consultants for non-traditional uses such as CPM schedule review, et cetera, such as during claim situations.
- #4 - Share/use employees with other Residencies or Regions.
- #5 - Maintain inter- and intra-Residency mentor networks and identify 'power user' mentorship roles within existing staff.
- #6 - Encourage creative use of available methods of acknowledging peak performance.
- #7 - Identify, enhance and maximize the use of technology solutions.
- #8 - Relax certain timelines that do not affect safety, quality and are not critically reviewed.

Pavement Management Program (2011) – ALL COMPLETED

- #1 - Surface Condition Distress Quality: Maintain the high-quality level of collecting, verifying, and maintaining surface condition distress data via current Pavement Management processes and procedures.
- #2 - Distress Index Accuracy: Investigate and review index values.
- #3 - Regression Analysis: Investigate other regression methods and models for calculating the deterioration rates of pavements, and determine the best predictive regression models.
- #4 - Structural Consideration: Investigate available technologies that can measure the depth and structural sufficiency of pavement, base, and sub-base.
- #5 - Treatment Costs, Benefits, and Triggers - Continue implementing statewide variables using current policies and procedures. Continue Regional involvement in determination of these variables.

Water Quality (2011)

- #1: Implement a top down management approach for water quality that includes risk- based performance measures for environmental stewardship (2014 revision)
- #2: Specification changes limiting disturbance or increasing stabilization efficiency
- #3: CDOT project engineers work with the Water Pollution Control Manager (WPCM) to develop cost effective ways to implement E/S control; implement the Lean process to reduce the cost to comply with water quality regulations; Directive from Executive Dir.
- #4: Specification changes - Use of incentives/disincentives for contractors through performance measures as a reward/penalty for contract/ permit/specifications compliance – **COMPLETED**
- #5: Identify and implement optimized staffing and identify strategies for improving maintenance support (2014 revision)
- #6: Chief Engineer's Mandatory Training Memo and Training Development and Delivery – **COMPLETED in 2014**
- #7: Create a specification change to reset the disturbance limit of 34 acres to a number or control level that is reasonable and consistent with other program components

- #8: 1)Obtain Management support for expansion of training – **COMPLETED**
  2) Develop and deliver training program
  3)Require testing and minimum test scores for certification and
  4) Implement two-day Erosion Control Supervisor Certification
- #9: Develop process addressing better seeding, fertilizing, and watering methods to enhance revegetation success – **COMPLETED in 2015**
- #10: CDOT needs to fund E/S Non-Project Specific (NPS) contractors and/or obtain better funding for CDOT Maintenance - **COMPLETED**
- #11: Funding liaison position at CDPHE – **COMPLETED**

APPENDIX A. ENVIRONMENT SECTION OTHER NOTABLE REGULATIONS AND ACCOMPLISHMENTS TO COMPARE FOR TRACK TRENDS 2013

Priority projects:

- T-REX construction = driven by Governor Owens/Tom Norton
- SH 85 and 120th extension signed in May 2003 = 9 months also driven by Tom Norton
- US 36 = Quick Final EIS/ROD driven by Tiger Grant opportunity and Governor Ritter/Russell George
- I-70 Mountain Corridor Programmatic EIS rewrite driven by Governor Ritter/Russell George (finished up by Governor Hickenlooper/Don Hunt)
- Twin Tunnel East-Bound EA= 13 months driven by Governor Hickenlooper/ Don Hunt

Delayed projects:

Not yet evaluated but workload played a factor in some, especially in R2, where some got put on hold. Others had issues with the local agencies, such as the C-470 EA – I25 to Kipling, US550/160 Supplemental EIS, and I-70 East EIS - all where the preferred alternative was not agreed to.

