

# COLORADO DEPARTMENT OF TRANSPORTATION FEDERAL-AID HIGHWAY PROGRAM

## STEWARDSHIP AND OVERSIGHT AGREEMENT

April 11, 2016

DEVELOPED IN PARTNERSHIP WITH THE FEDERAL HIGHWAY ADMINISTRATION'S  
COLORADO DIVISION AND THE COLORADO DEPARTMENT OF TRANSPORTATION

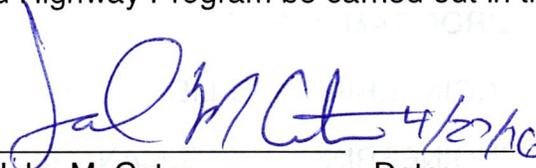
### REVISION HISTORY

Date	Description of Changes
March 31, 2015	Original S&O Agreement
April 11, 2016	S&O Agreement with revised organizational charts and Appendix A.

We support the concept of this Stewardship and Oversight Agreement and hereby direct that the stewardship and oversight of the Federal-Aid Highway Program be carried out in the spirit of a true partnership, as described herein.

  
\_\_\_\_\_  
Shailen P. Bhatt  
Executive Director  
Colorado Department of Transportation

*4/20/2016*  
Date:

  
\_\_\_\_\_  
John M. Cater  
Colorado Division Administrator  
Federal Highway Administration

*4/27/16*  
Date:



**COLORADO**  
Department of  
Transportation



**TABLE OF CONTENTS**

**TABLE OF CONTENTS**.....1

SECTION 1. BACKGROUND AND INTRODUCTION .....3

SECTION 2. INTENT AND PURPOSE OF S&O AGREEMENT .....4

SECTION 3. ASSUMPTION OF RESPONSIBILITIES FOR FEDERAL-AID PROJECTS ON THE  
NATIONAL HIGHWAY SYSTEM.....4

SECTION 4. ASSUMPTION OF RESPONSIBILITIES FOR FEDERAL-AID PROJECTS OFF THE  
NATIONAL HIGHWAY SYSTEM.....4

SECTION 5. ASSUMPTION OF RESPONSIBILITIES FOR LOCALLY ADMINISTERED  
PROJECTS .....5

SECTION 6. PERMISSIBLE AREAS OF ASSUMPTION UNDER 23 U.S.C. 106(C) .....5

SECTION 7. FEDERAL APPROVALS AND RELATED RESPONSIBILITIES THAT MAY NOT BE  
ASSUMED BY CDOT .....6

SECTION 8. PROJECT ACTION RESPONSIBILITY MATRIX.....7

SECTION 9. HIGH RISK CATEGORIES .....7

SECTION 10. FHWA OVERSIGHT PROGRAM UNDER 23 U.S.C. 106(G) .....7

SECTION 11. CDOT OVERSIGHT AND REPORTING REQUIREMENTS.....17

SECTION 12. IMPLEMENTATION AND AMENDMENTS.....20

**APPENDIX A: CDOT AND FHWA ROLES AND RESPONSIBILITIES BY FUNCTIONAL  
PROGRAM AREAS .....21**

SECTION 1. ENGINEERING: APPLIED RESEARCH AND INNOVATION .....23

SECTION 2. ENGINEERING: ASSET MANAGEMENT .....26

SECTION 3. ENGINEERING: CIVIL RIGHTS .....28

SECTION 4. ENGINEERING: CONTRACTING, ENGINEERING ESTIMATES AND OTHER  
PROJECT SUPPORT .....31

SECTION 5. ENGINEERING: ENVIRONMENT .....33

SECTION 6. ENGINEERING: HYDRAULICS.....38

SECTION 7. ENGINEERING: PAVEMENTS AND MATERIALS .....	40
SECTION 8. ENGINEERING: PLANNING.....	45
SECTION 9. ENGINEERING: PROGRAM AND PROJECT DELIVERY - DESIGN AND CONSTRUCTION.....	48
SECTION 10. ENGINEERING: PROGRAM AND PROJECT DELIVERY - PROGRAM MANAGEMENT.....	52
SECTION 11. ENGINEERING: RIGHT-OF-WAY.....	54
SECTION 12. ENGINEERING: STRUCTURES.....	57
SECTION 13. FINANCIAL MANAGEMENT.....	61
SECTION 14. MAINTENANCE & OPERATIONS.....	64
SECTION 15. TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS (TSM&O).....	67
SECTION 16. TSM&O – TRAFFIC AND SAFETY ENGINEERING BRANCH .....	70
SECTION 17. TSM&O - INTELLIGENT TRANSPORTATION SYSTEMS (ITS)/TECHNOLOGY PROGRAM.....	75
SECTION 18. TSM&O – ACTIVE TRAFFIC MANAGEMENT AND OPERATIONS BRANCH .....	78
<b>APPENDIX B: MANUALS AND OPERATING AGREEMENTS .....</b>	<b>81</b>
<b>APPENDIX C: GLOSSARY .....</b>	<b>84</b>
<b>APPENDIX D. CDOT AND FHWA ORGANIZATIONAL CHARTS.....</b>	<b>87</b>
<b>ATTACHMENT A: PROJECT ACTION RESPONSIBILITY MATRIX (AS OF FEBRUARY 6, 2015) .....</b>	<b>89</b>
<b>ATTACHMENT B: PROGRAM RESPONSIBILITY MATRIX.....</b>	<b>96</b>

**STEWARDSHIP AND OVERSIGHT AGREEMENT  
ON PROJECT ASSUMPTION AND PROGRAM OVERSIGHT  
BY AND BETWEEN THE  
FEDERAL HIGHWAY ADMINISTRATION, COLORADO DIVISION  
AND THE  
STATE OF COLORADO DEPARTMENT OF TRANSPORTATION**

**SECTION 1. BACKGROUND AND INTRODUCTION**

The Federal-aid Highway Program (FAHP) is a federally-assisted program of State-selected projects. The Federal Highway Administration (FHWA) and the State Departments of Transportation have long worked as partners to deliver the FAHP in accordance with Federal requirements. In enacting 23 U.S.C. 106(c), as amended, Congress recognized the need to give the States more authority to carry out project responsibilities traditionally handled by FHWA. Congress also recognized the importance of a risk-based approach to FHWA oversight of the FAHP, establishing requirements in 23 U.S.C. 106(g). This Stewardship and Oversight (S&O) Agreement sets forth the agreement between FHWA and the Colorado Department of Transportation (CDOT) on the roles and responsibilities of FHWA and CDOT with respect to Title 23 project approvals and related responsibilities, and FAHP oversight activities.

The scope of FHWA responsibilities, and the legal authority for CDOT assumption of FHWA responsibilities, developed over time. The U.S. Secretary of Transportation delegated responsibility to the Administrator of FHWA for the FAHP under Title 23 of the United States Code, and associated laws. (49 CFR 1.84 and 1.85) The following legislation further outlines FHWA's responsibilities:

- Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991;
- Transportation Equity Act for the 21st Century (TEA-21) of 1998;
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005; and
- Moving Ahead for Progress in the 21st Century Act (MAP-21) of 2012 (P.L. 112-141).

FHWA may not assign or delegate its decision-making authority to a State Department of Transportation unless authorized by law. Section 106 of Title 23, United States Code (Section 106), authorizes the State to assume specific project approvals. For projects that receive funding under Title 23, U.S.C., and are on the National Highway System (NHS) including projects on the Interstate System, the State may assume the responsibilities of the Secretary of the U.S. Department of Transportation under Title 23 for design, plans, specifications, estimates, contract awards, and inspections with respect to the projects unless the Secretary determines that the assumption is not appropriate. (23 U.S.C. 106(c)(1)) For projects under Title 23, U.S.C. that are not on the NHS, the State shall assume the responsibilities for design, plans, specifications, estimates, contract awards, and inspections unless the State determines that such assumption is not appropriate. (23 U.S.C. 106(c)(2))

For all other project activities which do not fall within the specific project approvals listed in Section 106 or are not otherwise authorized by law, FHWA may authorize CDOT to perform work needed to reach FHWA decision point, or to implement FHWA's decision. However such decisions themselves are reserved to FHWA.

The authority given to CDOT under Section 106(c)(1) and (2) is limited to specific project approvals listed herein. Nothing listed herein is intended to include assumption of FHWA's decision-making authority regarding Title 23, U.S.C. eligibility or Federal-aid participation determinations. FHWA always must make the final eligibility and participation decisions for the Federal-aid Highway Program.

Section 106(c)(3) requires FHWA and CDOT to enter into an agreement relating to the extent to which CDOT assumes project responsibilities. This Stewardship and Oversight Agreement (S&O Agreement), includes information on specific project approvals and related responsibilities, and provides the requirements for FHWA oversight of the FAHP (Oversight Program), as required by 23 U.S.C. 106(g).

## **SECTION 2. INTENT AND PURPOSE OF S&O AGREEMENT**

The intent and purpose of this S&O Agreement is to document the roles and responsibilities of FHWA's Colorado Division Office (FHWA or Division) and Colorado (CDOT) with respect to project approvals and related responsibilities, and to document the methods of oversight which will be used to efficiently and effectively deliver the FAHP.

The Project Action Responsibility Matrix, Attachment A to this S&O Agreement and as further described in Section 8 of this S&O Agreement, identifies FHWA FAHP project approvals and related responsibilities State DOT assumes from FHWA on a program-wide basis pursuant to 23 U.S.C. 106(c) and other legal authorities. Upon execution of this agreement, Attachment A shall be controlling and except as specifically noted in Attachment A, no other agreements, attachments, or other documents shall have the effect of delegating or assigning FHWA approvals to State DOT on a program-wide basis under 23 U.S.C 106 or have the effect of altering Attachment A.

## **SECTION 3. ASSUMPTION OF RESPONSIBILITIES FOR FEDERAL-AID PROJECTS ON THE NATIONAL HIGHWAY SYSTEM**

- 3.1.** CDOT may assume FHWA's Title 23 responsibilities for design; plans, specifications, and estimates (PS&E); contract awards; and inspections, with respect to Federal-aid projects on the National Highway System (NHS) if both CDOT and FHWA determine that assumption of responsibilities is appropriate.
- 3.2.** Approvals and related activities for which CDOT has assumed responsibilities as shown in Attachment A will apply program wide unless project specific actions for which the Division will carry out the approval or related responsibilities are documented in accordance with FHWA Project of Division Interest/Project of Corporate Interest Guide (FHWA PoDI/PoCI Guide) located at <http://www.fhwa.dot.gov/federalaid/stewardship>.

CDOT may not assume responsibilities for Interstate projects that are in high risk categories. (23 U.S.C. 106(c)(1))

- 3.3.** CDOT is to exercise any and all assumptions of the Secretary responsibilities for Federal-aid projects on the NHS in accordance with Federal laws, regulations and policies.

## **SECTION 4. ASSUMPTION OF RESPONSIBILITIES FOR FEDERAL-AID PROJECTS OFF THE NATIONAL HIGHWAY SYSTEM**

- 4.1.** CDOT shall assume FHWA's Title 23 responsibilities for design, PS&Es, contract awards, and inspections, with respect to Federal-aid projects off the NHS (non-NHS) unless CDOT determines that assumption of responsibilities is not appropriate. (23 U.S.C. 106(c)(2))

- 4.2. Except as provided in 23 U.S.C.109(o), CDOT is to exercise the Secretary's approvals and related responsibilities on these projects in accordance with Federal laws.
- 4.3. CDOT, in its discretion, may request FHWA carry out one or more non-NHS approvals or related responsibilities listed as "State" in Attachment A on a program-wide basis. For a project specific request, the State may request FHWA carry out any approval or related responsibility listed in Attachment A off the NHS. Such project-specific requests shall be documented in accordance with FHWA PoDI/PoCI Guide.
- 4.4. Pursuant to 23 U.S.C. 109(o), non-NHS projects shall be designed and constructed in accordance with State laws, regulations, directives, safety standards, design standards, and construction standards.

## **SECTION 5. ASSUMPTION OF RESPONSIBILITIES FOR LOCALLY ADMINISTERED PROJECTS**

CDOT may permit local public agencies (LPAs) to carry out CDOT's assumed responsibilities on locally administered projects. CDOT is responsible and accountable for LPA compliance with all applicable Federal laws and requirements.

## **SECTION 6. PERMISSIBLE AREAS OF ASSUMPTION UNDER 23 U.S.C. 106(c)**

An assumption of responsibilities under 23 U.S.C. 106(c) may cover only activities in the following areas:

- 6.1. Design, which includes preliminary engineering, engineering, and design-related services directly relating to the construction of a FAHP-funded project, including engineering, design, project development and management, construction project management and inspection, surveying, mapping (including the establishment of temporary and permanent geodetic control in accordance with specifications of the National Oceanic and Atmospheric Administration), and architectural-related services.
- 6.2. PS&E, which represents the actions and approvals required before authorization of construction. The PS&E package includes geometric standards, drawings, specifications, project estimates, certifications relating to completion of right-of-way acquisition and relocation, utility work, and railroad work.
- 6.3. Contract awards, which include procurement of professional and other consultant services and construction-related services to include advertising, evaluating, and awarding contracts.
- 6.4. Inspections, which include general contract administration, material testing and quality assurance, review, and inspections of Federal-aid contracts as well as final inspection/acceptance.
- 6.5. Approvals and related responsibilities affecting real property as provided in 23 CFR 710.201(i) and any successor regulation in 23 CFR Part 710.

## **SECTION 7. FEDERAL APPROVALS AND RELATED RESPONSIBILITIES THAT MAY NOT BE ASSUMED BY CDOT**

- 7.1.** Any approval or related responsibility not listed in Attachment A, Project Action Responsibility Matrix, cannot be assumed by the State without prior concurrence by FHWA Headquarters. The following is a list of the most frequently-occurring approvals and related responsibilities that may not be assumed by CDOT:
- Civil Rights Program approvals;
  - Environmental approvals, except those specifically assumed under other agreements. (23 U.S.C. 326 and 327; programmatic categorical exclusion agreements);
  - Federal air quality conformity determinations required by the Clean Air Act;
  - Approval of current bill and final vouchers;
  - Approval of federally-funded hardship acquisition, protective buying, and 23 U.S.C. 108(d) early acquisition;
  - Project agreements and modifications to project agreements and obligation of funds (including advance construction);
  - Planning and programming pursuant to 23 U.S.C. 134 and 135;
  - Special Experimental Projects (SEP-14 and SEP-15);
  - Use of interstate airspace for non-highway-related purposes;
  - Any Federal agency approval or determination under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended, and implementing regulations in 49 CFR Part 24;
  - Waivers to Buy America requirements;
  - Approval of Federal participation under 23 CFR 1.9(b);
  - Provide pre-approval for preventive maintenance project (until FHWA concurs with CDOT procedures);
  - Requests for credits toward the non-Federal share of construction costs for early acquisitions, donations, or other contributions applied to a project;
  - Functional replacement of property;
  - Approval of a time extension for preliminary engineering projects beyond the 10-year limit, in the event that actual construction or acquisition of right-of-way for a highway project has not commenced;
  - Approval of a time extension beyond the 20-year limit for right-of-way projects, in the event that actual construction of a road on the right-of-way is not undertaken;
  - Determine need for Coast Guard Permit;
  - Training Special Provision – Approval of New Project Training Programs; and
  - Any other approval or activity not specifically identified in Attachment A unless otherwise approved by FHWA, including the Office of Chief Counsel.
- 7.2.** For all projects and programs, CDOT will comply with Title 23 and all applicable non-Title 23, U.S.C. Federal-aid program requirements, such as metropolitan and statewide planning; environment; procurement of engineering and design related service contracts (except as provided in 23 U.S.C. 109(o)); Civil Rights including Title VI of the Civil Rights Act, and participation by Disadvantaged Business Enterprises; prevailing wage rates; and acquisition of right-of-way, etc.
- 7.3.** This Agreement does not modify FHWA's non-Title 23 program approval and related responsibilities, such as approvals required under the Clean Air Act; National Environmental Policy Act, Executive Order on Environmental Justice (E.O. 12898), and other related environmental laws and statutes; the Uniform Act; and the Civil Rights Act of 1964 and related

statutes.

## **SECTION 8. PROJECT ACTION RESPONSIBILITY MATRIX**

Attachment A, Project Action Responsibility Matrix, to this S&O Agreement identifies FAHP project approvals and related responsibilities. The Matrix specifies which approvals and related responsibilities are assumed by the State under 23 U.S.C. 106(c) or other statutory or regulatory authority, as well as approvals and related responsibilities reserved to FHWA.

## **SECTION 9. HIGH RISK CATEGORIES**

- 9.1.** In 23 U.S.C. 106(c), Congress directs that the Secretary shall not assign any approvals or related responsibilities for projects on the Interstate System if the Secretary determines the project to be in a high risk category. Under 23 U.S.C. 106(c)(4)(B), the Secretary may define high risk categories on a national basis, State-by-State basis, or national and State-by-State basis.
- 9.2.** The Division has determined there are no high risk categories.

## **SECTION 10. FHWA OVERSIGHT PROGRAM UNDER 23 U.S.C. 106(g)**

- 10.1.** In 23 U.S.C. 106(g), Congress directs that the Secretary shall establish an oversight program to monitor the effective and efficient use of funds authorized to carry out the FAHP. This program includes FHWA oversight of the State's processes and management practices, including those involved in carrying out the approvals and related responsibilities assumed by the State under 23 U.S.C. 106(c). Congress defines that, at a minimum, the oversight program shall be responsive to all areas relating to financial integrity and project delivery.
- 10.2.** FHWA shall perform annual reviews that address elements of CDOT's financial management system in accordance with 23 U.S.C. 106(g)(2)(A). FHWA will periodically review CDOT's monitoring of sub-recipients pursuant to 23 U.S.C. 106(g)(4)(B).
- 10.3.** FHWA shall perform annual reviews that address elements of the project delivery systems of CDOT, which elements include one or more activities that are involved in the life cycle of project from conception to completion of the project. FHWA will also evaluate the practices of CDOT for estimating project costs, awarding contracts, and reducing costs. 23 U.S.C. 106(g)(2) and (3).
- 10.4.** To carry out the requirements of 23 U.S.C. 106(g), FHWA will employ a risk management framework to evaluate financial integrity and project delivery, and balance risk with staffing resources, available funding, and the State's transportation needs. FHWA may work collaboratively with CDOT to assess the risks inherent with the FAHP and funds management, and how that assessment will be used to align resources to develop appropriate risk response strategies

Techniques the Division and CDOT may use to identify and analyze risks and develop response strategies include the following:

- Program Assessments;
- FIRE Reviews;
- Program Reviews;

- Certification Reviews;
- Recurring or periodic reviews such as the Compliance Assessment Program (CAP); and
- Inspections of project elements or phases.

The techniques and processes used to carry out the requirements of 23 U.S.C. 106(g) are managed by the Quality Improvement Council (QIC) and/or activities and reviews selected based on risk by the Division.

#### **10.4.1. QUALITY IMPROVEMENT COUNCIL (QIC)**

CDOT and FHWA-Colorado Division established the Quality Improvement Council (QIC) and Quality Assurance Program (QAP) to coordinate process reviews, annual risk assessment, and the management of the S&O Agreement. This QAP results in a complement of initiatives to help achieve our strategic goals, better meet our customer's needs and expectations, result in systemic improvement, assist with the deployment of innovative technologies, provide more focused technical assistance, and ensure the FAHP is being delivered consistent with applicable laws, regulations, policies and strategic goals.

CDOT and FHWA will jointly develop an annual prioritized list of risk statements and corresponding response strategies as stated in the Quality Improvement Council Operating Guidelines for the Quality Assurance Program (QAP). Each year a minimum of three joint CDOT/FHWA process reviews will be conducted as part of the identified risk response strategies. CDOT and FHWA will each have a Champion assigned to each response strategy who will manage the process including completion of the report (if necessary), implementation of the strategy and status of each strategy to monitor progress. This will help to provide assurance that CDOT and/or local agencies are following all appropriate activities to carry out their respective roles and responsibilities according to applicable laws, regulations, and policies.

In addition to the QAP Program, CDOT conducts other activities to ensure the quality of its projects and programs. These include an Audit Program, Performance Measures Program, Value Engineering Program, Independent program and process reviews, and CDOT Self-Assessment efforts. The following is a brief explanation of the purpose and scope of each of these components:

##### **10.4.1.1. REPORT ON PERFORMANCE COMPLIANCE**

Reporting on the performance/compliance indicators will be undertaken based on the cycle defined in Appendix A – CDOT & FHWA Roles and Responsibilities by Functional Program Areas. An annual report prepared by the Quality Improvement Council will be completed by March of each year. Reporting will be done based on the cycle in the Stewardship and Oversight Agreement. Reporting being done more frequently than annual will include data only with no formal report being prepared. CDOT Transportation Performance Branch, Division of Transportation Development, will ensure delivery of data for performance measures and compliance indicators listed as being reported more frequently than annual. Data only reporting will be submitted electronically to FHWA Colorado Division Management and Program Analyst.

##### **10.4.1.2. AUDIT PROGRAM**

CDOT Internal Auditors are to conduct and supervise: internal audits of CDOT, external audits of persons entering into contracts with the department, federally required audits, financial audits, and performance audits to determine the efficiency and effectiveness of CDOT operations. The internal audits often focus on the adequacy and effectiveness of internal and management controls. Audits also evaluate compliance with federal and state regulations and compliance with contract terms. Each year,

the Commission's Audit Review Committee approves an annual audit work plan. As a part of the process for developing CDOT Internal Auditor's work plan, managers throughout CDOT are surveyed concerning internal audit risks and audit needs. Coordination with the Quality Improvement Council (QIC) is planned as a part of the development of each fiscal year's work plan. Every effort is made to coordinate activities and prevent duplication. The Audit Program also plans on working with the Performance Measures Team to assist in verification of performance measure reporting, and to help evaluate the impact of the performance measures.

#### 10.4.1.3. PERFORMANCE MEASURES PROGRAM

A key to successful strategic planning is having performance measures that give accurate and timely information. The ultimate aim of implementing a measurement system is to improve the organizational performance of CDOT resulting in an improvement in system performance. CDOT intends to use performance measures to continually evaluate progress towards accomplishing its goals and objectives, by determining where improvements can be made in its process, and readjusting work activities accordingly.

CDOT is currently revising Policy Directive 14 (PD 14) as part of the statewide transportation planning process. The Transportation Commission sets policy direction and allocates resources to achieve performance objectives in PD 14, and it provides the overall framework for the transportation planning process through which a multimodal, comprehensive Statewide Transportation Plan is developed. Included in PD 14 are goals, performance measures and objectives, and planning principles. The four (4) goals are aligned with MAP-21 National Goals. Performance measures and objectives are being developed for the following goals:

- **Safety:** Move Colorado toward zero deaths by reducing traffic-related deaths and serious injuries by one half.
- **Infrastructure Condition:** Preserve the transportation infrastructure condition to ensure safety and mobility at the lowest life-cycle cost.
- **System Performance:** Improve system reliability and reduce congestion primarily through operational improvements and secondarily through the addition of capacity. Support opportunities for mode choice.
- **Maintenance:** Annually maintain CDOT's roadways and facilities to minimize the need for replacement or rehabilitation.

Each goal has specific performance objectives and associated measures that provide the foundation for discussion on how to best invest available funds. Performance measures provide tools to relate the expenditures and work results to the policies, priorities, and goals of the Department as determined by the Transportation Commission. Performance measures are utilized on an annual basis as well as on a long range plan basis to relate expenditures and work results to the desired performance objectives (i.e., the desired end-result) for the State Highway system.

The next level of measures is comprised of Region, Division and Office work program plans that encompass activities of each respective unit. All levels will have in place performance measure tools that link to and support the mission of the department. The desired outcome for the program is "improvement," whether this is in customer perception, productivity, timeliness, or quality, as well as to make better informed decisions. The Transportation Performance Branch within the Division of Transportation Development coordinates the Program, but the program is ultimately the responsibility of

everyone in CDOT. The Quality Improvement Council under the S&O Agreement is responsible for ensuring quality assurance in work processes.

#### **10.4.1.4. VALUE ENGINEERING PROGRAM**

Value engineering (VE) is required on all Federal-aid highway projects on the National Highway System (NHS) with an estimated cost of \$40 million or more. The purpose of this regulation (23 CFR 627.1) is to “establish a program to improve project quality, reduce project costs, foster innovation, eliminate unnecessary and costly design elements, and ensure efficient investments by requiring the application of VE”. The Design Program Manager in the Project Development Branch will be responsible for implementing, monitoring and reporting on the VE program. CDOT will complete an annual FHWA survey providing a summary of CDOT’s VE efforts for the past year. Typically this survey is done in January.

#### **10.4.1.5. INDEPENDENT REVIEWS**

FHWA may conduct independent reviews that could include program reviews/product evaluations and continuous process improvement initiatives. These reviews will be done in consultation with CDOT. The review topics will be different from the QIC risk response strategies, audit, and performance measurement reviews issues chosen on an annual basis as previously discussed. In addition to FHWA oversight activities, stewardship activities will include technical assistance, technology deployment, performance measurement, and sharing best practices.

Notwithstanding any provision of this S&O Agreement, FHWA retains overall responsibility for all aspects of Federal-aid programs and this S&O Agreement does not preclude FHWA’s access to and review of any Federal-aid project at any time and does not replace the provisions of Title 23.

#### **10.4.2. DECISIONS ON FHWA OVERSIGHT**

Under Title 23, FHWA is ultimately accountable for all programs under the FAHP; however, the State may assume responsibility for project-level activities associated with 23 USC 106 on certain projects (see Attachment A).

The provisions of this S&O Agreement do not modify FHWA’s non-Title 23 program oversight and project approval responsibilities for activities such as required under the *Clean Air Act*; the *National Environmental Policy Act of 1969 (NEPA)* and other related environmental laws and statutes; the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*; and the *Civil Rights Act of 1964* and related statutes, unless expressly permitted by MAP-21.

The collaborative process described below is intended to lead to a decision on FHWA Oversight for projects regardless of what phase they are in and is intended to capture the designation early in project development. Project specific oversight agreements will be required on each PoDI project and will document FHWA’s involvement and approval actions for each phase. A project might only have FHWA involvement in a single phase, based on risk. This ongoing process will be completed as described below:

1. Current Status of Program: FHWA Construction Program Manager in conjunction with CDOT Area Engineers will jointly develop an Annual Construction Program Report at the beginning of the calendar year assessing the health of the Construction Program. This annual report will document the status/issues/progress of the program based on information gained during the oversight of FHWA Oversight projects and of statistical sampling reviews conducted on

Delegated-Oversight projects. The purpose of the report will be to identify best practices as well as ongoing and new risks.

2. Selection of New PoDI Projects: PoDI Projects are projects that have Federal-aid funds regardless of the roadway classification. In order to capture and analyze potential projects, FHWA Area Engineers will attend their respective Region Plan Status meetings. FHWA Area Engineers will complete a PoDI evaluation form for projects that fit at least one of the risk criteria listed below and that information will be reviewed by FHWA Design and Construction Team Leaders who will make an initial oversight level determination. They will then present their recommendation to the appropriate CDOT Program Engineer who will respond with their concurrence or non-concurrence. If CDOT does not agree with a designation, a meeting will be held to resolve the issue. FHWA Area Engineers will then complete a project specific Stewardship Plan for each project designated as a PoDI project. Nationally, FHWA has also designated projects as having a corporate interest. These projects are called “Projects of Corporate Interest”, or PoCI projects.

The following factors will be used to consider oversight level: Workload distribution will be considered in the selection process.

- A Major Project (All Major Projects shall be PoDIs)
- A Design/Build Project
- Projects using complex funding (TIGER, TIFIA, P3, tolling)
- Special Experimental Projects – Alternative Contracting (SEP 14)
- Special Experimental Projects – Public Private Partnership (SEP 15)
- Unusual Bridge and Structure Projects
- Projects using innovative contracting/construction methods (SPMT, EDC)
- Politically sensitive or high profile projects
- Projects with a construction estimate of \$40M and over
- Projects on New Alignment
- PoCI projects
- EAs and EISs
- Projects with complexities in design
- Projects with anticipated complexities in construction
- Complex Local Public Agency (LPA) projects

In addition to PoDI projects and as part of FHWA’s Compliance Assessment Program (CAP), the Colorado Division will fulfill its requirement to provide oversight to the Federal-aid program by performing construction inspections on statistically sampled projects. These reviews will be used to assess risks, identify best practices, and monitor new or ongoing concerns on projects. These reviews will be completed based on a sampling plan provided by FHWA HQ on an annual basis and will focus on a set of core risk areas, and risk-areas identified by the Division in the previous Annual Construction Program Report. The results from these reviews will be used to develop the Annual Construction Program Report and determine best practices and risk areas/criteria for the next cycle of PoDI projects and the QIC risk assessment process.

### **10.4.3. DELEGATED PROGRAM AND PROJECT RESPONSIBILITIES**

#### **10.4.3.1. CDOT RESPONSIBILITIES**

CDOT assumes selected Title 23 responsibilities as described in Attachment A, Project Responsibility Matrix, for projects not identified as FHWA PoDI projects using the process described later in this

document. Projects must comply with all Federal-aid requirements contained in Title 23. When a local government becomes the implementing agency of a construction project in which CDOT participates in the funding by allocation of FAHP funds, CDOT is not relieved of its responsibilities even though the project may be under the supervision of a public agency or organization. In accordance with 23 CFR 1.11, CDOT will ensure that the agency is well qualified and suitably equipped to perform the work.

CDOT may elect to invite FHWA Colorado Division to be involved in any CDOT Delegated Oversight project.

#### **10.4.3.2. FHWA – COLORADO**

Under Title 23 and non-Title 23 (as noted under bullet 5), FHWA is ultimately accountable for the stewardship and oversight of all programs and projects under the FAHP.

1. FHWA PoDI Involvement: FHWA will develop a project specific oversight plan that describes their involvement. This plan will be shared with CDOT.
2. CDOT Delegated Oversight or Non-PoDI project Involvement: FHWA project level oversight responsibilities will be limited to ensuring compliance with non-Title 23 requirements and certain Title 23 requirements. FHWA will monitor project compliance through program reviews, process improvement studies, CAP reviews, etc. Also see bullet 5 below.
3. Other Project Involvement: FHWA Colorado Division in consultation with CDOT may elect to become actively involved with any Federal-aid transportation project, including those for which CDOT has assumed FHWA's responsibilities, when unique circumstances arise or when program or process reviews are being conducted. For all projects involving structures over or under the interstate, CDOT shall invite the appropriate FHWA Area Engineer to the Project Scoping meeting to determine the level of FHWA involvement, regardless of funding.
4. Technical Assistance: FHWA Colorado Division is prepared to provide technical assistance to CDOT or local agencies on any aspect of an eligible Title 23 project including intermodal transportation projects. Technical assistance activities will be decided on a case-by-case basis in consultation with CDOT, other partners and FHWA Colorado Division. FHWA Colorado Division will continue to focus their time and effort on improving processes and procedures, in cooperation with CDOT.
5. Non-Title 23 Responsibility: FHWA will continue to assume responsibility for Federal actions required under laws outside of Title 23, as noted in Section 3 in the respective sections, such as:
  - Activities for compliance with Section 102 (2) (c) of the National Environmental Policy Act (NEPA) of 1969 (42 USC 4321 et.seq.) and 23 CFR 771
  - Activities for compliance with Section 4 (f) of the Department of Transportation Act of 1966, P.L. 89-665, 49 USC 303
  - Civil Rights Act of 1964, 42 USC 2000 (d) et. seq. and 23 CFR 200 (Title VI), and 23 CFR 230 (EEO)
  - Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970, 42 USC 4601, et. seq. 23 CFR Parts 710-740 and 49 CFR Part 24
6. Independent FHWA review program: Each year FHWA Colorado Division may conduct independent process reviews that could include: program reviews, product evaluations, reviews required by law (e.g., National Bridge Inspections Standards Regulation (NBIS),

Planning, & Highway Performance Monitoring System (HPMS) and continuous process improvement initiatives. These reviews may be done in consultation with CDOT.

#### **10.4.4. MAJOR PROJECTS**

A major project is a project with an estimated total cost in the year of expenditure of over \$500 million and one that involves any amount of Federal financial assistance. Project Management Plan (PMP) requirements are found in (23 U.S.C. § 106(h)(2)). Financial Plan (FP) requirements can be found in (23 U.S.C. § 106(h)(3)(D), MAP-21 § 1503(a)(4)(B)). Financial Plans are required to have FHWA approval for projects with an estimated cost of more than \$500 million. The Division requires Financial Plans for projects \$100 million to \$500 million to be submitted and reviewed. An annual FP is also required for projects with an estimated cost from \$100-500 million. In addition, a Cost Estimate Review is required for projects greater than \$500 million as per (23 U.S.C. § 106(h)(3)).

FHWA and CDOT will place special emphasis on major projects including more extensive review of project costs estimates, through Cost Estimate Reviews (CER), Project Management Plans (PMP), risk analysis and the development of Finance Plans. Detailed guidance on FHWA's expectations are found on FHWA major project website including an FHWA memorandum from FHWA Administrator dated January 19, 2007 - [http://www.fhwa.dot.gov/ipd/project\\_delivery/](http://www.fhwa.dot.gov/ipd/project_delivery/)

1. Risk Management Tool: FHWA will utilize a document titled "Risk Management Tool for Managing the Planning/Environmental Phases of Prospective Major Projects," located on FHWA major project website;
2. Cost Estimate Reviews (CER): Prior to submitting an EA or FEIS to FHWA, CDOT shall coordinate with the Division Office to schedule a Cost Estimate Review of the preferred alternative. Guidance on cost estimating is found on FHWA major project website: [http://www.fhwa.dot.gov/ipd/project\\_delivery/tools\\_programs/cost\\_estimating/process.htm](http://www.fhwa.dot.gov/ipd/project_delivery/tools_programs/cost_estimating/process.htm)
3. Project Management Plan (PMP): A draft PMP must be submitted to FHWA for review prior to approval of the NEPA decision document (within 60 days prior to submittal of the Decision document). FHWA will provide comments and CDOT shall submit a PMP for approval within 90 days of the date of the signed NEPA decision document. This document should clearly define the roles, responsibilities, processes, and activities necessary to manage the project, which will result in the major project being completed on time, within budget, and with the highest degree of quality and safety. A PMP must be approved prior to any federal action such as authorizing federal funds for ROW or construction. Also, during construction, the PMP must be revised and updated periodically as needed to reflect current status of the major project. Guidance on a PMP is found on FHWA major project website. [http://www.fhwa.dot.gov/ipd/project\\_delivery/tools\\_programs/project\\_management\\_plans/index.htm](http://www.fhwa.dot.gov/ipd/project_delivery/tools_programs/project_management_plans/index.htm)
4. Finance Plans: An Initial Finance Plan shall be submitted to FHWA for review and approval. The FP shall be submitted to provide sufficient time such that review and approval can be obtained for construction. Depending upon the complexity of the project, the FP should be submitted at a minimum of 90 days prior to the planned advertisement date. On a designated date, until completion of construction, CDOT will submit an annual update and certification for FHWA Division Office approval. Guidance on a major project Finance Plan is found on FHWA major project website.

#### **10.4.5. HIGH PERFORMANCE TRANSPORTATION ENTERPRISE (HPTE)**

The High-Performance Transportation Enterprise (HPTE) was formed to aggressively pursue innovative means of more efficiently financing important surface transportation infrastructure projects that will improve the safety, capacity, and accessibility of the surface transportation system, can feasibly be commenced in a reasonable amount of time, will allow more efficient movement of people, goods, and information throughout the state, and will accelerate the economic recovery of the state.

Such innovative means of financing projects include, but are not limited to, public-private partnerships, operating concession agreements, user fee-based project financing, and availability payment and design-build contracting.

The HPTE shall operate as a government-owned business within the department and shall be a division of the department. As a Division of CDOT the requirements of this S&O Agreement shall apply to all HPTE projects and initiatives. The HPTE Director will coordinate on a regular basis with FHWA Program Delivery Team Leader to define roles and responsibilities of HPTE projects.

#### **10.4.6. OFFICE OF MAJOR PROJECT DEVELOPMENT**

The purpose of the Office of Major Project Development (OMPD) is to assist the Department and the High Performance Transportation Enterprise (HPTE) to effectively and efficiently develop major and complex projects through the promotion of consistency in the development, advancement, oversight, and execution of these projects.

Functions the Office will perform in furtherance of this purpose include:

- Conduct early project development activities and determine the overall feasibility of potential major projects. This includes project scoping, conceptual design, preliminary environmental evaluations, benefit cost analysis and coordinating with the HPTE in its initial financial analysis to determine the project delivery structure and the appropriate roles in that project's delivery for the Department and the HPTE respectively.
- If a project is deemed feasible, the Office will oversee and/or execute project development activities in coordination with CDOT Regions and the HPTE up to and including the final procurement of the project. The Office also will develop management tools to assist the Regions and HPTE in the project construction phase and any follow on activities such as long term operations and maintenance oversight, contract administration or periodic technical reviews.
- Additional functions of the Office include acting as the department's authority and lead practitioner for best management and contracting practices for department wide consistency in the development of major and complex projects and oversees project development and procurement documents, providing technical assistance to other CDOT and HPTE staff, managing the project development processes, assessing the feasibility and development of financial plans for major projects in conjunction with the HPTE, and policy formulation and coordination of roles with the HPTE.

As a Division of CDOT, the requirements of this S&O Agreement shall apply to all OMPD projects and initiatives. The OMPD Director will coordinate on a regular basis with FHWA Program Delivery Team Leaders to define roles and responsibilities of OMPD programs and projects.

#### **10.4.7. CONFLICT RESOLUTION PROCESS**

If disagreements emerge which cannot be resolved, the impasse shall be escalated as shown below. If other agencies are involved, personnel from equivalent organizational levels will be included in the conflict resolution process.

**Conflict Resolution Process**

<b>CDOT</b>	<b>FHWA</b>	<b>Meeting Date Established Within</b>
Project Coordinator	Area Engineer	
Regional Transportation Director	Program Delivery Team Leader	14 days
Chief Engineer	Assistant Division Administrator	30 days
Executive Director	Division Administrator	30 days

When the parties at the lowest organizational level of the agencies have agreed to escalate, a meeting date will be established within 14 days. At that time, the agencies from both levels will meet to discuss the issues and come up with a resolution. If an agreement cannot be reached, then the issue will be escalated to the next level and a meeting date established within 30 days. At that time, the agencies from all three levels will meet to discuss the issues and come to a resolution. If an agreement cannot be reached, the issue will be escalated to the highest level and a meeting date established within 30 days. At that time, all agencies will come to resolution.

Mediation and facilitation may be used at any level to help expedite resolution. Documentation of all disagreements and resolutions shall be furnished to all involved agencies and included in the project file.

**10.4.8. OVERSIGHT AUTHORITY AND MISCELLANEOUS STIPULATIONS**

**10.4.8.1. PROJECTS OF DIVISION INTEREST**

FHWA's authority will be specified in the project specific oversight plan and could include the following:

- Plan, Specifications & Estimates Approval;
- Approval of design exceptions on non-Interstate facilities
- Contract Concurrence in Award;
- Contract Change Order Approval;
- Approval of Contract Claims Settlement;
- Final Inspection; and
- Project Acceptance.

FHWA has established the following criteria for evaluation of projects for the purpose of selecting Projects of Divisions Interest (PoDI) and retaining some approval authority:

- A Major Project (All Major Projects Shall be Selected as PoDIs)
- A Design/Build Project
- Projects using complex funding (TIGER, TIFIA, P3, tolling)
- Special Experimental Projects – Alternative Contracting (SEP 14)
- Special Experimental Projects – Public Private Partnership (SEP 15)
- Unusual Bridge and Structure Projects
- Projects using innovative contracting/construction methods (SPMT, EDC)
- Politically sensitive or high profile projects
- Projects with a construction estimate of \$40M and over
- Projects on New Alignment

- PoCI projects
- EAs and EISs
- Projects with complexities in design
- Projects with anticipated complexities in construction
- Complex Local Public Agency (LPA) projects

#### **10.4.8.2. ADVANCE CONSTRUCTION**

Use of Advance Construction procedures to ensure future federal reimbursement of funds for a project is considered use of Federal-aid funds.

#### **10.4.8.3. BONDING**

If a project is financed with bond proceeds, and debt service is anticipated to be paid using federal funds, it shall be considered a Federal-aid project.

#### **10.4.8.4. SPECIAL EXPERIMENT PROJECT NO. 14 – INNOVATIVE CONTRACTING AWARD**

FHWA Headquarters' SEP-14 approval is necessary for any non-traditional construction contracting technique that deviates from accepted operational practices approved under current statutes. Design-build procurement processes which deviate from the requirements of 23 CFR 636 may require an SEP-14 work plan and approval. FHWA maintains an SEP-14 Active Project List at the following link: <http://www.fhwa.dot.gov/programadmin/contracts/sep14list.cfm>

#### **10.4.8.5. SPECIAL EXPERIMENT PROJECT NO.15 – INNOVATIVE CONTRACTING**

SEP-15 is an experimental process for FHWA to identify for trial evaluation new public-private partnership approaches to project delivery. It is anticipated that these new approaches will allow the efficient delivery of transportation projects without impairing FHWA's ability to carry out its stewardship responsibilities to protect both the environment and American taxpayers. SEP-15 addresses, but is not limited to, four major components of project delivery: contracting, compliance with environmental requirements, right-of-way acquisition, and project finance. Elements of the transportation planning process may be involved as well.

SEP-15 applications should be submitted by CDOT to FHWA Colorado Division Office. Applicants may include localities and private transportation ventures as project sponsors but must include CDOT. SEP-15 applications should provide a brief description of the project and specific Federal-aid program areas of experimentation, explain the innovative techniques proposed and the expected value of those techniques, and identify proposed performance measures to evaluate the success of the SEP-15 project.

### **10.5. PROGRAM RESPONSIBILITY MATRIX**

Attachment B to this S&O Agreement is the Program Responsibility Matrix that identifies all relevant FHWA program actions, and Division and CDOT program contact offices.

### **10.6. MANUALS AND OPERATING AGREEMENTS**

CDOT manuals, agreements and other control documents that have been approved for use on Federal-aid projects are listed in Appendix B to this S&O Agreement.

## 10.7. STEWARDSHIP AND OVERSIGHT INDICATORS

The Division and CDOT may jointly establish Stewardship and Oversight Indicators (Indicators). The Indicators should set targets, track trends, and implement countermeasures and actions when the data is moving away from the desired target direction. Indicators can provide documented evidence that CDOT assumption of responsibilities is functioning appropriately. Stewardship and Oversight Indicators should be reviewed on an annual basis.

## SECTION 11. CDOT OVERSIGHT AND REPORTING REQUIREMENTS

### 11.1. CDOT OVERSIGHT AND REPORTING REQUIREMENTS

CDOT is responsible for demonstrating to FHWA how it is carrying out its responsibilities in accordance with this S&O Agreement.

### 11.2. CDOT OVERSIGHT OF LOCALLY ADMINISTERED PROJECT

- 11.2.1. CDOT is required to provide adequate oversight of sub-recipients including oversight of any assumed responsibilities CDOT delegates to a LPA.
- 11.2.2. Pursuant to 23 U.S.C. 106(g)(4), the State DOT shall be responsible for determining that sub-recipients of Federal funds have adequate project delivery systems for locally administered projects and sufficient accounting controls to properly manage such Federal-aid funds. The State DOT is also responsible for ensuring compliance with reporting and other requirements applicable to grantees making sub-awards, such as monthly reporting requirements under the Federal Funding Accountability and Transparency Act of 2006, PL 109-282 (as amended by PL 110-252).
- 11.2.3. CDOT acknowledges that it is responsible for sub-recipient awareness of Federal grant requirements management of grant awards and sub-awards, and is familiar with and comprehends pass through entity responsibilities (2 C.F.R 200.331 Requirements for Pass-thru Entities). CDOT shall carry out these responsibilities using the following actions, programs, and processes outlined in the Local Public Agency (LPA) Manual
- 11.2.4. CDOT shall assess whether a sub-recipient has adequate project delivery systems and sufficient accounting controls to properly manage projects, using the following actions, programs, and processes outlined in the LPA Manual.

#### **Adequate Project Delivery System**

CDOT will maintain project delivery information in the Project Development, Construction and Local Agency Manuals. CDOT will assess Local Agency delivery systems during dialog with the Local Agency at project scoping meetings and on an on-going basis throughout project delivery. CDOT Regional Staff will be strategically assigned to projects based upon a project risk assessment and will be available as needed to answer questions and oversee processes.

#### **Sufficient Accounting Controls**

A-133 Single Audit Reviews - CDOT Audit Division will send letters to sub-recipients requesting copies of the single audit, if applicable, and a completed Audit Compliance Certification Form. Upon receipt of the report and form, CDOT Audit Division will perform a review of materials. The results of the A-133 audits will be used to determine the adequacy of the Local Agency's accounting controls.

- 11.2.5.** CDOT shall assess whether a sub-recipient is staffed and equipped to perform work satisfactorily and cost effectively, and that adequate staffing and supervision exists to manage the Federal project(s), by using the following actions, programs, and processes:

**Sub-recipient Staffing and Performance**

1. Risk Assessment Methodologies -Local Agency Bulletin 2013-1 addresses risk assessment in the oversight of Local Agency projects. The risk assessment will examine nature and magnitudes of risks associated with each project, and correlate those risks with needed frequency and depth of attention. Proficiency of the assigned delivery team will be a critical element of the analysis. CDOT will increase or decrease the frequency of oversight based on the Local Agency's performance, previous CDOT project involvement and project risk score.
  
2. NAVIGATE - Local Agency Project Tracking and Implementation Guidance Portal – This application will allow CDOT and LA staff to view and discuss status of key project milestones, exchange documents, and serve as a basis for dialog between staff regarding critical project features, schedule issues, project funding, changes in project management, and other project characteristics. Tool will be used to track projects both through project development and construction and incorporates risk assessment methodologies.

- 11.2.6.** CDOT shall assess whether sub-recipient projects receive adequate inspection to ensure they are completed in conformance with approved plans and specifications, by using the following actions, programs, and processes:

**Adequate Inspection to Ensure Conformance**

CDOT Form 1243, Section 8.5 "Supervise Construction," will identify a Professional Engineer registered in Colorado, who will be "in responsible charge of construction supervision" for the Local Agency. Section 8.18 will identify CDOT Resident Engineer responsible for conducting routine and random project reviews. CDOT Form 1243 is a part of the sub-award agreement (intergovernmental agreement) between CDOT and the Local Agency.

Local Agency Bulletin 2013-1 addresses risk assessment in the oversight of Local Agency construction projects. The assessment will examine nature and magnitudes of risks associated with each construction project, and correlate those risks with needed frequency and depth of attention. The knowledge and experience of the Project Administration Team (contractor, LA or LA consultant, and CDOT) will be a critical element of the analysis. CDOT Regional Staff will be strategically assigned to projects based upon project risk assessment. CDOT will increase or decrease the frequency of project oversight based on job performance, evidence of compliance and project risk score.

- 11.2.7.** CDOT shall ensure that when LPAs elect to use consultants for engineering services, the LPA, as provided under 23 CFR 635.105(b), shall provide a full-time employee of the agency to be in responsible charge of the project. CDOT's process to ensure

compliance with this requirement is documented by the following actions, programs, and processes:

**Local Agency Employee in Responsible Charge**

LAB 2012-1 addresses Local Agency “Employee in Responsible Charge” requirements. CDOT Form 1243, Section 8.5 “Supervise Construction” and Section 8.10 “Prepare and Approve Interim and Final Contractor Pay Estimates” will identify responsible Local Agency employees.