Dropped projects:

- NW Corridor EIS (became Jefferson Parkway, a private enterprise)
- Gaming Area EIS

Notable Regulation changes:

- Public Highway Authority Law in 1987 which allows tolling
- SAFETEA-LU in 2005
- MAP-21 in 2012

Notable Initiatives and Accomplishments:

- First EA/EIS started in 1999 in this analysis
- CDOT Environmental Stewardship Guide – 1st version in 2003
- CDOT Environmental Stewardship Guide – 2nd version in 2005
- Desired State Task Force initiated in 2005 (initiated the idea for the NEPA Manual)
- Step-Up (precursor to Planning and Environmental Linkages [PEL]) – 2004-2007
- First PEL document drafted in 2007
- CDOT NEPA Manual – 1st Version in June 2007
- A Recession Hit in 2008 so new project numbers dropped off during and after this year
- FHWA Non-Programmatic Environmental Review Summary developed in 2008
- CDOT NEPA Manual – 2nd version (total rewrite) in August 2008
- PEL – 56th Ave completed in 2008
- PEL – Arapahoe Road (start from somewhere 2005) draft in 2007, completed with new checklist in February 2009
- PEL – Parker Road (start September 2007 – end February 2009)
- PEL - Federal Blvd, West 5th Avenue to West Howard Place, completed in October 2009
- CDOT NEPA Manual – Minor update to fill placeholders in the 2008 version which was accomplished in Dec 2009 - added Style Guide and Generic Environmental Scope of Work – still considered Version 2.
- Every Day Counts 1 – 2010 - The first group of innovations, or EDC-1, was identified in 2010. These innovations were promoted through Every Day Counts during 2011 and 2012.
- Every Day Counts 2 – 2012
- CDOT NEPA Manual – 3rd version in March 2013 – many updates and additions
- PEL studies - 2013-2014 – 4 new projects started, none of which have been completed.
- EAs In 2013-2014 an additional 4 EAs were started.
- PEL studies post 2014 – 10 future PELs planned (but not necessarily funded)
- CDOT NEPA Manual – Version 4 released in October 2014 with many updates and additions
- MAP-21 resulted in new Categorical Exclusions being available to use with the intension of resulting in fewer EAs going forward.

Politics and Transportation Priorities:

1987-1999 – Governor Roy Romer was in office (Bill Jones was Exec Director for CDOT) – It was during his term that the idea for TREX came about. A Major Investment Study (MIS) identifying the need for the later-named "TRansportation EXpansion" dubbed "T-REX" was signed in 1995 and a more refined MIS was signed in 1997. In 1998, the DRCOG 20-year plan was adopted that had T-REX at the top of the priority list.

1999-2007 – Governor Bill Owens was in office (Tom Norton was Exec Director for CDOT): In November 1999, Owens brought his transportation funding initiative to the ballot. Called TRANS, the $1.7 billion bonding initiative accelerated future federal transportation dollars on 28 projects across the state. The keystone project on his campaign platform was the "TRansportation EXpansion" dubbed T-REX in 1999. T-REX combined road funding from TRANS with $460 million-worth of new light rail lines to greatly expand a 19-mile stretch of Interstate 25 through the south Denver Metro Area. Through an innovative (one-of the-first-of-its-kind) design-build concept that greatly reduced construction times, T-REX was finished in less than five years 2001 - 2006, and came in under budget. Owens was re-elected in 2002 by the largest majority in Colorado history, after making transportation, education, and tax cuts the focus of his governorship.

The passage of Referendum C in 2005 was in large part due to a wide coalition of bi-partisan supporters, including those in the business and transportation sectors. Although Ref C does not provide direct funds for transportation, it does allow transportation revenue to flow through Senate Bill 1 and House Bill 1310. The year prior to this, Tom Norton supported many corridor EAs and EISs including completing the "beltway" around the greater Denver area.

An early version of Planning and Environmental Linkages called Strategic Transportation, Environmental and Planning Process for Urbanizing Places (STEP UP) ran from approximately 2004 through 2007 and allowed CDOT to witness first-hand how the PEL approach could streamline its transportation planning. CDOT and FHWA-CO incorporated lessons learned from STEP UP to create new PEL tools for the State and to strengthen their relationships with Federal and State resource and regulatory agencies. The success of the pilot also became a motivating factor in formalizing the PEL approach for Colorado's statewide transportation planning.

2007-2011 – Governor Bill Ritter was in office (Russell George was Exec Director for CDOT): Governor Ritter's campaign platform was based on the following statement, "As Governor, I will bring a fresh, balanced approach to how we invest in our infrastructure, plan for future growth and protect the environment. Simply stated, the process for funding our transportation system is antiquated and needs a 21st century overhaul." In 2007, he convened a Blue Ribbon Transportation Finance and Implementation Panel to investigate how to better prioritize and implement our infrastructure needs. In 2009, the Transportation Environmental Resources Council, a collection of regulatory and governing agencies, signed a partnering agreement for collaborating on PEL efforts to help streamline NEPA process on large corridors.