**11.2.8.** CDOT shall ensure that project actions will be administered in accordance with all applicable Federal laws and regulations. CDOT will use the following process on required approvals on sub-recipient projects and approved on sub-recipient administered projects.

- a. Consultant selection and management;  
Local Agency Manual:
  - i. Chapter 5 – Project Development, Section 5.3
  - ii. Chapter 8 – Construction Management, “Introduction”
  
- b. Environment;  
Local Agency Manual:
  - i. Chapter 1 – Project Application, “Environmental Impacts”
  - ii. Chapter 5 – Project Development, Section 5.7
  
- c. Design;  
Local Agency Manual, Chapter 5 – Project Development  
Project Development Manual
  
- d. Civil Rights;  
Local Agency Manual:
  - i. Chapter 5 – Project Development, Section 5.5
  - ii. Chapter 6 – Project Development Civil Rights and Labor Compliance
  - iii. Chapter 10 – Construction Civil Rights and Labor ComplianceCivil Rights and Business Resource Center Website:  
<http://www.codot.gov/business/civilrights>
  
- e. Financial management including audits and indirect cost allocation plans;  
Local Agency Manual:
  - i. Chapter 3 – Intergovernmental Agreements
  - ii. Chapter 4 – Federal Funding Obligation and Authorization
  - iii. Chapter 5 – Project Development, Sections 5.3 and 5.15
  - iv. Chapter 8 – Construction Management, Sections 8.10 through 8.17
  
- f. Right-of-Way;  
Local Agency Manual:
  - i. Chapter 1 – Project Application, “Right-of-Way Requirements
  - ii. Chapter 5 – Project Development, Section 5.8Right-of-Way Manual, Chapter 8 – Local Public Agencies
  
- g. Construction monitoring, including Quality Control/Quality Assurance (QC/QA); and  
Local Agency Manual:
  - i. Chapter 8 – Construction Management

ii. Chapter 9 – Materials  
Construction Manual  
Field Materials Manual

- h. Contract administration including CDOT’s responsibility to approve a sub-recipient to pursue a contract procurement method other than competitive bidding.  
Local Agency Manual, Chapter 3 – Intergovernmental Agreements

**11.2.9.** CDOT shall document its oversight activities for LPA-administered projects and findings, and how it will share this information with FHWA.

CDOT will involve FHWA in updates to the Local Agency Manual and submit all modifications for their approval. FHWA participates in the regularly scheduled Local Agency Roundtable meetings. CDOT will provide FHWA access to NAVIGATE for monitoring individual projects.

The Division Office will accomplish its oversight responsibilities thru:

- Regularly scheduled meetings with CDOT LPA program director and staff
- Participation in the regularly scheduled Local Agency Roundtable Team meeting with CDOT’s HQ and LPA regional staff
- Review of LPA construction projects for compliance with federal requirements
- Program and Process reviews

## **SECTION 12. IMPLEMENTATION AND AMENDMENTS**

- 12.1.** This S&O Agreement will take effect as of the effective date of the signature of FHWA Colorado Division Administrator, who shall sign this S&O Agreement last.
- 12.2.** The Division and CDOT agree that updates to this Agreement will be considered periodically on a case-by-case basis or when:
- Significant new legislation, Executive orders, or other initiatives affecting the relationship or responsibilities of one or both parties to the S&O Agreement occurs;
  - Leadership, or leadership direction, changes at CDOT or FHWA; or
  - Priorities shift as a result of audits, public perception, or changes in staffing at either CDOT or Division Office.
- 12.3.** The Division and State DOT agree that changes may occur to the contents of the Attachments to this S&O Agreement and documents incorporated by reference into the S&O Agreement. Except as provided in paragraph XII.D and E, changes to the Attachments and documents incorporated by reference will not require the Division and State DOT to amend this S&O Agreement. The effective date of any revisions to one of these documents shall be clearly visible in the header of the revised document. This Agreement and any revised document shall be posted on the Division’s S&O Agreement internet site within five (5) business days of the effective date.
- 12.4.** Any changes to the high risk categories must be documented by an amendment to this S&O Agreement.
- 12.5.** Any changes to the Project Action Responsibility Matrix must be approved by FHWA Office of Infrastructure in writing and documented by an amendment to this S&O Agreement.

## **APPENDIX A: CDOT AND FHWA ROLES AND RESPONSIBILITIES BY FUNCTIONAL PROGRAM AREAS**

The following subsections describe the functional/program stewardship and oversight areas that are subject to this S&O Agreement. They correspond to CDOT organizational chart in Appendix D.

This section provides information on how CDOT and FHWA are organized to accomplish each of the functional/program areas. Each subsection will address required reviews, specific working relationships, and efforts relating to management systems. Performance indicators without a specific target or baseline are tracked in the “Quality/Results” section, and performance measures with a quantitative target/baseline are tracked in the “Performance/Compliance Measures” section. In addition, the Program Responsibility Matrix (Attachment B) outlines actions that are required through the 23 Code of Federal Regulations (CFR) and other policy and guidance.

Under this S&O Agreement, CDOT Staff Branches are responsible for facilitating the preparation of statewide policy and procedural directives, providing technical assistance, conducting continuous technical training, and providing quality assurance (QA) in all program areas. In some instances the Staff Branches may be responsible for project production. CDOT Region offices are responsible for preparing project scoping and scheduling documents, environment and right-of-way clearance documents, local entity agreements, and overall management of the individual projects.

FHWA-Colorado Division is responsible for the stewardship and oversight of the Federal-aid Highway Program in Colorado. FHWA Area Engineers are responsible for the oversight activities and the Program Managers are responsible for the stewardship activities. In many instances, the Area Engineers may be responsible for both stewardship and oversight. The Program Managers are responsible for relating policy, providing technical assistance, working with other federal agencies and guiding their programs on a statewide basis. Both the Area Engineers and Program Managers are responsible for ensuring quality assurance (QA) of the entire FAHP in Colorado. FHWA Team Leaders are responsible for ensuring the Area Engineers and Program Managers receive the appropriate leadership so that they may conduct an efficient and effective QA program.

The following exceptions highlight approval requirements specific to Colorado.

The following actions require the approval of FHWA CO Division regardless of project funding:

- Addition of access points on the Interstate System;
- Changes in the access control of the Interstate;
- Use of Interstate airspace for non-highway-related purposes;
- Disposal of Interstate Right-of-Way;
- Design exceptions affecting Interstate highways (13 controlling criteria); and
- Changes in Interstate Land Use or Operations.

The following actions require the approval of FHWA CO Divisions for Federal-Aid Projects, regardless of oversight:

- Obligation of funds;
- Waivers to Buy America requirements (FHWA Washington Headquarters (HQ) approval required as noted in Mr. Horne’s July 3, 2003 memorandum);
- SEP-14/SEP-15 methods (FHWA HQ approval required for experimental contracting/project delivery methods);
- Environmental approvals except those specifically delegated under the “Programmatic Agreement between CDOT and FHWA for the Review and Approval of Certain NEPA Categorically Excluded Transportation Projects”,

- Hardship acquisition and protective buying;
- Modifications to project agreements;
- Final vouchers;
- Project Termini Extensions (23 CFR 635.120 and 23 CFR 635.102);
- Major Design Changes (as defined in CDOT's Construction Manual, 120.7.7.1, "significant" to be determined via discussions between Area Engineer and CDOT)
- Material Change to the Scope of Work (i.e. additional capacity, additional access, major extra work, deletion of work etc.)
- Changes affecting Environmental Commitments; and
- Administrative Resolution of Claims (excluding Dispute Review Board Recommendations).

Information on the following functional areas is provided:

**Reports to CDOT Chief Engineer**

- Applied Research and Innovation (1)
- Asset Management (2)
- Civil Rights (3)
- Contracting, Engineering Estimates and Other Project Support (4)
- Environment (5)
- Hydraulics (6)
- Pavement and Materials (7)
- Planning (8)
- Program and Project Delivery
  - Design and Construction (9)
  - Program Management (10)
- Right-of-Way (.11)
- Structures (12)

**Reports to CDOT Chief Financial Officer**

- Financial Management (13)

**Reports to CDOT Chief Operating Officer**

- Maintenance and Operations (14)
- Transportation Systems and Management Operations (TSM&O)
  - TSM&O Overview (15)
  - Traffic and Safety Engineering (16)
  - Intelligent Transportation System (ITS)/ Technology (17)
  - Active Traffic Management and Operations Branch (18)

## **SECTION 1. ENGINEERING: APPLIED RESEARCH AND INNOVATION**

### **1.1. INTRODUCTION**

The Applied Research and Innovation (Research) program includes activities related to transportation technology.

### **1.2. METHOD OF OPERATION**

The role of FHWA is to conduct research of national focus and to transfer those technologies to state and local transportation agencies. The role of CDOT's Research Branch is to conduct research specific to state transportation needs and problems and to transfer technologies developed elsewhere into practice in Colorado.

### **1.3. CDOT ORGANIZATION**

The Research, Development, and Technology Transfer program (RD&T) at CDOT is the responsibility of the Applied Research and Innovations Branch (ARIB) of the Division of Transportation Development (DTD). The Structures and Technology Applications Team will handle the Federal-aid operations of research and technology transfer activities.

The primary products are:

1. Applied research: The study of phenomena relating to a specific known need in connection with the functional characteristics of a system to answer a question or solve a problem;
2. Development: The translation of basic or applied research results into prototype materials, devices, techniques, or procedures for the practical solution of a specific problem in transportation; and
3. Technology Transfer: Dissemination, demonstration, training, and other activities that lead to the eventual deployment of a new technique or product.

### **1.4. FHWA ORGANIZATION**

FHWA Research Program Manager is the primary liaison for research related activities with CDOT. The Manager will approve the CDOT Research Manual and review final research reports produced by or for CDOT to ensure Federal-aid funds are appropriately used. In addition, the Manager will serve on CDOT Research Implementation Council (RIC) that is responsible for guiding and directing the research and development program. The Manager provides expertise, leadership, and oversight of the Local Technical Assistance Program (LTAP). Also, the Manager serves as the principal advisor to CDOT on federal requirements for a variety of significant national studies, transportation needs, and administrative requirements.

### **1.5. QUALITY**

The purpose of RD&T at CDOT is to save Colorado money, time, and lives, and to improve the quality of life and the environment through the development and deployment of new or innovative methods, products, or materials in the planning, design, construction, and operation of transportation. The ultimate measure of quality is how effectively this is accomplished. To meet this purpose, research must be timely, relevant and valid when applied to priority real-world problems. It must also be cost-effective, and

accurately documented and disseminated. The technology must be appropriately transferred to the practitioner so as to be effectively utilized.

Quality is controlled in RD&T through oversight and review by experts and stakeholders. Oversight Teams and RIC are used to help focus the research program into priority areas with urgent problems to be solved. Research study panels composed of subject matter experts and practitioners with an interest in utilizing the research results are used in conjunction with each research study. A peer review of CDOT's research management process will be conducted every three years by researchers from other state DOTs after being trained in techniques for performing a peer review. The last Research Peer Exchange occurred in October 2015.

FHWA and CDOT will also develop risk response strategies of CDOT's research process when necessary.

This process is documented in the *Colorado Department of Transportation Research Manual (July 2015)*.

## 1.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Research Program:

**Table 1 - Performance/Compliance Measures (Research)**

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	Reporting Frequency
97	<b>Percent of recommendations implemented</b>	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%	State FY
412	<b>Number of projects completed on schedule</b>	The number of projects completed in the fiscal year on schedule	Research Work Plan and Report	10	State FY
415	<b>Percent of annual SPR funds spent</b>	Percent of annual fund spent on RD&T (professional services) activities	Research Work Plan and Report	Minimum 50%	State FY
416	<b>The annual number of classes scheduled by the LTAP Center</b>	The number of classes scheduled by the LTAP Center	Annual Report	70	State FY
417	<b>The annual number of people trained by the LTAP Center</b>	The number of people who attended classes offered by the LTAP Center	Annual Report	1400	State FY
473	<b>The annual number of people attending training on the Front Range and Eastern Plains</b>	The number of people attending training from the Front Range and Eastern Plains	Annual Report	1000	State FY
474	<b>The annual number of people attending training on the Western Slope</b>	The number of people attending training from the Western Slope	Annual Report	400	State FY

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/ Baseline</b>	<b>Reporting Frequency</b>
475	<b>The annual number of agencies attending training offered by the LTAP Center</b>	The number of agencies attending training offered by the LTAP Center	Annual Report	100	State FY

## **SECTION 2. ENGINEERING: ASSET MANAGEMENT**

### **2.1. INTRODUCTION**

Asset management is a strategic and systematic process of operating, maintaining and improving physical assets, with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost. (23 U.S.C. 101(a)(2), MAP-21 § 1103). CDOT invests in assets such as pavement, bridges, roadway equipment and Intelligent Transportation Systems, as well as the maintenance of each of these assets.

The Department's Performance and Asset Management Branch (PAMB) coordinates with the program managers of these assets, Regional and Division staff, and other agencies to comprehensively manage these assets. PAMB'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.

### **2.2. METHOD OF OPERATION**

The Performance and Asset Management Branch facilitates performance measures and asset management dialogue within CDOT and with external stakeholders. This role has become more important with the Moving Ahead for Progress in the 21<sup>st</sup> Century legislation (MAP-21), which was signed into law in July 2012 and took effect in October 2012. MAP-21 requires state departments of transportation nationwide to develop and implement risk-based transportation asset management plans and to establish statewide performance targets for the National Highway System. PAMB has been working with CDOT staff in planning, engineering, and finance, along with Transportation Commissioners, to fulfill the new federal requirements. The result of this effort is the initial Risk-Based Asset Management Plan (RB AMP).

### **2.3. CDOT ORGANIZATION**

1. Transportation Commission: The Colorado Transportation Commission directs CDOT in the management of the state transportation system. The Commission is composed of 11 Commissioners who represent specific districts in the state and are appointed by the Governor to four-year terms. State law empowers the commission to formulate general transportation policy and to advise and make recommendations to the Governor and the General Assembly on issues related to transportation policy and CDOT's budgets and programs.
2. DTD: CDOT's Division of Transportation Development includes five branches: Multimodal Planning, Information Management, Environmental Programs, Applied Research and Innovations, and Performance and Asset Management. The Planning, Information Management, and Performance Branches work closely together to identify and meet federal requirements. As CDOT gains more understanding in the areas of life-cycle asset management, the Performance and Asset Management Branch will provide objective analyses of the costs and benefits of investing in each asset.

Asset managers provide expertise on the inventory, condition, and expected life cycle for their areas. PAMB works with the asset managers to understand the current and forecasted

condition of assets based on various levels of funding, using a budget scenario trade-off tool developed for this purpose.

3. Project Support: The asset program areas for pavement, bridge, walls, tunnels, culverts, and geohazards fall under the Department's Division of Project Support.
4. Highway Maintenance: The asset program areas for maintenance and road equipment fall under the Department's Division of Highway Maintenance.
5. Transportation Systems Management and Operations: The asset program areas for intelligent transportation systems and signals fall under the Department's Division of Transportation Systems Management and Operations.
6. Buildings or Property Management: The asset program for buildings reports to the Chief Engineer.
7. OFMB: CDOT's Office of Financial Management and Budget (OFMB) within CDOT's Division of Finance and Accounting works with the Governor's Office of State Planning and Budget to determine CDOT's annual budget as well as short- and long-term revenue forecasts. PAMB works with OFMB to identify the overall budget available to the asset areas and determine which inflation and revenue assumptions should guide discussion across all assets.

## **2.4. FHWA ORGANIZATION**

The oversight of Asset Management activities at CDOT requires the development of a process to create a risk-based transportation asset management plan, and this process must be certified by FHWA. CDOT worked closely with FHWA-Colorado Division Office staff to develop the initial RB AMP, and continues to work with FHWA on implementation tasks, the top 10 gaps, and FHWA certification.

## **2.5. QUALITY**

The RB AMP includes:

- 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

## **2.6. PERFORMANCE/COMPLIANCE MEASURES**

CDOT has developed a risk-based asset management program to meet MAP-21 requirements.

## **SECTION 3. ENGINEERING: CIVIL RIGHTS**

### **3.1. INTRODUCTION**

The Civil Rights program is responsible for all activities relating to civil rights in CDOT and at the national level.

### **3.2. METHOD OF OPERATION**

The Civil Rights programs are non-exempt under MAP -21; therefore, FHWA oversight continues. The Civil Rights Program Section 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 the Civil Rights & Business Resource Center (CRBRC) to monitor on a programmatic and statewide basis. Staff from CDOT's CRBRC, work in partnership with each Regional Civil Rights Office (RCRO) and with the FHWA Civil Rights Specialist (CRS) to review, evaluate, and improve CDOT's Civil Rights Programs.

Civil rights programs are an integral part of all aspects of CDOT's on-going activities. The partnership between CDOT and FHWA continues to be an important part of ensuring compliance with the letter and spirit of laws and regulations.

### **3.3. CDOT ORGANIZATION**

Reporting directly to the Transportation Program Director/Chief Engineer, the Civil Rights & Business Resource Center (CRBRC) at CDOT Headquarters provides direct services as well as statewide program oversight. Program activities include:

- Title VI Program Implementation & Assessment;
- Americans with Disabilities Act (ADA) Title II Program Implementation & Assessment;
- Disadvantaged Business Enterprise (DBE) Program;
- DBE Supportive Services (Connect2DOT Program);
- Emerging Small Business (ESB) Program (Race Neutral);
- Contractor Compliance (External EEO);
- External Workforce Development including the FHWA On On-the-Job Training (OJT) Program;
- OJT Supportive Services; and
- Internal EEO (Affirmative Action) compliance reporting and quality assurance/training.

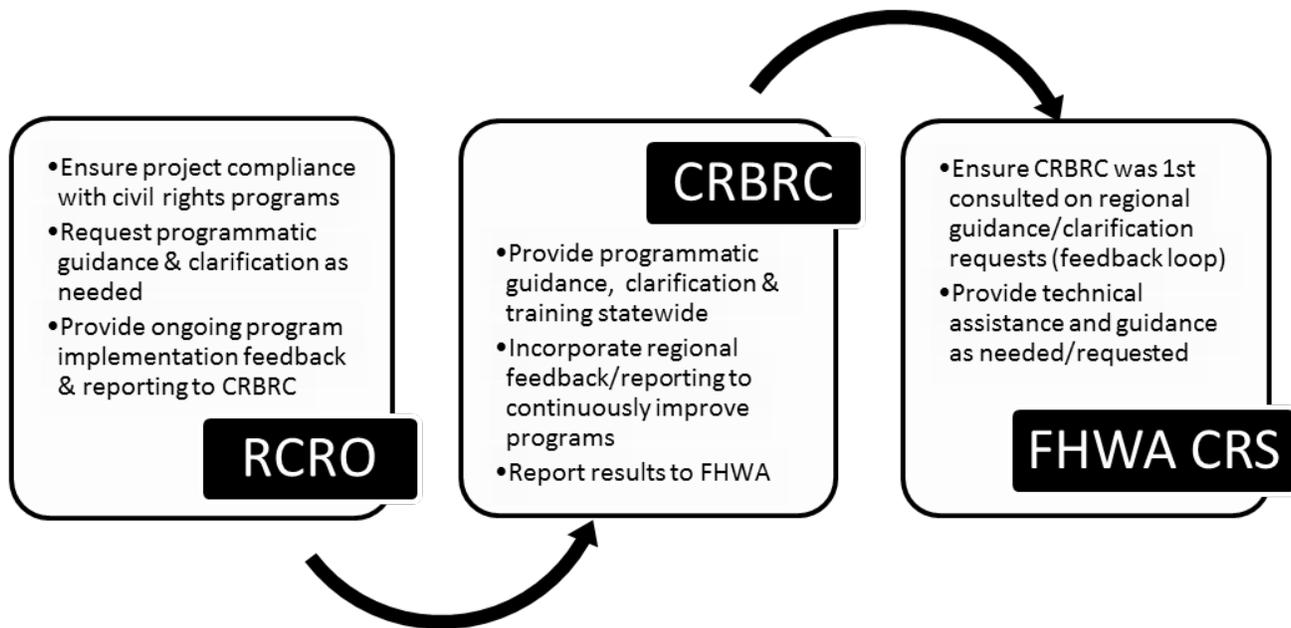
The following "internal" Civil Rights program activities remain under the Strategic Workforce Solutions (SWS) Unit at CDOT Headquarters. :

- Internal EEO investigations;
- Sexual Harassment prevention and investigation (Title VII); and
- ADA Title I compliance, training, and investigations.

Regional Civil Rights Offices (RCROs) are responsible for implementation of both the "internal" and "external" Civil Rights functions in their respective CDOT Regions.

### **3.4. FHWA ORGANIZATION**

FHWA-Colorado Division Office has the lead role in partnering with CDOT on all Civil Rights Program matters. The FHWA Civil Rights Specialist (CRS) is the principle contact under this Stewardship Agreement. To ensure appropriate oversight and statewide reporting is maintained, Division Office staff will coordinate all Civil Rights matters in collaboration with CDOT's CRBRC in the following manner:



The primary products of FHWA Division Office include technical assistance, regulatory guidance and coordination of training from the Division Office, the Resource Center and FHWA Headquarters.

### 3.5. QUALITY

The CRBRC is responsible for the statewide implementation, performance and overall quality control of all aspects of CDOT's Civil Rights Programs. Departmental Program Performance Measures (Table below) have been established and are monitored by this office. The FHWA Program Responsibility Matrix outlines the deliverables the CRBRC is responsible for providing to FHWA. Regional Civil Rights Offices (RCRO) are responsible for providing the CRBRC with all necessary data to allow CRBRC to perform its overall QA/QC responsibilities and to ensure activities are being performed in a transparent and consistent manner statewide. The CRBRC, the RCRO, and the CRS host monthly meetings to discuss each of the civil rights program areas. Planning is underway for a statewide training summit to occur in February, 2016. Furthermore, a statewide reporting portal was recently implemented with plans for a full Civil Rights & Labor (CRL) AASHTOWare Module to be fully implemented by the summer of 2016.

Quality control is documented by various reports made to FHWA and the Colorado Transportation Commission. Additionally, the CRBRC Director and/or FHWA Civil Rights Specialist conducts as needed Civil Rights Program Quality Assurance Reviews of Regional Civil Rights Office(s) and/or specific program areas to ensure that CDOT's civil rights programs are being appropriately implemented.

### 3.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Civil Rights Program:

**Table 2 - Performance Measures (Civil Rights)**

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	Reporting Frequency
107	<b>DBE participation (as percentage) to date on Federal Aid Highway Program</b>	DBE Program	Transport	12.15%	Federal FY <b>Semiannual Reporting</b>
459	<b># of DBE firms receiving supportive services/benefits</b>	DBE Supportive Services (DBE/SS)	Connect2DOT Program	100	Federal FY
313	<b># of completed Contract Compliance Reviews</b>	Contractor Compliance (External EEO) Program	Google Drive	18	Federal FY
460	<b># of OJT hours achieved</b>	On the Job Training (OJT) Program	Google Drive	50,000 hours	Federal FY
461	<b># of persons placed and employed (post-services)</b>	OJT Supportive Services (OJT/SS)	Google Drive	50	Federal FY
310	<b># of completed STA reviews</b>	Title VI Program	Title VI Assessment	10	Federal FY
462	<b># of completed sub recipient reviews</b>	ADA Title II Program	ADA Transition Plan	10	Federal FY

## **SECTION 4. ENGINEERING: CONTRACTING, ENGINEERING ESTIMATES AND OTHER PROJECT SUPPORT**

### **4.1. INTRODUCTION**

The Contracts and Market Analysis (CMA) Branch is responsible for preparing contracts for construction projects and professional consulting services, engineering cost estimates for projects prior to bidding, bid collusion detection, materially unbalanced bid detection and AASHTOWare Project software support. The Branch Units responsible for supporting the aforementioned tasks include Engineering Contracts, Engineering Estimates and Market Analysis (EEMA) and AASHTOWare Project Support.

### **4.2. METHOD OF OPERATION**

The Engineering Contracts Unit contracts for construction and professional services in accordance with applicable Federal rules and regulations. The EEMA Unit prepares project engineering cost estimates, as required by federal regulations, and monitors bidding activity for materially unbalanced bids and collusion. The AASHTOWare Project Support Unit provides technical support on the AASHTOWare Project suite of software to statewide users.

### **4.3. CDOT ORGANIZATION**

1. Engineering Contracts: The Engineering Contracts Unit provides two different types of services – construction contracting and professional services contracts. The construction contracting unit 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 Engineering Contracts Unit 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.
2. Engineering Estimates and Market Analysis (EEMA): The EEMA Unit prepares engineering cost estimates of construction projects prior to bidding, serves as an independent cost estimator (ICE) on CM/GC projects, performs materially unbalanced bid analysis and bid collusion analysis on submitted bids and prepares cost estimates for added work on active construction projects.
3. AASHTOWare Project Support: The AASHTOWare Project Support Unit is responsible for user support for the AASHTOWare Project software used for pre-construction and construction project management, including training, technical assistance, and reporting.

### **4.4. FHWA ORGANIZATION**

The Program Delivery Teams in FHWA-Colorado Division are responsible for contract administration, contract changes, dispute resolution and claims. The teams consist of a Program Delivery Team Leader who has leadership responsibility for the team, Area Engineers, and other Program Managers. Area Engineers within each of FHWA Program Delivery Teams are assigned to and serve as liaisons for each of CDOT Regions

#### 4.5. QUALITY

The following elements are included:

- Tracking of Professional Services selections and contracts executed;
- Tracking of Professional Service Contract average routing times;
- Tracking of Professional Services Task Order average routing times;
- Tracking of Construction contracts awarded;
- Tracking of Construction Contract Advertisements deferred by revisions;
- Tracking of Construction bids versus Engineer's Estimates and contracts awarded;
- Reviewing contract documents to ensure proper form;
- Oversight of CDOT process to request FHWA approval of consultant PM prior to contract per CFR 172.7(b)(5); and
- Tracking of training courses offered and employees trained.

#### 4.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Contracts and Market Analysis Branch Programs:

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

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	Reporting Frequency
239	<b>Percent of projects awarded without a justification letter and CE approval</b>	Percent of awarded low bids within +15% to -20% of Engineer's Estimate on projects over \$500,000	CDOT Branch Work Plan, Chief Engineer Objectives	85%	State FY
463	<b>Percent of projects awarded within set percentage of Engineer's Estimate</b>	Percent of awarded low bids within +/- 10% of Engineer's Estimate on ALL projects	CMA Branch Work Plans	55%	State FY Quarterly reporting
241	<b>Percent of projects awarded within set timeline of bid opening (CDOT oversight and FHWA oversight)</b>	Percent of projects awarded within 30 days of bid opening	CMA Branch Work Plans, Chief Engineer Objectives	95%	State FY Quarterly reporting
246	<b>Percent of professional services contracts executed within set timeline</b>	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%	State FY

## **SECTION 5. ENGINEERING: ENVIRONMENT**

### **5.1. INTRODUCTION**

The Environmental Program is based on policy guidance from both CDOT and FHWA.

The national commitment to the environment was formalized through the passage of the National Environmental Policy Act (NEPA) of 1969. NEPA establishes a national environmental policy and provides a framework for environmental planning and decision-making. NEPA directs FHWA and CDOT, when planning projects or issuing permits, to conduct environmental reviews to consider the potential impacts on the environment by their proposed actions. The NEPA process consists of a set of fundamental objectives that include interagency coordination and cooperation and public participation in planning and project development decision-making.

Environmental reviews involve an interdisciplinary and interagency process. FHWA and CDOT work cooperatively with other federal and state agencies during the environmental review process. This coordinated review process includes input from the public, as well as from other agencies, to guarantee that all environmental protections, as well as all other issues are addressed.

Environmental streamlining drives FHWA to improve project delivery without compromising environmental protection. Environmental stewardship helps demonstrate that FHWA is mindful of the natural and human environment while addressing mobility and safety needs of the public. FHWA promotes actions that show it is a responsible steward of the environment. FHWA takes advantage of opportunities to enhance environmental protection and encourage partnerships that promote eco-system conservation or encourage broader mitigation strategies that seek corridor or watershed based approaches. Environmental streamlining solutions must go hand in hand with principles of stewardship.

CDOT's "Policy Directive 14.0 (2015 update), Statewide Transportation Planning" describes the planning principles CDOT will use to conduct business in carrying out the statewide transportation planning process with regard to environmental sustainability. It states that CDOT will:

"Incorporate social, economic, and environmental concerns into the planning, design, construction, maintenance, and operation of a state multimodal transportation system. Support coordinated decision making that balances transportation, land and resource use, and quality of life needs. Promote a transportation system that minimizes impacts to and encourages preservation of the environment, and follows CDOT Environmental Stewardship Guide. Provide a sustainable transportation system that meets existing needs without compromising the ability to provide for the future."

The Transportation Commission supports proactive techniques to mitigate impacts of the transportation system on the environment by developing creative strategies that:

- Comprehensively address anticipated environmental impacts of the state transportation system;
- Consider project enhancements in affected communities in a cost effective manner;
- Are consistent with the mission of the Department;
- Expedite project development.

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

- Environmental issues are identified early;
- Appropriate impact analyses are performed in a timely manner;
- Adequate documentation is submitted and reviewed as scheduled;
- 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
- Environmental commitments are completed.

Timely compliance with the environmental requirements is critical for advancing projects. The regions, with assistance from the Project Development Branch and 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.

## **5.2. METHOD OF OPERATION**

For the environmental function, FHWA maintains ultimate responsibility and approval authority for all activities requiring federal actions. Interagency coordination and stewardship are maintained through routine contacts in person, by telephone, by electronic mail, and in writing during the course of transacting normal business operations. Contact normally occurs between the FHWA Environmental Program Manager (Env PM) and CDOT's Environmental Programs Branch (EPB) Manager/ NEPA Program Manager. On specific project activities, stewardship and oversight coordination occurs between CDOT's decentralized Region Planning and Environmental Managers (RPEMs) and FHWA Area Engineers (AEs). CDOT EPB Manager/ NEPA Program Manager, FHWA Env PM, and CDOT Environmental Specialists assist in coordinating interagency approvals for various environmental resources impacted by projects.

Environmental considerations affect virtually all aspects of transportation. Coordination and interaction with other disciplines is necessary to administer the environmental program. Sometimes project specific decisions affect statewide policy. In such cases, the RPEMs should consult with the EPB Manager/ NEPA Program Manager and FHWA Env PM. Similarly, if CDOT EPB Manager/ NEPA Program Manager or FHWA Env PM observes potential policy implications of project level decisions, such concerns should be discussed with CDOT RPEM and FHWA AE. FHWA Planning and Environment (P&E) Team Leader and Env PM will work with other federal agencies and the EPB Manager/ NEPA Program Manager on program and project matters to ensure statewide consistency in intergovernmental working relationships.

In the environmental functional area, there are several diverse factors that influence the quality of the products and services delivered. First, the timely delivery of specific environmental activities is critical to advancing transportation projects toward successful completion. For CDOT staff specialists, project compliance activities should be completed on or ahead of the established schedule date. For Region personnel, all NEPA documents should be completed in time for review and approval by FHWA prior to the scheduled project advertisement date. For major NEPA documents (Environmental Assessments [EAs] and Environmental Impact Statements [EISs]), EPB review will be completed prior to forwarding documents on to FHWA for approval, unless otherwise agreed to in advance per CDOT's Environmental Document Review Procedures (Chapter 8 of CDOT NEPA Manual). Second, CDOT's public involvement procedures should include soliciting the views of all affected members of the public and should be implemented in accordance with Executive Order 12898 on Environmental Justice. The general effectiveness of this program can be measured by the number, substance and general tone of both positive and negative comments received on the environmental documents. Third, FHWA and CDOT should constantly strive to improve the existing working relationships with the many resource protection agencies involved in the environmental functional area (the US Fish and Wildlife Service, the US Army

Corps of Engineers, the US Environmental Protection Agency, the State Historic Preservation Office, the Colorado Parks and Wildlife, the Colorado Department of Public Health and Environment, etc.).

### **5.3. CDOT ORGANIZATION**

CDOT's environmental function is divided between the region environmental offices and the central office staff, consisting of the EPB and one position in the Office of Major Project Development (OMPD). CDOT's environmental program consists of numerous interrelated responsibilities requiring close coordination between all parts of CDOT.

EPB generally has the lead in providing technical expertise to the regions and other CDOT Branches/Divisions, assisting regions with project development by helping scope a project for resource issues and applicability of NEPA/PEL approach, providing specialty clearances, reviewing of NEPA documents, resolution of special environmental issues, and development and implementation of memoranda of understanding and agreement with resource and regulatory agencies.

EPB also develops environmental streamlining initiatives, environmental policy guidance, programmatic agreements, and environmental data for use in the planning and project development process, and assists regions and the Office of Major Project Development (OMPD) in early corridor environmental analyses.

Regions are responsible for all project development, and for construction- and maintenance-related environmental activities, with assistance from central staff as necessary. The OMPD is also responsible for working with the regions for project development activities.

### **5.4. FHWA ORGANIZATION**

Oversight of the environmental function in the Colorado Division Office is the responsibility of the P&E Team Leader, Env PM and the AEs assigned to each of CDOT's region offices. FHWA's primary responsibility is to review, interpret and provide guidance and training on environmental policy, procedures and regulations by maintaining active liaison with CDOT program and project personnel, and with other federal, state and local agencies. Assistance is provided to CDOT when addressing technically complex or controversial issues on general or project specific applications related to environmental policy and interagency coordination.

It is also FHWA's responsibility to ensure environmental requirements are properly satisfied on individual projects. FHWA reviews and approves all environmental documents (project categorization requests, NEPA documents, wetland findings, Section 106 compliance, and Section 4(f) Evaluations, etc.), with the exception of those that are subject to the Programmatic Agreements or guidance between CDOT and FHWA, such as the review and approval of certain NEPA Categorical Excluded transportation projects.

### **5.5. QUALITY**

FHWA and CDOT review all environmental documents, attend public hearings and other project development meetings as necessary, and monitor news articles to assess the quality of work being planned and developed by CDOT. In addition to internal coordination, CDOT and FHWA will work with other state and federal reviewing agencies, Indian Tribes, local and regional governments, and the general public to ensure that their views on the environmental function are considered in developing areas for quality improvement.

Under the Stewardship Agreement, CDOT and FHWA personnel work together as partners to continually review, evaluate, and improve the environmental program. The main emphasis areas of the Agreement

are strengthening the environmental function by sharing information and correcting identified weaknesses. FHWA Env PM (or other designee) will be a member on the Environmental Advisory Committee (EAC). CDOT Environmental Program Branch Manager and FHWA Env PM will host quarterly meetings with region environmental personnel to share information, improve the quality and consistency of the various CDOT regional offices, and instill an environmental ethic throughout the agency.

Annually, CDOT and FHWA should sponsor an Environmental Training Workshop for all region and headquarters environmental personnel. The purpose of the workshop is to provide training on new requirements and refine expertise on various resource issues. In addition, National Highway Institute (NHI) courses and other resources will provide training to the regions on specific environmental programs. Agencies with special expertise are invited to participate in training for CDOT/FHWA environmental program.

Information that documents the environmental program will be kept current, as information sources permit. CDOT’s Project Development Manual and NEPA Manual will be continually improved on a resource-by-resource basis as necessary and appropriate. The list of Intergovernmental Agreements on CDOT’s website <http://www.codot.gov/programs/environmental/resources/intergovernmental-agreements> will be reviewed and regularly updated. FHWA’s Standard Operating Procedure for NEPA and Section 4(f) Review and Approval will be continually updated as laws, regulations, policies and procedures change and as FHWA HQ produces new materials. In addition, information on water quality and CDOT’s Municipal Separate Storm Sewer System (MS4) Permit will be available on CDOT’s website.

Proposed review areas will be included as recommendations to CDOT/FHWA Quality Improvement Council and become a part of the overall CDOT/FHWA Stewardship program.

The following performance indicators will help assess the health of the Environmental Program:

**Table 4 - Performance/Compliance Indicators (Environment)**

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
625	<b>Completion time for environmental documents</b>	The time to complete an EA from 45 days after the date of the initial Coordination Letter through the Finding of No Significant Impact (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	Calendar Year <b>Quarterly reporting for EIS/ EAs</b>
104, 381-382	<b>Active and completed NEPA documents</b>	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 ((Categorical Exclusion [CE], EA, EIS) as added to previous years’ data	Track trend	Calendar Year <b>Quarterly reporting for EIS/ EAs</b>

## 5.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will help assess the health of the Environmental Program:

**Table 5 - Performance/Compliance Measures (Environment)**

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

<sup>1</sup> EPA rates EIS documents from best to worse as: LO (Lack of objections), EC (Environmental Concerns), 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.

## **SECTION 6. ENGINEERING: HYDRAULICS**

### **6.1. INTRODUCTION**

CDOT Region Hydraulic Engineers (RHEs) are responsible for the hydraulic design and review of bridges, culverts and roadside drainage. The RHE coordinates with many agencies involved with flood plain issues. The Staff Hydraulic Engineer (SHE) provides leadership, training, guidance and represents CDOT as the technical authority for hydraulics. FHWA Division Bridge Engineer or Area Engineer is the primary contact for the Division for hydraulic related issues.

### **6.2. METHOD OF OPERATION**

CDOT and FHWA will review bridge culverts and bridges for hydraulic conformance to state and federal design requirements for all Projects of Division Interest (PODI) and Projects of Corporate Interest (POCI). The FHWA Bridge Engineer will coordinate directly with the SHE regarding FHWA requests and training announcements.

### **6.3. CDOT ORGANIZATION**

The RHE's are responsible for hydraulic designs for roadway drainage, culverts, bridges, water quality sediment ponds, detention basins, and open and closed channels. They provide water quality and environmental support and provide expertise for drainage issues in their region. The RHE also provides leadership for erosion and sediment control mitigation, bridge scour, channel improvements and coordinates with the Federal Emergency Management Agency (FEMA), Colorado Department of Public Health and Environment (CDPHE), US Army Corps of Engineers (USACE) and regional floodplain administrators with water and floodplain issues. Additionally, the RHE reviews developers' consultant drainage design plans and reports for potential impacts to state highway rights-of-way.

The SHE represents CDOT as the technical authority by coordinating training, developing policy guidance, maintaining the Drainage Design Manual and fostering hydraulic related research. The SHE also represents CDOT for hydraulics at American Association of State Highway and Transportation Officials (AASHTO), Urban Drainage and Flood Control District (UDFCD), Colorado Association of Stormwater and Floodplain Managers (CASFM) and other technical organizations. The SHE is the manager of the current consulting project to update the plans of action for scour critical bridges statewide. The SHE will coordinate status meetings with FHWA and Staff Bridge on an as-needed basis.

### **6.4. FHWA ORGANIZATION**

The Division Bridge Engineer will be the primary contact for hydraulics. The Division Area Engineers will also provide hydraulic related input for project reviews at their discretion.

### **6.5. QUALITY**

The Staff Hydraulics makes the Drainage Design Manual available to the public through CDOT's web page. The RHE will have their project drainage designs and reports reviewed independently; either by a consultant or other outside source. FHWA and the SHE can request a hydraulic report from the region for their review at their discretion. FHWA and the SHE will meet annually and make recommendations to the QIC for future related QA's involving hydraulics. The SHE will organize and conduct an annual meeting with all Region Hydraulic Engineers and meet on an as-needed basis with Region Hydraulic Engineers to discuss projects, issues and concerns.

## 6.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measure will be used to assess the health of the Hydraulics Program:

**Table 6 - Performance/Compliance Measures (Hydraulics)**

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

## **SECTION 7. ENGINEERING: PAVEMENTS AND MATERIALS**

### **7.1. INTRODUCTION**

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.

### **7.2. METHOD OF OPERATION**

CDOT and FHWA will work together as partners to review the materials, pavement, and geotechnical programs, verify procedures, and provide solutions to identified problem areas. This working relationship requires teamwork across functional boundaries in FHWA and CDOT. The utilization of outside resources, such as industry groups and organizations, will be considered in this joint effort.

### **7.3. CDOT ORGANIZATION**

1. Soils / Geotechnical Program: The mission of the Soils/Geotechnical Program is to provide geological and geotechnical engineering recommendations and support for the design, construction and maintenance of CDOT projects involving roadway cut and fill, bridge, retaining wall, and other transportation structure foundations. This Program also manages and runs pile driving analyzation program for bridge construction in addition to the Western Alliance for Quality Transportation Construction (WAQTC) certification for construction soil testers. This Program manages CDOT's geotechnical drilling operations, which includes the installation of geotechnical instrumentation for long term monitoring. The Soils/Geotechnical Program works collaboratively with the Geohazards Program to evaluate geotechnical and geological hazards such as embankment and slope failures, landslides, sink holes, debris flows and others, as they affect safety and mobility, along with providing emergency services for these features.
2. Geohazards Program: The mission of the Geohazards Program is to provide expertise in the geotechnical engineering and geohazard fields. This involves data collection, interpretation, analysis, review and design work that direct the planning, design, construction and maintenance of civil engineering and environmental projects for CDOT. The engineers and scientists in this program provide geological expertise for rockfall, rockslide, mudslide and landslide geological hazard mitigation, design, construction and planning. This Program develops and maintains the statewide Geohazard Management System for directing funds and identifying statewide projects. The Program also provides emergency services for geological hazards, highway embankment, and slope and subgrade failures. The Geohazards Program works collaboratively with the Soils/Geotechnical Program to provide soils and geotechnical engineering support. The Program manages CDOT's aerial reconnaissance program used to assess and document emergency conditions and project development statewide.
3. Concrete & Physical Properties Program: The mission of the Concrete and Physical Properties Program is to provide timely and accurate test results for concrete, aggregate, soils, steel, and other construction and maintenance materials, maintaining an accredited laboratory in accordance with the AASHTO accreditation program (AAP). This program provides statewide Portland cement concrete coordination through engineering and technical expertise that will assist the regions in the development of the Department's transportation system to meet the structural condition goals for

bridges and the surface condition goals for pavement established by the Transportation Commission. This Program consists of the concrete and steel testing unit, the aggregate testing unit, soils testing unit, the pavement deflection and smoothness testing unit, the radiation safety unit, and engineering support.

The primary products include review of concrete mix designs, design, production and quality assurance testing, and concrete design specifications for aggregates and concrete. Quality assurance of many materials listed as Certificate of Compliance (COC) or pre-inspection is included.

4. Asphalt Program: The mission of the Asphalt Pavement Program is to provide timely and accurate asphalt mix and binder testing, ensure high quality of CDOT asphalt mix and binder testing statewide, and provide engineering and technical expertise in the development, selection, application, construction, testing and maintenance of asphalt mix and binder materials that will assist the regions in the development of the Department's transportation system to meet the surface condition goals established by the Transportation Commission. The Asphalt Pavement Program consists of the Bituminous and European Laboratory, the Flexible Pavement Laboratory, Chemical Unit and the Asphalt Engineering Unit. The Program maintains an accredited laboratory in accordance with the AASHTO accreditation program (AAP).

Products of this program include production and assurance testing of asphalt mix and binder and the development of mix design specifications and testing procedures. They also include QA testing of asphalt binders and emulsions, development of specifications, including performance-graded binders, and testing of mixtures using European and performance testing methods. In addition, specifications for Hot Mix Asphalt (HMA) and other asphalt mixtures are reviewed and developed;

5. Pavement Management Program: The Pavement Management Program functions to implement the most cost effective surface treatment and pavement maintenance program possible. The primary function is to create planning tools to be utilized in development of the Department's transportation system such that it meets the surface condition goals established by the Transportation Commission.

The primary products and function of the Pavement Management Program include:

- Network level pavement management condition and funding recommendations,
- Project level pavement management procedures,
- Completion of the annual pavement surface condition survey and analysis of the results at both the network and region levels,
- Quality assurance of condition data collection,
- Provide project recommendations and report on matching percentage of projects constructed by the regions,
- Provide training relevant to pavement management and preventive maintenance, and
- Provide technical expertise regarding improvements to procedures and policies relevant to pavement management.

6. Pavement Design Program/Documentation Unit: The mission of the Pavement Design Program is to give technical expertise in the development of Mechanistic – Empirical pavement designs and statistical materials acceptance specifications, offer technical expertise to all appropriate personnel, and provide statewide support for the Site Manager Materials and Laboratory Information Management System software used for construction project management, including training, technical assistance, and reporting while being responsive to customer needs in a timely and professional manner.

The primary products of the Pavement Design Program include:

- Implementation and enhancements to the Mechanistic – Empirical pavement design procedures,
- QC & QA specification development,
- Engineering software support,
- SiteManager Materials and Laboratory Information Management System support, and
- QARs of pavement construction projects (as needed).

The Documentation Unit is part of the Pavement Design Program. It oversees and maintains AMRL and CCRL Certification Records for the Materials Branch. Also, this unit ensures compliance with AASHTO Designation R- 18 and updates and maintains the AASHTO Accreditation Program Quality System Manual. This Unit maintains the records of certification for the Annual Region Laboratory Inspection of testing equipment and reviews the Assurance Sampling and Testing Program to assure compliance with Title 23, CFR, Part 637, Subpart B. It also provides materials documentation training and quality assurance review of materials documentation and final materials certification. This Unit is responsible for publication and currency of CDOT Field Materials Manual, Pavement Design Manual, and the Laboratory Manual of Test Procedures.

#### **7.4. FHWA ORGANIZATION**

FHWA-Colorado Division has assigned one engineer the primary responsibilities associated with the stewardship and oversight of the Pavements and Materials program. The Division Pavement/Materials Engineer is the lead contact for Pavement Management and Design, as well as the Asphalt and Materials Programs. The Division Bridge Engineer will handle Structural Concrete, Rockfall and Geotechnical Programs. The Division Operation Engineers will resolve project issues with CDOT Project Managers with consultation when necessary with the Division Pavement/Materials Operation Engineer.

The Division will provide technical assistance to CDOT in the development of material and pavement specifications and provide quality assurance reviews of the programs.

#### **7.5. QUALITY**

CDOT and FHWA individuals responsible for materials and geotechnical engineering conduct a variety of activities to ensure quality control and assurance of these programs.

1. Training: Training programs have been developed for QC / QA software, pavement design and life cycle cost analysis, materials for managers, concrete paving inspection, and testing and documentation for the inexperienced. Training for asphalt paving inspection has been developed in cooperation with the Colorado Asphalt Pavement Association (CAPA) and are currently offered through the Rocky Mountain Asphalt Education Center at CAPA. Training for concrete paving inspection has been developed in cooperation with the Colorado Ready Mixed Concrete Association (CRMCA) and the American Concrete Paving Association (ACPA) and are currently offered through the CRMCA.
2. Manuals: The primary manuals within the Branch include the *Field Materials Manual*, the *Pavement Design Manual*, and the *Laboratory Manual of Test Procedures*. These manuals are updated annually and there is a regularly scheduled meeting each year to review the contents and update the materials within each manual. There are two other manuals, the *Radiation Safety Manual* and the *Rockfall Manual*, which are updated from time to time as needs exist, or approximately every three to five years.

3. Specification Development: In order to influence quality, the Materials Advisory Committee meets a minimum of five times per year. FHWA, CDOT HQ staff subject matter experts, and each Region Materials Engineer meet to discuss and resolve issues relating to specifications. As part of this effort, the Independent Assurance Testers and the Flexible Pavement Operators meet once or twice per year to identify and resolve issues that impact this program. CDOT meets annually with the Four Corner states' (AZ, NM, CO, UT) DOT materials engineers to collaborate on shared technical issues.

CDOT meets a minimum of three times per year with CAPA, the Colorado / Wyoming Chapter of the American Concrete Pavement Association and the Colorado Ready Mixed Concrete Association. FHWA attends when available. Specifications are updated and improved through partnering based on lessons learned from all of the parties.