On March 2, 2009 - Gov. Bill Ritter signed into law the FASTER transportation bill that put an emphasis on safety and bridge projects. In March through May 2009, Governor Ritter also certified 5 different Transportation Recovery Funds rounds of funding (ARRA) including one targeting transit projects, bringing multi-modal projects to the front and center of the discussion. He also proposed helping other local ventures handle their aging infrastructure and used the passage of FasTracks in metro Denver and Go 1A in greater Colorado Springs as examples of broad coalitions that were successfully built to win voter support and address regional needs.

Governor Ritter pointed out I-70 Mountain Corridor as an example of proper planning with the environment, citing the way I-70 gracefully snakes through Glenwood Canyon. He said that this project and its concerns for our natural settings should serve as a model as we look for 21st century solutions to congestion problems throughout the I-70 mountain corridor. We must design projects that improve mobility, honor the environment and protect the livability of adjacent communities. For this reason, he proposed to preserve a transit envelope as part of a long-term I-70 transportation solution. This put a priority on the I-70 Mt. Corridor NEPA process so that work could begin on this corridor.

US 36 improvements became a priority for Governor Ritter so in 2007, Colorado submitted for Urban Partnership funding. They did not get this funding but applied for and later received $10 million in TIGER Grant funds in 2010. To help position this project for the TIGER Grant after losing the Urban Partnership funding, the Governor put a priority in completing the EIS for this corridor to help position US36 for this other funding.
2011 to Present – Governor John Hickenlooper in office (Donald Hunt is CDOT's Exec Director: Governor Hickenlooper sees the Interstate-70 (I-70) West Mountain Corridor as a critical corridor that impacts commerce, tourism, recreation, and overall economic development with year-round congestion problems and is actively looking for funding.

Priorities he had/has for the I-70 corridor include:

- Complete the I-70 Programmatic Environmental Impact Statement (PEIS), in a timely fashion.
- Pursue projects that do not require completion of the PEIS such as safety projects, community mitigation projects, environmental projects and some highway widening (e.g., Twin Tunnels Project)
- Start an alignment study for high speed rail.
- Implement Transportation System Management projects and carefully review the viability of proposals such as "zipper lanes" (now called Hard Shoulder Running)
- Work with Colorado's congressional delegation to designate I-70 as a Project of National and Regional Significance in the federal transportation re-authorization process.

He is supportive and believes in FASTER legislation; there are 178 bridges that are 75 years old, stretches of highways that are 75-100 years old, and expanses of interstate that are approximately 50 years-old. He wants to prioritize the funding of key projects, while leveraging state dollars with federal funds to repair our important transportation infrastructure. He is looking to innovative Public Private Partnerships (P3) funding to help with some needed projects as well. On October 17, 2013, 44 partnership projects were selected as part of the Responsible Acceleration of Maintenance and Partnerships (RAMP) program totaling $580 million to maximize and expand the statewide transportation system.

The governor put a high priority on the I-70 East EIS project, which has been ongoing for a number of years due to public controversy. This is a high-profile corridor for CDOT, in part because of the aging viaduct that needs replaced, and a lot of resources and attention have been placed on its completion by the Governor.

In September 2013, there was a large flooding event that wiped out many major roadways in northwest Colorado. Governor Hickenlooper worked with CDOT to get access to all the areas isolated by the roadway damage with a promise to open all the damaged and closed highways by Dec 1st of the same year. This goal was met before Thanksgiving with the understanding that the emergency repairs were temporary and that the permanent repairs would occur over the next several years. The intensity of this effort pulled resources off of other projects, although the normal course of business was still expected to occur as well for CDOT, just with a lower priority that might have delayed some of the other planning efforts going around the state.

The Governor announced his intensions of running for another term in office and made the section of I-25 between Castle Rock and Monument a high priority on his campaign platform. He was reelected in November of 2014 for another 4-years, so this may be the next big project on the horizon for the state.