4. Process Reviews: Joint Process Reviews, as part of the Stewardship Agreement with FHWA, can be periodically conducted with HQ staff, the regions, FHWA, and industry representatives across a range of technical areas including concrete pavement, structural concrete, HMA, pavement management and geotechnical engineering. Areas of potential risk will be identified by the QIC and prioritized in the QIC's Joint Process Review/Risk Response Strategies annual effort.
5. Materials Acceptance: Material production of HMA and Portland Cement Concrete Pavement (PCCP) in the regions is measured by quality levels (QC / QA programs) and through the assurance-testing program.
6. Laboratory Accreditation: The Materials and Geotechnical Branch is an AASHTO accredited laboratory for tests relating to bituminous materials, asphalt mix, soils, reinforcing steel, concrete and physical properties.
7. Region Oversight: Every three years CDOT Materials and Geotechnical Branch conducts quality reviews of each region Materials Unit regarding their Independent Assurance Programs and the materials final certifications.

Every year the Branch conducts a quality review of each region Materials Unit laboratory to ensure that equipment is calibrated and checked. Further, proficiency samples are tested annually by HQ and region laboratories on soils, concrete and asphalt. The average test results and rating of each lab is reported.

8. Technician Certification: All technicians performing acceptance testing are required to be certified. Certification programs, approved by FHWA, exist for asphalt, concrete, and soils. The administration of each certification program is the responsibility of CDOT partnering with Colorado Ready Mix Concrete Association (CRMCA) for concrete, Colorado Association of Geotechnical Engineers (CAGE) and Western Alliance for Quality Transportation Construction (WAQTC) for soils and the Colorado Asphalt Pavement Association (CAPA) for asphalt. There are quality checks within each of the certification programs to ensure they are effective. For example, CDOT and FHWA are active members of the Laboratory Certification of Asphalt Technicians (LabCAT) Technical Committee and LabCAT Board which oversee and direct continuous quality improvements to the technical training documents and statewide certification programs.
9. Pavement Management System: The Pavement Management Technical Committee meets a minimum of five times a year to identify and resolve issues with the Pavement Management System. The condition reports, and maps are provided, each September to the Transportation Commission and Asset Management Program in October. A functioning Pavement Management software setup is provided to the regions in December so that the regions can compile project recommendation lists for

use in planning the Surface Treatment Program. Differences in condition or project selection, as recommended by the Pavement Management System, from that observed by the Region are categorized and work is undertaken to resolve these differences.

## 7.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Pavement and Materials Program:

**Table 7 - Performance/ Compliance Measures (Pavements and Materials)**

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/ Baseline</b>	<b>Reporting Frequency</b>
254	<b>Percent of NHS pavements within Colorado with an International Roughness Index (IRI) less than 95</b>	Percent of NHS pavements within Colorado that have a good ride quality as defined by an IRI less than 95	Pavement Management System	52%	State FY
253	<b>Percent of resurfacing projects matching recommendations of the Pavement Management Systems annual review</b>	Percent of resurfacing projects recommended by the Pavement Management System for each State fiscal year	Pavement Management Systems Work Plan	80%	State FY

## **SECTION 8. ENGINEERING: PLANNING**

### **8.1. INTRODUCTION**

Colorado state law states that transportation planning is the responsibility of CDOT's Division of Transportation Development (DTD) and that it should be carried out in cooperation with internal and external planning partners and in compliance with federal laws and regulations (i.e., MAP-21; 23 CFR 420, 23 CFR 450, 23 CFR 460 and 23 CFR 470). The activities to be accomplished by DTD make up the framework of the annual State Planning and Research (SPR) work program, which is approved by FHWA. State Planning and Research funds are provided annually to CDOT and their programming is documented in the work program. DTD includes five branches: Multimodal Planning Branch (MPB), Information Management Branch (IMB), Performance and Asset Management Branch (PAMB), Environmental Programs Branch (EPB), and the Applied Research and Innovation Branch.

The Multimodal Planning Branch (MPB) within DTD supports strategic planning, policy development and analysis, development of the Statewide and Regional Transportation Plans, and prepares Commission materials related to transportation development and planning. This Branch also oversees the planning process that includes both statewide and regional planning activities. As part of its responsibility for the transportation planning process and plan development, MPB administers and coordinates regional and statewide planning through the 15 Transportation Planning Regions (TPRs). The TPRs include five Metropolitan Planning Organizations (MPOs) and ten non-urban planning regions. In addition, MPB consults with the 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 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 Statewide Transportation Plan and the STIP are approved by the Colorado Transportation Commission and the STIP is forwarded to FHWA/FTA for approval. The Branch is also responsible for administering Freight programs, Bike/Pedestrian programs, and the Safe Routes to School (SRTS) and Scenic Byways programs.

For the MPOs, FHWA and FTA planning funds are allocated on the basis of a formula agreed upon by CDOT and the five MPOs. Based on expected funding, each MPO develops a Unified Planning Work Program (UPWP). The accomplishment of the UPWP is the responsibility of the MPO with CDOT MPB oversight and review. Mid-year reviews are conducted with each MPO by MPB and FHWA/FTA staff.

The MPB also supports the air quality conformity process required to meet the planning regulations and oversees the non-infrastructure Congestion Mitigation and Air Quality (CMAQ) program. The EPB manages air quality analysis at the project level.

MPB Liaisons work closely with MPOs and TRPs in developing regional plans, administering CPG funds, developing products within the UPWP, and also serve as members of the Technical Advisory Committee for each MPO. The Liaisons deal with political, financial and policy issues associated with the MPOs and TPRs on a regular basis and serve to represent CDOT Headquarters at TPR and MPO meetings. The MPB Liaisons also coordinate extensively with the CDOT regions, primarily through the Region Planners.

In performing planning functions, MPB staff work closely with the IMB, PAMB.

The IMB prepares and submits highway information as required by FHWA. This Branch has two sections: GIS/Data Management and Mobility. The GIS/Data Management section is responsible for information management and data dissemination functions that contribute to the development of

transportation plans, projects, 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, Highway Performance Monitoring System (HPMS) and road mileage certification, management of special studies, and travel demand modeling.

The PAMB leads the performance measures and asset management programs, providing tools to effectively measure, analyze, forecast and communicate to management and stakeholders, the performance of CDOT's programs, processes, and investment decisions. This Branch prepares the Performance Plan and Transportation Deficit Report for the legislature.

## **8.2. METHOD OF OPERATION**

CDOT has responsibility for transportation planning per state statute (Title 43 Part 11 of Colorado Revised Statutes) and federal laws (23 USC 134 and 23 USC 135) and regulations (23 CFR 420, 23 CFR 450, 23 CFR 460 and 23 CFR 470). These laws establish the planning requirements to be conducted by CDOT in cooperation with internal and external planning partners. State law is consistent with federal law, ensuring that planning is conducted according to US DOT standards and requirements. At a minimum the state must develop a comprehensive, multimodal 20-year transportation plan that integrates and consolidates the regional transportation plans developed by the urban and non-urban regions of the state and a four-year Statewide Transportation Improvement Program (STIP).

The MPB, IMB, PAMB and FHWA/FTA work together closely and coordinate on issues pertaining to state and regional transportation planning in addition to bi-monthly coordination meetings. These include:

- Strategic Planning;
- Policy Development and analysis;
- Performance Based Planning and Programming;
- Development of Statewide and Regional Transportation Plans;
- Oversight of work in UPWPs;
- Bi-annual MPO certification;
- Development of annual SPR work program;
- Technical assistance to MPOs and TPRs;
- Air quality conformity;
- Planning and environmental linkages activities;
- Bike/pedestrian data collection and analysis;
- Freight planning;
- Data collection and reporting;
- Data management;
- HPMS;
- Travel demand forecasting;
- Traffic data analysis; and
- Other planning related activities.

## **8.3. CDOT ORGANIZATION**

Located in Denver and housed within the DTD, MPB is comprised of four sections: Statewide Planning, MPO and Regional Planning, Freight Planning and Planning Analysis, and Bicycle/Pedestrian Planning. In performing planning functions, MPB staff work closely with staff from CDOT regions, as well as IMB, PAMB, and Office of Financial Management and Budget (OFMB) staff.

The IMB is responsible for roadway and traffic data collection, modeling and analysis, and the GIS functions.

The STIP is coordinated and prepared by the OFMB in conjunction with the MPB. MPB staff works closely with the MPOs, TPRs, OFMB staff and Region Planners to support the development of the STIP.

The PAM is responsible for performance measurement and reporting and asset management for CDOT.

#### 8.4. FHWA ORGANIZATION

Within the FHWA-Colorado Division, there is a Program Development Team Leader and a Transportation Planner who are responsible for providing CDOT and the MPOs with technical assistance and oversight for all transportation planning and air quality activities. The planners are responsible for route classification, highway statistics, and intermodal activities. Transportation planning responsibilities are broadly split between metropolitan and statewide planning, although considerable overlap exists. The planners will be a part of the effort in the development of work activities produced by CDOT and the MPOs. In addition, the planners will provide guidance, suggestions, and written comments on draft documents, review and provide comments on final products and provide technical assistance to state and local agencies.

#### 8.5. QUALITY

CDOT works closely with FHWA, FTA and its planning partners to ensure quality material is prepared through cooperation and quality reviews and that the public has the opportunity to provide comment. The planning process includes development of plan documents in consultation with planning partners, land management agencies, regulatory agencies and Tribal governments, and review of plan documents by planning partners, the Statewide Transportation Advisory Committee (STAC), Freight Advisory Council (FAC), Transportation Commission, and the public.

#### 8.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of CDOT’s Planning Program:

**Table 8- Performance/Compliance Measures (Planning)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
379, 380	<b>Work program progress</b>	Percent of funds encumbered or expended compared to the estimate for the fiscal year	Feedback on annual review and tracking of percent complete on projects  Progress on the work program is in the FY Accomplishments Report	70% of planned amount	State FY
10	<b>TPR coordination</b>	CPG and Rural PO	Contracts executed by deadline	100% of contracts executed on time	Federal FY for CPG  State FY for Rural PO
630	<b>Accuracy and Timeliness of HPMS and other transportation data submitted</b>	Annual HPMS Report Card Score from FHWA HPMS Review	Annual HPMS Report Card Score	120	State FY

## **SECTION 9. ENGINEERING: PROGRAM AND PROJECT DELIVERY - DESIGN AND CONSTRUCTION**

### **9.1. INTRODUCTION**

#### Design

CDOT Design Program Manager is responsible for assisting CDOT regions to maintain uniform practices in design including the usage of guidance documents and manuals, plan sheet production, training, and project management practices. The Design Program Manager also provides design related technical support to the region personnel.

#### Construction

CDOT Area Engineers are responsible for assisting CDOT regions to maintain uniform contract administration and management practices in construction. In addition, the Area Engineers are responsible for providing technical assistance to the regions. The Construction Area Engineer positions are a part of CDOT Contracts & Market Analysis Branch.

### **9.2. METHOD OF OPERATION**

CDOT Design Program Manager, CDOT Area Engineers, and FHWA provide oversight, technical assistance, support, training, and quality assurance to the region personnel to ensure uniformity of construction, design, and contract administration.

### **9.3. CDOT ORGANIZATION**

1. CDOT Design Program Manager: The Design Program Manager provides roadway design and pre-construction project management related support and ensures consistency for the region and headquarters personnel. The Design Program Manager position resides in the Project Development Branch.
2. Area Engineers: CDOT Area Engineers provide construction related support and assure consistency for the region personnel. The Area Engineers are each assigned to different regions of the State. The regional assignments are rotated annually. The Area Engineers are supported by Assistant Area Engineers. The Area Engineer positions and associated support staff reside within the Contracts and Market Analysis Branch.
3. Standards and Specifications Engineer: CDOT Standards and Specifications Engineer (SSE) is responsible for developing and maintaining CDOT's Standard Plans, Standard Specifications, Standard Special Provisions and assisting in maintaining various engineering support documents and manuals. The SSE also reviews project special provisions and coordinates efforts related to statewide Findings in the Public Interest (FIPI's). The SSE and associated support staff reside in the Project Development Branch.
4. Innovative Contracting Program Manager: The Innovative Contracting Program Manager is responsible for developing and updating CDOT's policies and procedures for project delivery methods outside the realm of Design-Bid-Build (e.g. Design-Build and Construction Manager/General Contractor). This position also provides technical assistance in determining the most appropriate project delivery method and development of procurement documents. This position resides in the Project Development Branch.

5. CDOT Regions: A Region Program Engineer is responsible for the overall design and construction program in part of each region. The residencies in each region report directly to a Region Program Engineer. Each residency is staffed by a Resident Engineer, Project Engineers, and other project personnel who are responsible for the day-to-day operations of the design and construction program.

#### **9.4. FHWA ORGANIZATION**

The Program Delivery Teams in FHWA-Colorado Division are responsible for design and construction oversight including: design, contract administration, contract changes, dispute resolution and claims, materials and pavements, specifications and quality assurance oversight. The teams consist of a Program Delivery Team Leader who has leadership responsibility for the team, Area Engineers, and other Program Managers. The Area Engineers work on project oversight directly with the Resident Engineers in the regions. There is a Program Delivery Team Leader who is responsible for working with the Project Development Staff Branch Manager on the Design Program and a Team Leader that works with the Contracts and Market Analysis Branch Manager on the Construction Program.

#### **9.5. QUALITY**

CDOT and FHWA plan program-wide implementation of Quality Control (QC) activities. CDOT Design Program Manager, CDOT Area Engineers, FHWA Operation Engineers, and the regions will cooperate to ensure that effective QC procedures are established and carried out for design and construction activities.

Following are some of the cooperative QC activities:

- Post Construction Reviews: Post Construction reviews will be conducted in half of the regions each year. The Design Program Manager assists the regions in coordinating their post-construction reviews. FHWA Area Engineers will be invited to attend reviews on oversight projects.
- Inter-Region Reviews: Inter-Region reviews will be conducted in half of the regions each year. The Area Engineers assist the regions in coordinating their inter-region reviews. The respective FHWA Area Engineer will be invited to attend the reviews.
- Change Orders: The Area Engineers will track Change Order activities on projects and report on the quantity and dollar impacts to projects:
  - Number of change orders with time/schedule impacts;
  - Number of change orders requiring a funding letter;
  - How many requiring FHWA approval; and
  - How many requiring CDOT approval.
- Disputes and Claims: The Area Engineers will track Dispute and Claims activity on projects and report on the quantity and cost impacts to projects:
  - Dispute dollars divided by total contract dollars; and
  - Claim dollars disputed divided by total contract dollars.
- Revisions Under Advertisement: The construction contracts award unit will annually track and report Revisions Under Ad activities and trends. This data is not required for any performance indicators but will be reported as a part of section 4, Contracting, Engineering Estimates and Other Support, of the Stewardship Agreement Annual Report.

- Value Engineering: The Design Program Manager will annually track the fulfillment of Value Engineering assessments and report on cost-benefits to the Department.
- Constructability Reviews: The Design Program Manager will annually track constructability review activities on projects.
- Innovative Contracting Project Delivery: The Innovative Contracting Program Manager will track use of the Project Delivery Selection Matrix and Innovative Contracting use. On an annual basis CDOT will report the number of projects that utilized the selection matrix, number of projects that used innovative delivery methods, and the associated dollar value of the innovative delivery projects.
- Annual Residency Visits: CDOT Design Program Manager, the Area Engineers, and FHWA Area Engineers will meet annually with the Resident Engineers and their personnel. These Residency visits are intended to provide a valuable exchange of information and ideas between CDOT Project Development staff, FHWA and region personnel. In addition, the reviews will help to improve the QC function.
- Area Engineers/Design Program Manager/FHWA Program Delivery Team Leader Meetings: The Project Development Branch Manager, Contracts and Market Analysis Branch Manager, Area Engineers, Design Program Manager, and FHWA Program Delivery Team Leaders will meet on a quarterly basis to discuss issues of mutual concern in the design and construction program.
- Committees: The Area Engineers, Design Program Manager, Standards and Specification Engineer, Innovative Contracting Program Manager and FHWA will participate on the following committees:
  - CDOT Area Engineers and FHWA
    - Joint Colorado Contractor's Association/CDOT Specification Committee;
    - Joint American Concrete Paving Association/CDOT Coop Committee;
    - Joint Colorado Asphalt Paving Association/CDOT Coop Committee;
    - Project Delivery Advisory Committee;
    - Materials Advisory Committee;
    - Water Quality Advisory Committee
  - CDOT Design Program Manager and FHWA
    - Project Delivery Advisory Committee
  - CDOT Standards and Specifications Engineer and FHWA
    - Project Delivery Advisory Committee,
    - Materials Advisory Committee,
    - Joint Colorado Contractor's Association/CDOT Specification Committee
  - CDOT Innovative Contracting Program Manager and FHWA
    - Innovative Contracting Advisory Committee
- Guidance Manuals: CDOT documents its design and construction procedures through the Project Development, Construction, and Design Manuals. These manuals are kept on CDOT's web page and are updated periodically. The Area Engineers and the Design Program Manager prepare interim design and construction bulletins as necessary for revisions and

clarifications to the design process and procedures. In addition to being distributed electronically, these bulletins are also on CDOT's web page. All employees have access to the manuals and bulletins.

The following performance indicators will be used to assess the health of the Design and Construction Programs:

**Table 9 - Performance/ Compliance Indicators (Design and Construction)**

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
465	<b>Revisions under Advertisement</b>	Percent of projects that have one or more Revisions under Advertisement	CDOT Work Plan	Establish baseline and track trend	State FY
466	<b>Constructability reviews</b>	Number of projects that include a constructability review during the design phase	CDOT Work Plan	Establish baseline and track trend	State FY
323	<b>Number of major change orders</b>	Number of change orders which required FHWA approval	CDOT Work Plan	Establish baseline and track trend	State FY
328	<b>Number of change orders approved by CDOT</b>	Number of change orders which did not require FHWA approval	CDOT Work Plan	Establish baseline and track trend	State FY <b>Quarterly reporting</b>
324	<b>Number of claims paid out after Dispute Resolution Board (DRB) process followed</b>	Claim dollars disputed divided by total contract dollars	CDOT Work Plan	Establish baseline and track trend	State FY
325	<b>Number of disputes filed each year</b>	Contract dollars disputed divided by total contract dollars	CDOT Work Plan	Establish baseline and track trend	State FY

## 9.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Design and Construction Programs:

**Table 10 - Performance/ Compliance Measures (Design and Construction)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
464	<b>Value Engineering (VE) Reviews</b>	The percentage of projects over \$40 million in which a Value Engineering Assessment was completed	CDOT Work Plan	100%	State FY
345	<b>Time to close a project from final acceptance to project closure in (Fiscal Management Information System (FMIS))</b>	Average # of days to close a project	CDOT Work Plan	200 days	State FY <b>Quarterly reporting</b>

## SECTION 10. ENGINEERING: PROGRAM AND PROJECT DELIVERY - PROGRAM MANAGEMENT

### 10.1. INTRODUCTION

The Office of Program Management is responsible for developing and implementing business processes and policies to provide uniformity and consistency in CDOT's project management, project performance and program delivery performance across CDOT. This group is also responsible for the data and information needed to support program, cash and project management reporting on performance metrics in coordination with CDOT's regions.

### 10.2. METHOD OF OPERATION

The Office of Program Management staff provide procedures, technical assistance, support, and training to ensure uniformity of available information to manage projects and programs at the project, regional, and statewide levels.

#### Definitions:

- *Program*: Set of projects to be managed as a whole to deliver an/several outcome(s). It is not the asset or color of money.
- *Program Management*: Activities for managing the success of the program.
- *Project Management*: Activities for managing the success of a single project.

### 10.3. CDOT ORGANIZATION

1. Asset Managers: Manage funding allocations and identify eligible assets to achieve performance goals for their asset class.
2. Region Transportation Director(s): Responsible for the delivery of the region's program.
3. Region Program Engineer(s): Executes program management at the region level.
4. Region PMO Representatives: Coordinates between the regions and the PMO, maintains the region master program schedule and supports/mentors region staff in project reporting, tracking and delivery of projects.
5. Resident Engineer(s): Responsible for delivering projects and reporting/tracking on those projects.
6. Project Manager/Engineer: Supports the Resident Engineer and manages the individual project.
7. HQ PMO: Responsible for coordinating the management of programs with the Office of Cash Management at the statewide level. Provides information to support statewide program delivery decisions.
8. OFMB: Provides information to align project cash needs with cash availability and project budgeting.

#### 10.4. FHWA ORGANIZATION

Project and program management are cross cutting through various roles of FHWA staff. Because of this, the Assistant Division Administrator will be the primary point of contact at FHWA. As issues or challenges may develop, others from FHWA will be brought into the discussions/solutions as needed.

#### 10.5. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of Program Management:

**Table 11 - Performance/ Compliance Measures (Program Management)**

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
555	<b>Expenditure Performance Index (XPI)</b>	XPI is actual program expenditures divided by anticipated program expenditures	Reported monthly	1.0	Calendar Year <b>Quarterly reporting</b>
662	<b>Risk Adjusted Estimate at Completion (EACr)</b>	Bottom up forecast of construction expenditures based on project cash drawdown schedules	Evaluated monthly at Program Management Governance Committee	EACr > calendar year spending target	Calendar Year
663	<b>Schedule Performance Index at Risk (SPIar)</b>	Dollar value of at risk projects containing a red preconstruction schedule performance index (SPI), defined as a slope forecasted advertisement date past the late advertisement date	Evaluated monthly at Program Management Governance Committee	SPIar < EACr calendar year spending target	Calendar Year

## **SECTION 11. ENGINEERING: RIGHT-OF-WAY**

### **11.1. INTRODUCTION**

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 and the relocation of homes, businesses and personal property on Federal-aid projects. This responsibility includes assuring that acquisition and relocations are conducted in compliance with the legal requirements of the state and federal laws and regulations.

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

- Surveying;
- Valuation (Appraisals/Review and Waiver Valuations);
- Acquisition; and
- Relocation.

### **11.2. METHOD OF OPERATION**

FHWA-Colorado Division's relationship with CDOT's ROW program has historically been a very close working relationship that strives to identify best practices and training opportunities, and maintain good communications. As such there are responsibilities on the part of each organization to foster good public relations while striving to adhere to the ultimate goal of building highways.

The operation from the agencies' perspectives includes the maximum delegation of authority to CDOT. This offers the greatest possible innovation and flexibility to administer the ROW program. In this regard, CDOT Right of Way Manual is an important tool.

Coordination and oversight are maintained through an annual statewide ROW training event involving all CDOT ROW program personnel and FHWA's ROW Program Manager, quarterly ROW managers' meetings, and routine contacts in person, in writing and by phone, during the course of business. Daily coordination is normally between the CDOT ROW Program Manager (Central Office) and the FHWA ROW Program Manager.

### **11.3. CDOT ORGANIZATION**

The ROW program is headquartered in Denver and has offices in each of the five regions. It has a professional staff of real estate specialists, surveyors, appraisers, administrators, and others who deliver ROW projects.

CDOT Central Office is responsible for facilitating the provisions of statewide policies and guidelines, conducting quality assurance, providing training and development, and technical assistance to the regions in support of their responsibility for program delivery.

The ROW program is comprised of the following functions:

- Survey;
- Property Valuation (Appraisal/Review and Waiver Valuations)
- Acquisition;
- Relocation;
- Local Public Agency Oversight;
- Consultant Management; and

- Records Management.

#### 11.4. FHWA ORGANIZATION

Oversight of the ROW program in FHWA-Colorado Division Office is the responsibility of the ROW Program Manager and FHWA Area Engineers assigned to each of the five CDOT regional offices. Their primary responsibility is to review, interpret and provide guidance and training for FHWA ROW policies, procedures and regulations.

#### 11.5. QUALITY

Quality Control (QC) is performed in four functional areas within CDOT ROW process as documented in the FHWA approved CDOT ROW Manual. First, a ROW plan review is held at the beginning of the appraisal process to determine the adequacy of the ROW plans and reduce the potential for possible plan revisions during the process. Second, most appraisals are reviewed by CDOT staff to provide assurance that all state and federal laws are complied with in the appraisal function. Third, all relocation determinations are approved by CDOT Central Office ROW staff prior to making an offer to the displaced person. Finally, a check list is used with each settlement package to make sure that all matters affecting title have been taken care of prior to closing.

Additionally, to encourage process consistency and ensure that the end product or service provided meets established quality standards and criteria, quarterly intra-region file reviews are performed by CDOT Region ROW staff. The review topics are function specific (appraisal, relocation, acquisition, etc.) and are determined by a consensus of CDOT ROW Managers, CDOT Central Office ROW staff and FHWA.

Quality assurance reviews of critical areas will be made on a rotational basis based on the risk assessment made by CDOT ROW Program Manager and FHWA Division ROW Manager.

The following performance indicators in combination with periodic reviews will be used to assess the health of the ROW program:

**Table 12 - Performance/Compliance Indicators (ROW)**

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
319	<b>Conditional clearances</b>	Percentage of Federal-aid projects with conditional ROW certifications	A list of conditional clearances	Track trend	State FY
320	<b>Condemnations</b>	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	State FY
322	<b>Fair market value settlement rate</b>	The percentage of parcels settled at FMV	Calculation of the number of parcels that settled at FMV versus the total number of parcels acquired	Track trend	State FY
321	<b>Appeals</b>	The number of appeals filed each year	A list of appeals	Track trend	State FY

## 11.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures in combination with periodic reviews will be used to assess the health of the ROW program:

**Table 13 - Performance/Compliance Measures (ROW)**

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/Baseline</b>	<b>Reporting Frequency</b>
426	<b>ROW customer survey</b>	ROW appraiser and agent customer service rating	ROW customer service survey by region	Achieve very good or better in all categories	State FY

## **SECTION 12. ENGINEERING: STRUCTURES**

### **12.1. INTRODUCTION**

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, culverts that span 4 to 20 feet, overhead sign structures, high mast luminaries, and traffic signal poles, retaining walls, noise walls, and tunnels. The staff of the Structures program develops structural design requirements, standard structural details, and structural construction specifications. In addition, the Structures program evaluates structural products and materials. The Structures program provides the vital services of: structure inspection, fabrication inspection, construction assistance, structure asset management, bridge load rating and oversize overweight vehicle permit investigations.

### **12.2. METHOD OF OPERATION**

CDOT will provide FHWA Division Bridge Engineer the following on oversight projects: structure selection reports, Field Inspection Review (FIR) plans and Final Office Review (FOR) plans. CDOT project managers shall provide final plan, specification and estimate (PS&E plans for all major bridges to FHWA for review and information.

FHWA will provide comments on any bridge at their discretion. The Bridge Design and Management Branch (Staff Bridge Branch) will provide written responses to any written FHWA comments. In the latter instance, CDOT project manager will be copied, or, if requested by the project manager, responses to FHWA will be sent through the project manager. Foundation and hydraulic reports will be made available to FHWA. FHWA will monitor these reports through participation on all CDOT QA and QC teams reviewing these activities. The QA process will monitor construction inspections on projects.

FHWA will work with CDOT regarding the National Bridge Inspection Program, the National Tunnel Inspection Program and federal eligibility issues.

FHWA Division Bridge Engineer and CDOT Staff Bridge Engineer will meet on a regular basis to discuss input into all assigned programs. FHWA Structural Engineer will participate in regularly scheduled staff meetings of the Branch at his discretion.

### **12.3. CDOT ORGANIZATION**

The Staff Bridge Branch is responsible for CDOT's requirements on structure design and construction, bridge management and structural inspections. The Branch is responsible for load rating bridges, checking permits associated with vehicles weighing 200,000 lb. or greater, providing structural design and consultant review services to the regions, as well as engineering services when emergencies occur and bridge repairs are warranted.

The Staff Bridge Branch provides assistance and structural engineering expertise to the regions' construction and maintenance programs. This includes fabrication inspection services for structural members and products such as structural steel and precast concrete structural members, and specific types of expansion devices, bearing devices, overhead signs, and signals. The Branch participates in and provides structural engineering expertise to the Department's non-project specific activities such as research teams, training committees, CAD committees, the specifications committee, and quality assurance review teams.

The Staff Bridge Structural Bridge Inspection and Structural Asset Management Units maintain the National Bridge Inventory (NBI). Structure inventory, inspection data, asset management, and reports are provided to other CDOT offices and FHWA. Staff Bridge is responsible for CDOT's bridge inspection program, On-System bridge inspection program, bridge essential repair notifications, bridge essential repair tracking, and the Colorado Off-System bridge program. In addition to bridges, Staff Bridge is responsible for CDOT's overhead signs, mast arm traffic signals, high mast lights, minor structures, retaining and noise walls, and tunnels inventory and inspection programs. Existing highway structures are inspected and evaluated for their integrity and major vehicle bridges are load rated for their live load carrying capacity.

The Staff Bridge Engineer represents the State nationally and is active with the AASHTO Subcommittee with Bridges, an organization that maintains the national design standards and policy for bridges. Also, the Staff Bridge Engineer is a participant in other national organizations and initiatives, such as the National Steel Bridge Alliance, Precast Concrete Institute and the High Performance Concrete initiative.

#### **12.4. FHWA ORGANIZATION**

FHWA Division Bridge Engineer (DBE) provides the oversight of all CDOT bridge programs and activities. These activities include the National Bridge Elements (NBE), NBI, NBIS, and the preparation of project plans and specifications, the development of design and construction standards, as well as hydraulic, materials and geotechnical activities.

FHWA Division Bridge Engineer provides leadership, overall quality assurance, and technical assistance to CDOT and FHWA Division.

#### **12.5. QUALITY**

Staff Bridge provides and maintains several documents that are available to the public through CDOT's web page. The publications available include the: *Colorado Bridge Element Coding Guide*, *Colorado Structure Inventory Coding Guide*, *CDOT Bridge Design Manual*, *CDOT Bridge Detailing Manual*, *CDOT Bridge Rating Manual*, *CDOT Bridge Worksheets*, and structures-related construction specifications.

The NBI data for all bridges is routinely reviewed for accuracy by Staff Bridge's quality control bridge inspector. Annually, FHWA and members of Staff Bridge's bridge inspection and asset management units will review at least twenty bridges, including local bridges, for accuracy of NBI data. FHWA will review inspection procedures and compliance of the NBIS by reviewing the 23 metrics standards as required by FHWA HQ, and will report deficiencies to the Staff Bridge Engineer. The metric report will be completed by the end of the calendar year. CDOT will have until February 28 to respond to the deficiencies reported. The DBE will finalize the report by March 31 to FHWA HQ. Staff Bridge provides quality control for the NBI tape submittal to FHWA headquarters by checking the data and making any corrections before submitting the tape to FHWA. The quality control includes running FHWA's NBI checking software utility.

The annual bridge construction costs are submitted by Staff Bridge to FHWA Division Bridge Engineer for review. FHWA will check costs for at least four bridges. Also with this submittal, FHWA will review unusual bids or award bids that are 15% over the Engineer's cost estimate. Unusual bids or line items with significant cost increases will be reported to the Staff Bridge Engineer by FHWA.

## 12.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Structures Program:

**Table 14 - Performance/ Compliance Measures (Structures)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
411	<b>Decrease the number of scour critical bridges</b>	Reduce the number of scour critical bridges per year over the last 5 years	Staff Bridge annual asset management reports	Downward trend	State FY
214, 443, 701	<b>Structurally deficient bridges and deck area</b>	Number of structurally deficient bridges  Structurally deficient deck area (sq. ft)  Percentage of structurally deficient deck area	Staff Bridge annual asset management reports	Downward trend over 5 years (always less than 10%)	State FY
216, 442, 700	<b>Structurally deficient bridges and deck area on the NHS</b>	Number of structurally deficient bridges per NHS  Structurally deficient deck area (sq. ft) per NHS  Percentage of structurally deficient deck area per NHS	Staff Bridge annual asset management reports	Downward trend over 5 years (Always less than 10% per MAP-21)	State FY
238	<b>Reduce the backlog of overdue high priority (orange &amp; yellow) essential repair activities recommended by Staff Bridge</b>	Number of overdue high priority (orange & yellow) repair recommendations	Staff Bridge annual asset management reports	Downward trend or 0	State FY <b>Quarterly reporting</b>
237	<b>Reduce the quantity of bridge expansion joints that are leaking</b>	Repair or replace joints noted as leaking or damaged per inspection reports	Staff Bridge annual asset management reports	Downward trend	State FY
467	<b>Decrease the number of structures with sub-standard vertical clearance</b>	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	State FY
468	<b>Decrease the number of load restricted bridges</b>	Decrease the number of structures that are load posted or are restricting permitted loads.	Staff Bridge annual asset management reports	Downward trend	State FY
664	<b>Bridge Inspection Metrics Report</b>	Percentage of the 23 metrics in non-compliance	FHWA's Metric Compliance Report	Downward trend or 0%	State FY
471	<b>Documentation supporting Item 113, Scour Critical Bridges, coding on all bridges over waterways.</b>	In order to justify item 113 coding, capture existing scour evaluation information or produce the scour evaluation where it is not available	Staff Bridge annual asset management reports	Upward trend	State FY

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/ Baseline</b>	<b>Reporting Frequency</b>
472	<b>Perform new load ratings on bridges that contain advanced deterioration</b>	Rerate structures with components that have significant section loss that are not repaired.	Staff Bridge annual asset management reports	Upward trend	State FY

## **SECTION 13. FINANCIAL MANAGEMENT**

### **13.1. INTRODUCTION**

Financial Management encompasses the entire Federal-aid program from the authorization of a project through any phase (Environment, ROW, Preliminary engineering through construction and debt retirement). Oversight is performed at headquarters, regional business offices, and during project site visits to ensure eligibility of Federal-aid funds.

### **13.2. METHOD OF OPERATION**

FHWA and CDOT personnel maintain a cooperative working relationship in the administration and oversight of financial management. Communication and interaction between FHWA and CDOT occurs routinely for the exchange of information, coordination of activities, and the resolution of issues in the financial management areas of Accounting, Budget, Audit, Obligation Control, Systems Integrity and Control and Process Reviews and Federal reimbursement.

### **13.3. CDOT ORGANIZATION**

The following organizations have a direct impact upon the financial operations and subsequent reviews of financial data processed through established automated systems.

The Division of Accounting and Finance - Office of Financial Management and Budget is responsible for the development and coordination of the Statewide Transportation Improvement Program, the Department's Budget, the federal obligation process, and overall financial management of the Department's resources. The Division of Accounting and Finance - Office of the Controller manages the payment of vendors and employees, billings of accounts receivable, transaction reviews and edits to assure accuracy and eligibility of expenditures, project expenditure reviews and subsequent closure, federal aid billing, and financial reporting.

The Division of Audit conducts performance, process or internal control audits of CDOT operations to assure effectiveness, efficiency and compliance with rules and regulations. Audit is also evaluating the possible utilization of FHWA Financial Integrity Review and Evaluation (FIRE) program risk assessment for performing an internal audit of the highest risk areas in a future work plan.

The Office of the State Auditor (OSA), or its contractor, performs an annual statewide financial audit on the financial condition of CDOT and its compliance with FHWA and state requirements. Such audits are performed to comply with the requirements of the Single Audit Act.

### **13.4. FHWA ORGANIZATION**

FHWA provides the Federal-aid funds for highways and monitors usage of the funds with staff from the Division and national levels. FHWA staff also participates in risk response strategies and regional or national reviews as appropriate. FHWA FIRE plan requires certain reviews be conducted. The review may be conducted solely by FHWA or in conjunction with CDOT. The primary FHWA financial support comes from the Division's Finance and Administration Team, which includes a Financial Manager, a Financial Specialist and a Program Assistant.

### 13.5. QUALITY

Successful financial management incorporates a series of processes adding value to the operation relative to available resources, time, and management philosophy. General emphasis areas include: improvements and enhancements to financial management systems and processes, assurances of compliance, improved control of funds, and adequate project management systems and reports. Quality control and assurance efforts embrace the philosophy of the National Quality Financial Management Initiatives.

The primary quality controls of the financial system are the edits and security that control the quality of outputs. Quality control efforts also consist of periodic process reviews conducted by selected staff from CDOT and/or single audit reviews. The reviews result in either an affirmation of the process or an identification of potential areas for improvement. They also provide an opportunity for identifying training needs.

CDOT and FHWA are committed to working together to provide improvements and enhancements to Financial Management Systems and Processes to:

- Ensure the integrity of the financial management system and to maximize the use of federal and state funds;
- Revise and streamline the financial management system so that each process adds value to the operation and incorporates the best practice;
- Assist in the identification and prioritization of improvement efforts through the results of the quality control process reviews, internal audits, and regular single audit reviews conducted by the State Auditor's Office. CDOT management and FHWA both have input regarding audit emphasis areas.

The process is documented in the Office of Financial Management and Budget Policy and Procedure Manual, dated April 20, 2011.

The following performance indicators will be used to assess the health of the Financial Management Program:

**Table 15 - Performance/ Compliance Indicators (Financial Management)**

SAP #	Indicator	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
120	<b>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</b>	Percent of projects authorized for construction this year executed by local agencies or sub-grantees	SAP	Track trend	State FY <b>Quarterly reporting</b>
123	<b>Amount of Federal Aid funds obligated versus total available per fiscal year</b>	Percent of STIP projects obligated in the same year promised	STIP Obligation Report	Track Trend	State FY

### 13.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Financial Management Program:

**Table 16 - Performance/Compliance Measures (Financial Management)**

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline	Reporting Frequency
155	<b>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.)</b>	<ul style="list-style-type: none"> <li>(1) Determine all projects that have completed Design or Right-of-Way but have not gone to construction;</li> <li>(2) If projects have not gone to construction, determine which were constructed under another project number;</li> <li>(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;</li> <li>(4) Begin to move ahead by measuring projects at eight years for design and fifteen for ROW to ensure projects are constructed;</li> <li>(5) Data fields need to be populated in PSAM module of SAP to enable an automated reporting at any time</li> </ul>	FMIS (Fiscal Management Information System) and CDOT systems for projects authorized as part of the annual project	Less than 5%	State FY

## SECTION 14. MAINTENANCE & OPERATIONS

### 14.1. INTRODUCTION

CDOT has within the Central Office a Division of Highway Maintenance and within that a Staff Maintenance Branch. In support of the Transportation Commission's stated Investment Categories of Program Delivery, Mobility, System Quality and Safety, the Division of Highway Maintenance 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 Division will provide a liaison contact that will assist and oversee successful completion of the Methods of Operations and Maintenance.

### 14.2. METHOD OF OPERATION

The Staff Maintenance Branch and FHWA will assure that available resources are utilized effectively to assure compliance with federal requirements as defined in 23 CFR 635E.

### 14.3. CDOT ORGANIZATION

The Staff Maintenance Branch is comprised of a series of program areas that provide a broad variety of services and support to CDOT. The M&O Branch program areas include:

1. Maintenance Planning and Performance: The Planning and Performance program plans and sets performance targets for assets, develops funding needs and tracks accomplishments, as well as asset condition.
2. Maintenance Training: The Maintenance training is delivered in various formats; regionally delivered programs, leadership programs (NHI Maintenance Leadership Academy), and the Maintenance Training Academy (MTA). The MTA exists to provide a standardized training curriculum to ensure minimum levels of core competency for new hires, existing maintenance workers and supervisors.
3. Road Equipment Services: The Road Equipment Services program exists to administer the acquisition, maintenance and replacement of equipment across the regions and increase the department's ability to purchase and maintain equipment at the lowest possible cost.
4. Oversize/Overweight Permits: The work unit exists to administer a statewide transport permit program for extra-legal vehicles and loads in order to protect the traveling public and the state's infrastructure.
5. Maintenance Support and Levels of Service: The Maintenance Levels of Service (MLOS)/ Maintenance Management System (MMS) (program analyzes and prepares the statewide Maintenance budget recommendations based on analysis of the MLOS for the Director of Highway Maintenance, Executive Management Team and Transportation Commission. This program is responsible for supporting the Plant Maintenance and MLOS modules of SAP. This program is responsible for implementing several Maintenance projects, Maintenance performance management and training. This program also manages the statewide Adopt / Sponsor a Highway program to provide litter control on Interstate and state highways.
6. Maintenance Engineering: This unit performs as the asset manager for Highway Tunnels and is the liaison between Maintenance and Staff Bridge. In addition, this support unit is

responsible for Maintenance Specifications, Maintenance Contracting (Maintenance-Jobs), liquid deicer materials testing and Avalanche/Weed Control. These programs exist to support the regions in avalanche management, explosives management, and to provide statewide expertise in noxious weed management. This unit serves as liaison between CDOT and the Colorado Avalanche Information Center and the US Army on contract related issues. Additionally, this unit provides statewide explosive storage records depository by conducting audits and maintaining official files. This unit acts as a liaison between CDOT and the Colorado Dept. of Agriculture State Noxious Weed Coordinator.

#### **14.4. FHWA ORGANIZATION**

FHWA Maintenance Program Manager is responsible for the Maintenance Program. The Program Manager will coordinate with CDOT liaison to assure that all pertinent federal requirements are met. FHWA Area Engineers will perform random field surveys of their CDOT regions, visit with maintenance superintendents, and make note of issues and concerns that pertain to their respective operations areas.

FHWA Statewide Planner handles the truck size and weight (S&W) program with the Colorado Division of Public Safety (CDPS) Port of Entry (POE), State Patrol, Motor Carrier Safety Section and CDOT Oversize Overweight Permitting Section by coordinating quarterly meetings to discuss S&W issues and proposed federal or state regulations. The CDPS Port of Entry is the lead agency and handles the requirements of 23 CFR 657 by the following: Truck S&W enforcement plan by July 1, and enforcement certification before January 1. CDPS submits the enforcement plan and certification electronically to FHWA HQ website. The CDPS coordinates with CDOT and CSP to provide the necessary data. The Statewide Planner reviews and makes recommendations to the plan and certification for approval.

#### **14.5. QUALITY**

The Staff Maintenance Branch utilizes the MLOS process that includes the annual review of 764 survey segments. In addition, the 764 segments are inspected real time during and after snow storms for levels of snow removal. This entire process develops and drives CDOT maintenance budgets.

The Branch and FHWA will participate in a number of the 764 survey segments. In addition, they will develop risk response strategies for selected issues. Also, FHWA Field Area Engineers will review their CDOT regions with respect to the following critical elements (listed under 23 CFR 635.505): roadway surfaces, shoulders, roadside (e.g. vegetation management, erosion control, and liter pick-up), drainage, bridges and tunnels, snow and ice control, traffic control devices, safety appurtenances (e.g. guardrails, impact attenuators, breakaway supports, barriers, etc.), safety rest areas, access control, and traffic safety in maintenance and utility work zones.

The M&O process is documented in the 1997 Manual of Maintenance.

## 14.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance/compliance measures will be used to assess the health of Maintenance and Operations Programs:

**Table 17 - Performance/Compliance Measures (Maintenance and Operations)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
271	<b>Maintain the transportation system at the adopted annual MLOS grade</b>	Annual MLOS adopted target grades for Maintenance Program Areas 150, 200, 250, 300, 350, 400, 450, and 500	MLOS actual grades from annual survey	Statewide MLOS target achieved +/- one step	State FY
270	<b>Maintain the snow and ice service MLOS grade at the adopted annual grade</b>	Annual MLOS grade for snow and ice removal	MLOS reporting	Statewide MLOS target achieved +/- one step	State FY

## **SECTION 15. TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS (TSM&O)**

### **15.1. INTRODUCTION**

CDOT created the Division of Transportation Systems Management & Operations (TSM&O) to align the core functional business areas that provide operational activities and services on a statewide basis. The mission of TSM&O is "to systematically improve travel time reliability and safety on Colorado highways through technology, innovative programs and strategies, targeted traffic management activities, and safety improvements to maximize the return on investment of transportation funds." CDOT recognizes that insufficient funds are available to "build our way out" of the congestion problem. Safety and reliability are impacted on both rural and urban corridors due to traffic incidents and crashes, adverse weather conditions, poor signal timing, bottle-necks, work zones and special events. Effective solutions with high benefit to cost ratios are available to address congestion caused by these factors.

Systematic, coordinated and targeted TSM&O strategies, improvements, and applications can be implemented quickly, to maximize the efficiency of the existing highway operations. These low-cost and high-value improvements can achieve tremendous benefit to the state transportation system, which demonstrates government's ability to be good stewards of taxpayer dollars. These operational improvements focus on getting more out of the existing system and maximizing traffic through-put. A multitude of strategies are utilized to target issues that cause congestion to minimize their impact, thereby allowing the system to operate at the highest capability.

Typically, TSM&O projects provide the following benefits:

- High-benefit cost ratios typically 10:1 and as much as 40:1;
- Readily implementable in less time (usually within 12 months) and for less money than adding lanes;
- Highly visible, many times but not always, and noticeable improvements by the traveling public;
- Quantifiable reduction in delay and improvement in travel time reliability;
- Measurable safety related improvements; and
- Improvements that continue to provide value even when long-term construction projects are completed.

### **15.2. METHOD OF OPERATION**

CDOT currently uses many techniques used nationwide to control and reduce congestion. Examples of these strategies include: traffic signal timing, ramp metering, alternative intersection and interchange designs; traffic incident management planning; real travel time information to passenger and freight drivers; variable speed limits, traffic metering; HOV and managed lanes; truck management and parking, and so on. TSM&O is also preparing the state infrastructure under the ROADX Program to be a leader in advancing Connected Vehicles and Autonomous Vehicles technology. Operational strategies will include improvements to the fiber optic network, traffic operations centers, data collection and distribution, public communication of roadway conditions, highway striping, adaptive traffic signals, and innovative and active traffic management systems.

### **15.3. CDOT ORGANIZATION**

The Division of TSM&O develops policies and implements innovative strategies to emphasize and integrate operations into CDOT's daily business. Staff proactively and continuously examine methods for effectiveness that develop a strong foundation of skills in managing traffic operations. The Division of

TSM&O reports to the CDOT Deputy Executive Director and consists of five branches, as described below:

1. Traffic, Safety and Engineering Branch: 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 also acts as the State's repository for state highway traffic crash information.
2. Intelligent Transportation Systems/Technology Branch: Designs and implements technology to enhance operations of the transportation system by implementing advanced traveler information, advanced traffic and incident management and other applications that improve the mobility and safety of the system for all travelers.
3. Active Traffic Management and Operations Branch: Serves as a Traffic Management Center (actively managing traffic conditions and implementing appropriate operational measures) and a traffic information center through 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 Branch assists in the development of all Traffic Incident Management Plans (TIMP) for the purpose of managing traffic operations in a coordinated manner among pertinent jurisdictions during an incident.
4. Corridor Management and Incident Command Branch: Focuses on Courtesy Patrol and Heavy Tow to remove distressed vehicles from the highway. This Branch communicates extensively with CDOT construction and maintenance staff, regional interstate coalitions, and local communities for improved incident, special event and work zone activities. It will expand coverage areas into Region 2 and 4 on the I-25 Corridor in March/April of 2016.
5. Planning, Performance and Transportation Demand Management Branch: Works closely with the CDOT Division of Transportation Development to refine and report on monthly performance metrics.

The Branches work together very closely, and with CDOT regions, maintenance, Office of Emergency Management, Division of Transportation Development. TSM&O staff coordinate extensively with external stakeholders such as: Colorado State Patrol, cities, counties, Metropolitan Planning Organizations, and local law enforcement, to promote and foster systematic statewide operations and a new paradigm that emphasizes and places a priority on "Thinking Operations First".

The Division has implemented or is in the process of implementing several initiatives to improve operations:

- Statewide TSM&O Plan
- I-70 Winter Operations Plan
- Dispatch Heavy Tow/I-70 Courtesy Patrol and Mile-High Courtesy Patrol
- I-70 and I-25 Incident Management Commanders
- I-70 Corridor Manager
- Development of an I-70 Operations Plan
- TSM&O Performance Measures including performance measure reports
- Operations Evaluation for CDOT projects
- Enhanced Incident Management/Situational Awareness
- Managed Lanes Guidance

- Data and Analytics Tool
- Development of a Statewide Transportation Demand Management (TDM) Plan
- Cooperate with RoadX

The changes to the organizational framework to create the Division of TSM&O provide the ability to advance statewide operations and build a comprehensive operations program. Enhanced multi-agency collaboration will yield operational benefits through better integration, leveraged coordination, well-defined operational agreements, and systematic and strategic deployment and implementation resulting in tangible operational improvements. Both the traveling public and CDOT will gain benefits in the areas of: safety, mobility, availability and integration of modal choices and greater economic productivity by implementing TSM&O strategies and applications.

#### **15.4. FHWA ORGANIZATION**

Within the Colorado Division, there is a TSM&O Team with a primary point of contact or program manager. The Colorado Division's Operations TSM&O Team provides stewardship, oversight, and leadership for the management and operation of the surface transportation system in Colorado. FHWA Area Engineers assigned to the regions will also provide stewardship, oversight, and leadership for minor project level decisions, conduct field reviews, and assist the Division Team on complex operations analyses performed for larger projects or system level alternatives. They will be the point of contact with the regions for items such as Interstate Access requests, MIMR's, and those minor project level operations issues. The Division is responsible for FHWA's efforts in the areas of congestion management, Intelligent Transportation Systems (ITS) Deployment, traffic operations, emergency management, and freight management and operations.

#### **15.5. QUALITY**

CDOT works closely with FHWA TSM&O Team on a variety programs and projects. Regular coordination meetings led by CDOT TSM&O Division Director and FHWA TSM&O POC are held to discuss TSM&O priorities, technical assistance needs and track progress of the activities. FHWA TSM&O Team members participate in team meetings with the Safety and Traffic Engineering Branch, the ITS/Technology Branch, the Planning Performance and TDM Branch, and the Active Traffic Management and Operations Branch. These TSM&O program meetings ensure that FHWA is aware of, and appropriately involved in, all planning level and implementation related activities.

#### **15.6. PERFORMANCE/COMPLIANCE MEASURES**

The Safety and Traffic Engineering Branch and the ITS Branch have program responsibility to administer and report performance measures for the Division of TSM&O. Therefore, performance measures are shown in the sections for these two branches below.

## **SECTION 16. TSM&O – TRAFFIC AND SAFETY ENGINEERING BRANCH**

### **16.1. INTRODUCTION**

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

The Branch focuses on implementing the Highway Safety Improvement Program (HSIP), which includes the Strategic Highway Safety Plan (SHSP) and high risk rural roads, and works with the Project Development Branch on rail-highway grade crossings. The Branch works 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 and local agencies.

The HSIP is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. States shall fund safety projects or activities that are most likely to achieve fatality and serious injury performance targets.

The program and policy language for implementing the Highway Safety Improvement Program (HSIP) is codified as 23 USC 148, with related policies in 23 CFR 924. Specific provisions related to the Highway Safety Improvement Program (HSIP) are also provided under section 1112 of MAP-21. Each State is required to develop, implement, and evaluate, on an annual basis, a comprehensive HSIP that has the objective of significantly reducing fatalities and serious injuries resulting from crashes on all public roads. Further guidance on implementing the HSIP is given through various FHWA HSIP program guidance documents.

CDOT has the responsibility for carrying out the State's HSIP. FHWA exercises its oversight responsibilities through review of the annual program of projects, review of program processes, and review of annual reports, as well as through various approval and acceptance actions in accordance with 23 USC 148, 23 CFR 924 and other guidance as released by FHWA.

CDOT will maintain a documented process, approved by FHWA, for programming projects that conforms to 23 USC 148 and 23 CFR 924. This documented process will be updated by CDOT as needed. All changes to this process will be approved by FHWA.

CDOT will manage the overall HSIP in accordance with 23 USC 148 and 23 CFR 924. CDOT will prepare an annual report on the progress made and on the effectiveness of the HSIP. The report will be submitted to FHWA on or before August 31st of each year. The report contents will substantially follow the HSIP Reporting Guidance document developed by FHWA for this program.

The Rail-Highway Grade Crossing program (23 U.S.C. 130) uses an agreed upon procedure for project selection in accordance with 23 C.F.R. 924. In addition, grade crossing crashes are tracked with the help of law enforcement agencies and other Branch resources to respond quickly to crash sites to ensure that any safety issues are addressed.

The Branch also serves as the State's steward for Colorado traffic crash data and associated databases. The Branch administers both NHTSA and FHWA funding to improve the accuracy, completeness, timeliness, consistency, integration, and availability of the data after receiving the crash records from the Department of Revenue. The Branch is advised by, and also serves on and participates in achieving 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, the Office of Information Technology, and the Judicial Branch. Crash data serves as the foundation in planning safety mitigation projects and programs.

The CDOT Highway Safety Office (HSO) administers the state's traffic safety programs funded by the National Highway Traffic Safety Administration (NHTSA). Both the Branch and HSO are jointly responsible for developing and maintaining the FHWA-mandated Strategic Highway Safety Plan. This strategic safety plan is the vision document and roadmap for guiding and developing the annual Colorado Integrated Safety Plan (ISP). The ISP meets the annual safety program planning requirements of the NHTSA as well as the annual HSP requirements of FHWA. The goal of the ISP is to strategically reduce traffic deaths on Colorado's highways in as many ways possible. Primary focuses of the program include reducing impaired driving related traffic deaths, increasing adult seat-belt and other restraint use, reducing motorcyclist, pedestrian, and bicyclist fatalities, and improving Colorado's roadway infrastructure to increase safety. Public information and outreach activities are coordinated along with training and education services.

## **16.2. METHOD OF OPERATION**

The Stewardship Agreement describes activities of FHWA Division Office and CDOT in implementing the required safety program activities. These activities are required under the HSIP (23 USC 148), which encompasses the SHSP and the Rail/Highway Crossing Program (23 USC 130). Activities consist of components of planning, implementation, evaluation and reporting of safety programs and projects and providing support for problem identification, design, construction, maintenance, and technical assistance to CDOT, FHWA, the Federal Motor Carrier Safety Administration (FMCSA), NHTSA, Federal Transit Administration (FTA), Federal Railroad Administration (FRA), and local governments.

The Rail-Highway Grade Crossing program (23 U.S.C. 130) utilizes a hazard index for project selection in accordance with 23 C.F.R. 924. In addition, grade crossing crashes are tracked with the help of law enforcement agencies and other Branch resources to respond quickly to crash sites to ensure that any safety issues are addressed.

## **16.3. CDOT ORGANIZATION**

CDOT Traffic and Safety Engineering Branch, a branch of the Transportation Systems Management and Operations (TSM&O) Division, will administer FHWA safety infrastructure programs in collaboration with the regional traffic sections. These programs include HSIP, work zone safety and mobility, the flagger program, and various standards, specifications, manuals, and other references related to traffic engineering and safety (such as Manual on Uniform Traffic Control Devices (MUTCD), Highway Safety Manual, CDOT Standard Plans and Specifications). The region traffic sections are responsible for the development of safety project scopes, schedules and budgets, delivering the safety projects, implementing safety recommendations on all projects as applicable, developing or reviewing work zone traffic control plans, signing, striping, and other traffic control device plans. The Traffic and Safety Engineering Branch is primarily responsible for safety program administration, standard designs and specifications for safety hardware devices used in construction projects, directing the safety assessment functions, assisting the regions with the selection of safety projects, facilitating the regions in the development of policies and procedures, providing and/or coordinating technical training and assistance, and overseeing the safety quality assurance effort.

The HSO will administer the non-infrastructure safety programs including the Colorado ISP which incorporates all safety program funding. This plan will identify the overall state safety objectives and the programs and resource allocations to be implemented annually to reach these objectives.

#### **16.4. FHWA ORGANIZATION**

The Colorado Division Safety and Traffic Area Engineer works in conjunction with CDOT in the areas of safety and traffic operations. This involves promoting and providing guidance on new national initiatives for increasing safety, decreasing the potential for crashes on all highways, minimizing the number of serious injuries and reducing fatalities. The Highway Safety Improvement Program (HSIP), originally established by SAFETEA-LU, is a core MAP-21 program. The safety program provides funding through MAP-21 to CDOT for the HSIP and Rail-Highway Grade Crossing Programs. FHWA has responsibility for approving the processes developed and set forth in CDOT's HSIP. Additional FHWA responsibilities, which are delegated to CDOT, include offering assistance to local governments in performing traffic engineering studies, and providing training and technical assistance to CDOT employees, Bureau of Indian Affairs (BIA) personnel and local agency personnel.

- FHWA participates as a team member in CDOT-led task forces and teams, formed as needed to address perceived needs or problems.
- FHWA participates as a member of various CDOT committees that are responsible for assessing traffic control practices and safety, as well as new traffic and safety-related technology and devices.
- FHWA may conduct inspections, including finals, on a statewide sampling basis through annual and process reviews.
- FHWA will provide ongoing technical assistance in the planning, implementation, and evaluation components of the HSIP.
- FHWA and CDOT serve as members of the engineering-related SHSP emphasis area committees providing direction in strategies.

#### **16.5. NHTSA ORGANIZATION**

The highway safety programs outlined in 23 CFR Part 1205 are eligible for federal funding under the State and Community Highway Safety Grant Program (23 U.S.C. 405). The Section 405 Safety Program is administered by NHTSA on the national level and by the Governor's Highway Safety Representative (currently CDOT Executive Director) at the state level. Programs developed under these guidelines are eligible for federal funding issued by NHTSA and FHWA. NHTSA is responsible for FHWA's portion of Section 405 that involves program oversight, eligibility, and administrative activities. FHWA's role is to provide technical assistance and support when appropriate. HSO is responsible for the day-to-day administration of this program. NHTSA is primarily responsible for approval of the statewide ISP for the Roadway Safety Program area of Section 405 and management and program reviews.

#### **16.6. QUALITY**

Quality of safety programs is ensured by CDOT through evaluation of safety cost effectiveness and/or value derived from the safety programs and projects and assessment of progress on key safety performance measures, as reported in the Annual HSIP reports. The continuous quality improvements

process of the Traffic and Safety Engineering Branch and Problem Identification conducted by HSO are used to prioritize limited funds to determine which initiatives have the greatest impact on highway safety in the areas of engineering and human factors (behavior). The quality is enhanced through collaboration with others to include FHWA, which provides technical assistance for the HSIP and individual projects. Quality is monitored through ongoing operations and the regional and project oversight that consists of work zone traffic control reviews, process reviews, scoping reviews, and Quality Assurance Reviews.

In conducting safety analysis, CDOT analyzes crash data using the latest and proven methodologies that are consistent with the HSM as well as current research. CDOT screens for locations that have a comparatively high concentration of crashes and correctable crash patterns, which are then categorized as locations with high potential for crash reduction. Through routine safety assessments, HSIP planning, or other statewide safety program planning, CDOT analyzes these locations and provides recommendations for mitigation that are both researched and proven (as documented in NCHRP Report 500 and in FHWA's Guide on the use of Proven Safety Countermeasures) in conjunction with other innovative strategies applied towards safety improvement.

The processes of this program are documented in 23 CFR, along with CDOT procedural directives and policies, operational guidelines, etc. This information is shared with those who need to understand how the process operates. In addition, meetings are an integral and critical method of process and operational communications.

Traffic Control Reviews: CDOT Area Engineers, with the support of Staff Traffic Engineers, Region Traffic Engineers, and FHWA Area Engineers will jointly conduct annual traffic control reviews to monitor traffic control on construction projects to ensure conformance with established regulations, policies, procedures, and guidelines.

Work Zone Safety and Mobility Process Reviews: The Branch, with the support of the FHWA Safety Program Manager, will comply with Section 23 CFR 630.1008(e) which states that "In order to assess the effectiveness of work zone safety and mobility procedures, the States shall perform a process review at least every two years".

## 16.7. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the effectiveness of the Traffic and Safety Program:

**Table 18- Performance/ Compliance Measures (Traffic and Safety Engineering)**

SAP #	Measure	Description	Reporting Mechanism	Target/Baseline <sup>1</sup>	Reporting Frequency
338	<b>Reduce the total number of fatalities</b>	Annual number of fatalities	Colorado Highway Safety Program Annual Report/Quarterly	Reduce annual number of fatalities by 12 from previous year's goal (464 for 2015)	Calendar Year <b>Quarterly reporting</b>
329	<b>Reduce total fatalities per VMT</b>	Annual fatality rate per 100 million VMT	Colorado Highway Safety Program Annual Report	Reduce annual fatality rate by 2.5% from previous year's goal (0.97 for 2015)	Calendar Year <b>Quarterly reporting</b>
355	<b>Reduce total number of serious injuries</b>	Annual number of serious injuries	Colorado Highway Safety Program Annual Report	Reduce annual number of serious injuries by 2.9% from previous year's goal (2,900 for 2015)	Calendar Year

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/Baseline<sup>1</sup></b>	<b>Reporting Frequency</b>
335	<b>Reduce the total serious injuries per VMT</b>	Reduce the total serious injuries per 100 million VMT	Colorado Highway Safety Program Annual Report	Reduce the serious injury rate by 2.9% annually from previous year's goal (6.18 for 2015)	Calendar Year
336	<b>Reduce alcohol-related fatal crashes</b>	Alcohol-related fatal crashes as a percentage of overall fatal crashes	Colorado Highway Safety Program Annual Report	Less than 45%	Calendar Year
376	<b>Reduce crash data processing time</b>	Number of months crash data processing is backlogged	Colorado Highway Safety Program Annual Report/Quarterly	Less than 6 months	Calendar Year <b>Quarterly reporting</b>
477	<b>Rural road fatality rate</b>	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	Calendar Year
478	<b>Older driver fatalities and serious injuries</b>	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	Calendar Year

<sup>1</sup> Data is not official for a year after the end of the calendar year. Therefore, targets/baselines are for 2015.

## **SECTION 17. TSM&O - INTELLIGENT TRANSPORTATION SYSTEMS (ITS)/ TECHNOLOGY PROGRAM**

### **17.1. INTRODUCTION**

The overall purpose of the ITS/Technology program is to use innovative technology and strategies to enhance and improve 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, Digital Short Range Radio (DSRC), connected vehicles, autonomous vehicles, higher quality and higher volume of transportation data (a.k.a. “Big 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 such as CDOT Mobile App including push notification, geo-fencing and targeted information, Active Traffic Management, Managed Lanes, Peak Period Shoulder Lanes, Variable Speed Limits (VSL), real time cameras, weather stations, 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. The goals are 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.

### **17.2. METHOD OF OPERATION**

The ITS staff persons of CDOT and FHWA work closely together to develop and deliver a quality product through teamwork and close coordination. Each organization has the goal of advancing and implementing an ITS program on the leading edge of technology in order to maximize the operational efficiency of the state’s transportation system. This working relationship meets the needs of our customers. Additionally, FHWA provides technical assistance, guidance, and oversight in applying federal laws and regulations, and in developing and deploying technology. These program activities include the use of ITS in transportation methods and procedures used by traffic engineers to manage and operate roadways, and ITS standards and specifications used for the procurement of traffic control systems.

The ITS program coordination and oversight are maintained through ITS managers meetings, monthly DRCOG Regional Transportation Operations meetings and other ITS project related meetings involving CDOT ITS staff and FHWA’s ITS Program Manager.

All projects (including ITS projects) that have Federal-aid funds, regardless of roadway classification, are subject to FHWA “Full-Oversight”. FHWA has developed certain factors, including workload distribution, which are considered to determine appropriate oversight level. Also, FHWA performs Program Accountability Reviews on Designated-Oversight projects, which could include ITS projects, based on certain risk areas identified in the previous Annual Construction Program Report.

In addition, ITS projects are required to conduct a Systems Engineering Analysis (SEA) commensurate with the scale and scope of the project, which is determined by the project risk assessment level. SEA is a structured process for arriving at a final design of a system and an approach to building systems that

enhance the quality of the end result with feedback on operations to allow for changes and upgrades through the life of a system

### **17.3. CDOT ORGANIZATION**

The ITS Branch consists of the following five Sections whose primary responsibility is:

1. Technology: Ensure that Colorado Transportation Management System, Cotrip.org, network equipment, servers, fiber communications backbone and Oracle database function properly and are operational 24/7. This also includes preparing the CDOT highway network to facilitate connected vehicle and autonomous vehicle technology.
2. Maintenance: Perform maintenance on the statewide ITS infrastructure as effectively and efficiently as possible in order to ensure maximum operational functionality and best use of available resources.
3. Engineering: Design and deliver high-quality projects and provide technical assistance and support to the regions and other agencies. Typical examples may include upgrades to the fiber optic network, VSL signs, installation of ramp meters, and truck parking/chain up station management systems.
4. System Performance and Support: Provide ITS asset programmatic oversight, administer Operations Evaluation and SEA process for ITS projects, work with CDOT regions to develop TSM&O Implementation and Corridor Plans to provide strategic, coordinated and systematic ITS statewide implementation and deployment, manage big data efforts with the INRIX Traffic application to make use of statewide travel condition data that can be used to enhance performance measures and business decisions, oversee connected vehicle deployment efforts and other efforts to support expansion of a statewide ITS network.
5. Traffic Signal and Ramp Meter Operations: Operate traffic signals and ramp meters as effectively and efficiently as possible and integrate traffic signal and ramp meter operations to support freeway operations including corridor, event and incident management.

### **17.4. FHWA ORGANIZATION**

FHWA ITS Program Manager leads the Division's efforts to mainstream ITS technology by continuing to increase the level of understanding of planners, engineers, officials and citizens within Colorado by providing awareness seminars, participation in ITS planning activities, and conducting or hosting technical training. In the Division, it is the responsibility of the ITS Program Manager and the Traffic and Area Engineers assigned to each of the five regional CDOT offices to provide close project management and coordination. The Traffic and Area Engineer will routinely review the ITS aspects of FHWA oversight projects during the design and construction phases for conformance with approved standards, specifications, and procedures. Questions or concerns are brought to the ITS Program Manager's attention. The Traffic and Area Engineer will rely on the ITS Program Manager for technical expertise or interpretation of ITS policy requirements.

The ITS Program Manager will have the lead on all ITS federally funded projects. An ITS project is defined as the application of technology devices, computers and communications infrastructure to address and solve transportation related problems. This includes the application of advanced technologies to control, manage, or otherwise provide guidance to the public. Other examples include advanced traffic management systems, computerized traffic signal systems, advanced traveler

information systems, etc. The FHWA oversight responsibility covers project initiation, right of way and/or environmental clearances, design reviews, and periodic construction inspections.

## 17.5. QUALITY

To ensure quality within the ITS Program, FHWA actively participates in the Metropolitan Planning Organization’s ITS working groups and was instrumental in assisting CDOT and DRCOG with the development of the System Engineering Analysis Guidelines. As a condition of spending federal dollars on ITS projects, federal law requires that all ITS projects comply with the system engineering analysis (SEA) process including all ITS architecture and standards requirements to assure successful implementation and quality of the project. FHWA participates in a technical manager’s meeting that tracks the project’s progress on an as-needed basis. This guarantees that the project is implemented in accordance with the project schedule and budget thereby ensuring quality. FHWA also participates in ITS Branch team meetings. This ensures that FHWA is aware of, and appropriately involved in, all planning level related ITS activities. The ITS Branch actively participates on the Quality Implementation Committee. In addition, FHWA participates in several CDOT statewide Traffic Engineer/TSM&O meetings per year that are attended by region Traffic Engineers who are also responsible for ITS projects in their respective region.

CDOT reports on corridor-specific congestion and incidents in the CDOT Performance Plan, which is shared with the state legislature. The information from the Governor's Vision 2018 Dashboard will be shared in the Stewardship and Oversight Agreement Annual Report.

## 17.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the ITS Program:

**Table 19 - Performance/Compliance Measures (ITS)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline <sup>1</sup>	Reporting Frequency
352	<b>Percent of identified congested corridors where ITS solutions implemented</b>	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%	Calendar Year <b>Quarterly reporting</b>
267	<b>Percent of identified congested corridors with ramp metering implemented</b>	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%	Calendar Year <b>Quarterly reporting</b>

<sup>1</sup> Data will not be available until late 2016. Therefore, targets/baselines are for 2015.

## **SECTION 18. TSM&O – ACTIVE TRAFFIC MANAGEMENT AND OPERATIONS BRANCH**

### **18.1. INTRODUCTION**

The Active Traffic Management and Operations Branch serves as both a traffic information center (collecting and disseminating statewide traveler information) and as a Traffic Management Center (actively managing traffic conditions and implementing appropriate operational measures). The Active Traffic and Operations 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 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 Branch assists in the development of all Traffic Incident Management Plans (TIMP) (currently there are 28 TIMPs statewide) for the purpose of managing traffic operations in a coordinated manner among pertinent jurisdictions during an incident. The two Incident Management Commanders and the I-70 Mountain Corridor Manager focus on the two highest-priority congested corridors that were identified in the Front Range/Denver metro area, I-25 and I-70. Staff provided 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. Another responsibility for the Active Traffic Management and Operations Branch is dispatching the Heavy Tow/I-70 Courtesy Patrol (focuses on I-70 Mountain Corridor) and the Mile-High Courtesy Patrol (focuses on Front Range Denver Metro Area). CDOT is tracking incident performance in the amount of assists and clearance time. Directly dispatching the vehicles will also result in quicker response to incidents, better communication during the incident and higher levels of service provided.

### **18.2. METHOD OF OPERATION**

Due to the integral relationship between the ITS Branch and the Active Traffic Management and Operations Branch, implementation and advancement of the ITS program is done by closely working with FHWA. FHWA coordinates with the Branch as it pertains to the delivery of first-responder training to ensure federal standards are met. The Branch is also responsible to ensure that federal guidelines pertaining to VMS message requirements are in compliance, and is responsible for the development of procedures, processes and protocols concerning dissemination of traveler information. Coordination and oversight are maintained through ITS managers meetings and other related meetings involving Branch staff and FHWA's ITS Program Manager.

### **18.3. CDOT ORGANIZATION**

The Active Traffic Management and Operations Branch is comprised of a Branch Manager, Operators, Incident Management Commanders and a Corridor Manager. The Branch collects traveler and road condition information from an extensive information collection network that consists of: detectors and sensors, CCTV cameras, ramp meters, radar detectors, weather stations, National Weather Service, toll tag readers, and road condition information provided by Colorado State Patrol (CSP) troopers and CDOT maintenance forces. Staff then aggregate, analyze, process and disseminate the information using the Colorado Transportation Management System (CTMS), which interfaces with the cotrip.org website, CDOT Mobile App, VMS on the roadway and highway advisory radios (HAR), and disseminates the information via 511 automated IVR phone system and GovDelivery. The Branch also assists with traffic,

incident and event management functions working with the other centers and CDOT regions using ramp meters, HOV lanes, and Incident Management Plan strategies to improve operations of the transportation system.

#### 18.4. FHWA ORGANIZATION

Within the Colorado Division, there is a TSM&O Team with a primary point of contact or program manager. The Colorado Division’s Operations TSM&O Team provides stewardship, oversight, and leadership for the management and operation of the surface transportation system in Colorado. The FHWA ITS Program Manager works directly with the Active Traffic Management and Operations Branch as it pertains to the delivery of first-responder training to ensure federal standards are met. The FHWA ITS Program Manager also works with the Branch to assist and provide oversight in development of corridor-specific incident management scenarios to incorporate into Situational Awareness incident management systems to facilitate and coordinate improved operational response, resources and efforts.

#### 18.5. QUALITY

To ensure quality within the activities that pertain to the Active Traffic Management and Operations Branch, FHWA routinely meets with the Branch in technical manager’s meetings to discuss and track progress of the activities on an as-needed basis. FHWA also participates in team meetings with both the Active Traffic Management and Operations Branch and the ITS Branch. This ensures that FHWA is aware of, and appropriately involved in, all planning level and implementation related activities.

The following performance indicators will be used to assess the health of the Active Traffic Management and Operations Program:

**Table 20 - Performance/ Compliance Indicators (Active Traffic Management and Operations Program)**

SAP #	Measure	Description	Reporting Mechanism	Target/ Baseline	Reporting Frequency
386	<b>CDOT Courtesy Patrol Assists</b> <sup>1</sup>	Measure the number of CDOT Courtesy Patrol Assists	CTMS Software	Track trend	Calendar Year
665	<b>Non-CDOT Courtesy Patrol Assists</b> <sup>2</sup>	Measure the number of non-CDOT Courtesy Patrol Assists	E-470 Highway Group Data	Track trend	Calendar Year
666	<b>Hits for CDOT Traveler Tools</b>	Measure the number of hits for CDOT traveler tools that customers have accessed (i.e., CoTrip and 511 calls) in order to identify trends to improve information consumption by the public	Google Analytics CoTrip Site  511 Data collection	Track trend	Calendar Year
667	<b>Number of CDOT Push Notifications</b>	Measure the number of CDOT communications pushed out (i.e., CoTrip notifications and 511 notes) in order to identify trends to improve information consumption by the public	Google Analytics CoTrip Site  511 Data collection (12 month average)	Track trend	Calendar Year

<sup>1</sup> The CDOT Courtesy Patrol operates 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.

<sup>2</sup> The non-CDOT Courtesy Patrol includes the E-470 Highway Group’s courtesy patrol for the 470 highway network. The assists include, but not limited to, the following services: abandoned, customer

resting, air, secure load, directions, telephone, drive off, flat tire, fluid, fuel, GOA , wave off, overheat, jump, mechanical, other, accident, incident, plaza security check and litter. There is not currently data available for Northwest Parkway.

## 18.6. PERFORMANCE/COMPLIANCE MEASURES

The following performance measures will be used to assess the health of the Active Traffic Management and Operations Program:

**Table 21 - Performance/Compliance Measures (Active Traffic Management and Operations)**

<b>SAP #</b>	<b>Measure</b>	<b>Description</b>	<b>Reporting Mechanism</b>	<b>Target/Baseline<sup>1</sup></b>	<b>Reporting Frequency</b>
266	<b>Percent of congested corridors implemented with incident management plans</b>	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%	Calendar Year <b>Quarterly reporting</b>

<sup>1</sup> Data will not be available until late 2016. Therefore, targets/baselines are for 2015.

## APPENDIX B: MANUALS AND OPERATING AGREEMENTS

MANUAL/ GUIDANCE	REFERENCE	RESPONSIBLE PARTY	FHWA Approval (Y OR N)
2013 Flood Event Indirect and CE Cost Allocation Plan	2 CFR 200	Chief Financial Officer	Y
Indirect and CE Cost Allocation Plan	2 CFR 200	Chief Financial Officer	Y
OFMB Policy and Procedure Manual	No Authority	Chief Financial Officer	Y
Affirmative Action Program Plan	23 CFR 230.311	Civil Rights & Business Resource Center	Y
Contractor Compliance Program	23 CFR 230, Subparts A, C and D	Civil Rights & Business Resource Center	Y
Disadvantaged Business Enterprise (DBE) Program Plan/DBE Goal	49 CFR 26	Civil Rights & Business Resource Center	Y
Title VI Plan	23 CFR 230.311	Civil Rights & Business Resource Center	Y
Construction Manual – 2004	No Authority	Contracts and Market Analysis Branch	Should review + concur
Consultant Selection Process	23 CFR 172.9	Contracts and Market Analysis Branch	
CDOT NEPA Manual	No Authority or 42 USC 4321-4370	Environmental Programs	Should review + concur (Chapter 7 approval)
Environmental Stewardship Guide	No Authority	Environmental Programs	N
Erosion Control and Stormwater Quality Guide	23 CFR 650.211	Environmental Programs	Y
Landscape Architecture Manual	No Authority	Environmental Programs	Should review + concur
NEPA Compliance Policy Directive 1904.0	No Authority	Environmental Programs	N
Noise Policy	23 CFR 772	Environmental Programs	Y
Planning and Environmental Linkages (PEL) Handbook	23 USC 168-169	Environmental Programs	N
Stakeholder Involvement Guidance and Public Involvement Plan (Chapter 7 of CDOT NEPA Manual)	23 CFR 771.111(h)(1)	Environmental Programs	Y
CDOT Drainage Design Manual	CFR 625	Hydraulics	Y

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

<b>MANUAL/ GUIDANCE</b>	<b>REFERENCE</b>	<b>RESPONSIBLE PARTY</b>	<b>FHWA Approval (Y OR N)</b>
FHWA HEC Publications	<a href="http://www.fhwa.dot.gov/engineering/hydraulics/bridgehyd/bridge.cfm">http://www.fhwa.dot.gov/engineering/hydraulics/bridgehyd/bridge.cfm</a>	Hydraulics	
Field Materials Manual	CFR 625	Materials and Geotechnical Branch	Y
Laboratory Manual of Test Procedures	CFR 625	Materials and Geotechnical Branch	Y
Pavement Design Manual	CFR 625	Materials and Geotechnical Branch	Y
CDOT Retaining and Sound Wall Inspection and Asset Management Manual	No Authority	No Authority	N
Design – Build Manual - 2006	No Authority	Project Development Branch	Should review + concur
Lighting Design Guide – 2006	CFR 625	Project Development Branch	Y
Local Agency Manual – 2006	No Authority	Project Development Branch	Should review + concur
Project Development Manual	No Authority	Project Development Branch	Should review + concur
Right-of-Way Manual	23 CFR 710.201	Project Development Branch	Y
Roadway Design Guide – 2005	No Authority	Project Development Branch	Should review + concur
Standard Plans – M & S Standards	23 CFR 625.3	Project Development Branch	Y
Standard Specifications for Road and Bridge Construction	23 CFR 625.3	Project Development Branch	Y
Survey Manual	CFR 625	Project Development Branch	Y
Access Code/Policy	No Authority	Safety and Traffic Engineering Branch	Should review + concur
Colorado supplement to the MUTCD	23 CFR 655.603	Safety and Traffic Engineering Branch	Y
Highway Safety Improvement Program (HSIP) Manual	23 USC 148	Safety and Traffic Engineering Branch	Y
Manual on Uniform Traffic Control Devices (MUTCD) – State Adoption	23 CFR 655.603	Safety and Traffic Engineering Branch	Y
Utility Manual	CFR 625	Safety and Traffic Engineering Branch	Y
CDOT Bridge Design Manual	CFR 625	Staff Bridge Branch	Should review + concur

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

<b>MANUAL/ GUIDANCE</b>	<b>REFERENCE</b>	<b>RESPONSIBLE PARTY</b>	<b>FHWA Approval (Y OR N)</b>
CDOT Bridge Detailing Manual	CFR 625	Staff Bridge Branch	Should review + concur
CDOT Bridge Rating Manual	CFR 625 and CFR 650.313 C	Staff Bridge Branch	Should review + concur
CDOT Bridge Ratings, Inspections and Records Manual (BRIAR) Manual	CFR 650 Subpart C CFR 650 Subpart D	Staff Bridge Branch	Should review + concur
CDOT Overhead Signs, Signals, & High Mast Lights Coding Guide	No Authority	Staff Bridge Branch	N
CDOT Pontis Bridge Inspection Coding Guide	CFR 650 Subpart C	Staff Bridge Branch	Should review + concur
Colorado Structure Inventory Coding Guide	CFR 650 Subpart C	Staff Bridge Branch	Y

## APPENDIX C: GLOSSARY

### 3R Projects - Resurfacing, Rehabilitation and Restoration

Assumption of Responsibilities – The act of State DOT to accept responsibility for carrying out and approving certain actions in the place of FHWA. Such actions are to be taken by the State DOT in conformance with Federal laws, regulations, and policies.

Assumed Projects – Federal projects that the State DOT reviews in the place of FHWA and has the authority to approve certain specified actions pertaining to design; plans, specifications, and estimates; contract awards; and inspections.

Certification Reviews – A review that formalizes the continuing oversight and day-to-day evaluation of the planning process.

Control Document – Applicable laws, regulations, standards, policies, and standard specifications approved by FHWA for use on Federal-aid highway projects.

Core Functions – Activities that make up the primary elements of the division office's Federal-aid oversight responsibilities based on regulations and national policies. Core functions in the division office are Planning, Environment, Right-of-Way, Design, Construction, Finance, Operations, System Preservation, Safety, and Civil Rights.

Delegated Projects – Projects that do not require FHWA to review and approve actions pertaining to design, plans, specifications, estimates, right-of-way certification statements, contract awards, inspections, and final acceptance of Federal-aid projects on a project by project basis.

Emergency Relief Projects – The Emergency Relief (ER) program assists State and local governments with the expense of repairing serious damage to Federal-aid highways and roads on Federal Lands resulting from natural disasters or catastrophic failures. In addition to the permanent authorization of \$100 million annually, SAFETEA-LU authorizes such sums as may be necessary to be made available by appropriation from the General Fund to supplement the permanent authorization in years when Emergency Relief allocations exceed \$100 million. [1112]

Locally Administered Projects – For the purpose of the S&O Agreement, a Federal-aid project in which an entity other than a traditional State DOT is a sub-recipient and this entity is administering the particular phase being authorized, i.e., Preliminary Engineering, ROW, or Construction. These would include projects where the non-traditional entity will either perform the work itself or enter into a contract for services or construction. State DOT remains responsible for the local public agency's compliance on locally administered projects.

Local Public Agency (LPA) – Any organization, other than a traditional State DOT, with administrative or functional responsibilities that are directly or indirectly affiliated with a governmental body of any Tribal Nation, State, or local jurisdiction. LPAs would most often include cities or counties. However, an LPA, as defined here, could also include a State entity as well, perhaps even a part of a State DOT. An example could include a Port Authority or Toll Authority that had not traditionally worked with the Federal-aid highway program (FAHP).

Major Projects – Projects with an estimated total cost greater than \$500 million, or projects approaching \$500 million with a high level of interest by the public, Congress, or the Administration.

Major Bridges - Major bridges are defined in the policy of FHWA Order 5520.1 "Preliminary Plan Review and Approval" and should have preliminary plan approval by FHWA. Examples of special features meeting major bridge project criteria are:

- Bridges with approximately (125,000 sq. ft.) deck area
- Bridge span of 152.4 meters (500 ft.) or greater
- Bridges utilizing high-strength steel or concrete or special materials
- Unusual bridge types, e.g., arches and trusses
- Tunnels and unusually high cuts or high fills
- Major hydraulic structures

Oversight – The act of ensuring that the Federal highway program is delivered consistent with laws, regulations and policies.

Oversight Projects – Projects that require FHWA to review and approve actions pertaining to design, plans, specifications, estimates, right-of-way certification statements, contract awards, inspections, and final acceptance of Federal-aid projects on a project by project basis.

Performance/Compliance Indicators – These indicators track performance trends, health of the Federal-aid Highway Program, and compliance with Federal requirements. They do not have a specific target or baseline.

Performance/Compliance Measures – These measures track performance trends, health of the Federal-aid Highway Program, and compliance with Federal requirements. They include quantitative targets, including those with a “downward or upward trend” target. When a specific target has not been determined, but will in the near term, a descriptive footnote is added to describe why there is no target and when it will be developed.

Program Assessments – This evaluation technique may take many forms, including joint risk assessments and self-assessments. These tools are based on the common concepts of identifying strengths, weaknesses, and opportunities and the identification and sharing of “best” practices to continually improve the program.

Program Reviews – A thorough analysis of key program components and the processes employed by the State DOT in managing the program. The reviews are conducted to: 1) ensure compliance with Federal requirements; 2) identify areas in need of improvement; 3) identify opportunities for greater efficiencies and cost improvement to the program; and/or 4) identify exemplary practices.

Projects of Division Interest (PoDIs) – PoDIs are those projects that have an elevated risk, contain elements of higher risk, or present a meaningful opportunity for FHWA involvement to enhance meeting project objectives. For PoDIs, FHWA has made a risk-based decision to retain project approval actions or conduct stewardship and oversight activities for the project as provided for in 23 USC 106.

Recurring Reviews – Reviews that the division office conducts annually or on a regular periodic basis. Examples include NBIS, HPMS, HVUT, etc.

Risk Assessment – The process of identifying a risk event, determining the likelihood of the event happening, determining the impact (positive or negative) of the event on the delivery of the FAHP, and identifying an appropriate risk response strategy.

Risk-Based Approach – Incorporating risk assessment and risk management into investment and strategic decision making (the means by which limited resources are focused).

Risk Management – The systematic identification, assessment, planning, and management of threats and opportunities faced by FHWA projects and programs.

Stewardship – The efficient and effective management of the public funds that have been entrusted to FHWA.

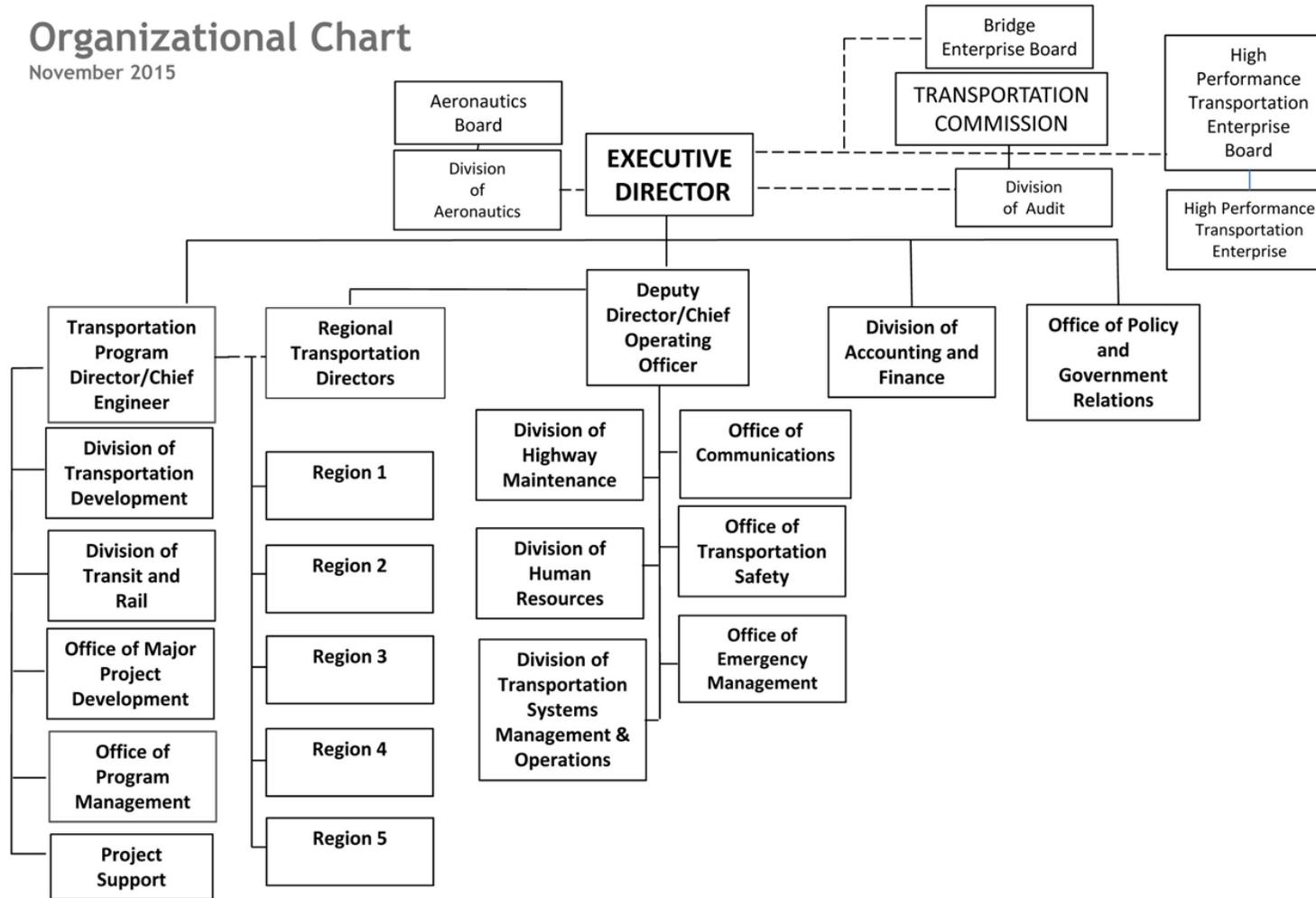
Unit Performance Plan – The annual performance plan prepared by an individual FHWA unit that address unit responsibilities and priorities taking into account the National Performance Objectives and National Initiatives identified in FHWA’s Strategic Implementation Plan (SIP) as well as specific initiatives identified at the unit level based on risk.

ISTEA, TEA-21, SAFETEA-LU, and MAP-21 – The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 was a six-year federal transportation funding law that took effect in 1991. ISTEA provided \$155 billion for highways, highway safety and transit for fiscal years 1992 through 1997. The Transportation Equity Act for the 21st Century (TEA-21) is a six-year extension of ISTEA providing a 40-percent increase in transportation funding for fiscal years 1998 through 2003. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users guaranteed (SAFETEA-LU) provided \$244.1 billion for highways, highway safety, and public transportation. SAFETEA-LU represents the largest surface transportation investment in our Nation's history. The Moving Ahead for Progress in the 21st Century (MAP-21) was signed in 2012. It creates a streamlined and performance-based surface transportation program. These acts have given states increased flexibility in establishing the degree to which FHWA will be involved in the development of the Federal-Aid Highway Program (FAHP).

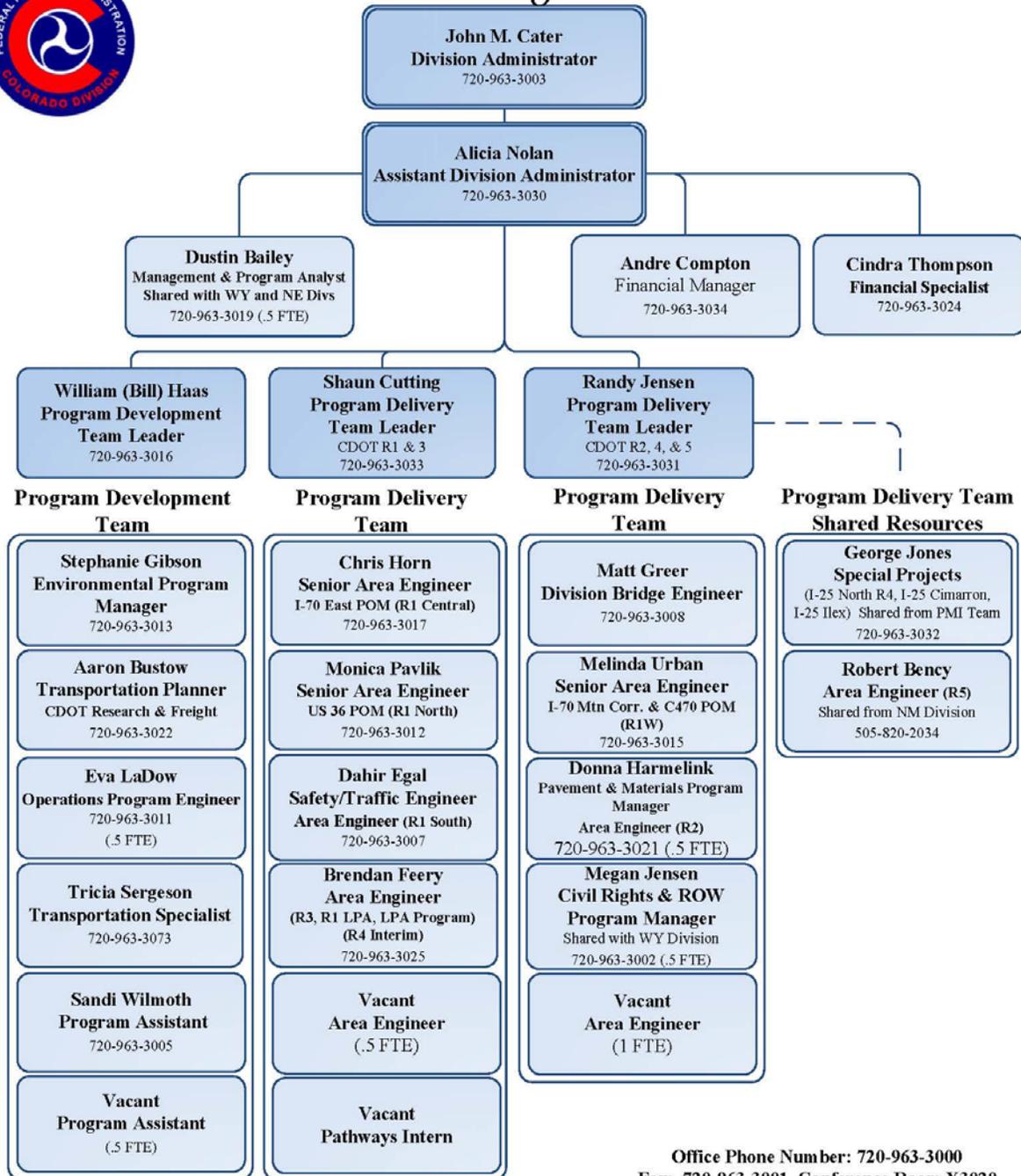
## APPENDIX D. CDOT AND FHWA ORGANIZATIONAL CHARTS

### Organizational Chart

November 2015



# Federal Highway Administration Colorado Division Organizational Chart



Office Phone Number: 720-963-3000  
 Fax: 720-963-3001 Conference Room X3020  
 HELP DESK 1-866-466-5221  
 IT - Ed Potter 720-963-3046  
**GUARD X3770**

## ATTACHMENT A: PROJECT ACTION RESPONSIBILITY MATRIX (As of February 6, 2015)

The following matrix identifies Federal-aid highway program (FAHP) project approvals and related responsibilities. The matrix specifies which ones are subject to State assumption under the provisions of 23 U.S.C. 106(c) or other statutory or regulatory authority, as well as those which are reserved to FHWA.

In the column entitled “Projects on the NHS” if an item is marked “FHWA or State,” it means the State may assume the specified approval and related responsibilities if the Division determines the assumption is appropriate. For projects on the NHS, FHWA may retain any approval or related action in any box marked “FHWA or State”, as deemed appropriate by the Division, by choosing to enter “FHWA” for that box. If FHWA retains any approval or related action in any box marked “FHWA or State”, the project is a PoDI, and will require a PoDI plan.

For the column marked “Projects off the NHS”, the State must assume all items marked “State” unless the State determines the assumption of a particular item by the State is not appropriate and requests FHWA take responsibility for the action. In such cases, the box should read “FHWA”. If FHWA retains an action the State could have assumed (on the NHS) or has a right to assume (off the NHS), the affected projects become PoDI projects.<sup>1</sup> Matrix users may find it easier to identify such situations if you mark such instances in the matrix with a note or asterisk (\*). Divisions also may wish to include in Attachment A’s introduction information about where readers can find a list of PoDI projects and copies of PoDI plans.

Except as expressly stated in notes to the matrix below, the State cannot assume any item marked only as “FHWA” in either column. Any item marked only “FHWA” is reserved to FHWA because it is outside the scope of 23 U.S.C. 106(c), or otherwise is reserved to FHWA by law. While FHWA may not delegate decision-making authority to a State unless authorized by law, FHWA may authorize a State DOT to perform work needed to reach the decision point, or to implement the decision.

The following matrix identifies Federal-aid highway program (FAHP) project approvals and related responsibilities on a program-wide basis. The matrix specifies which actions are assumed by the State under the provisions of 23 U.S.C. 106(c) or other statutory or regulatory authority, as well as those which are reserved to FHWA. Projects classified as PoDI projects are not covered by the matrix, as those projects will be governed by a separate PoDI plan that specifies FHWA and State responsibilities for the project.

The State DOT is responsible for ensuring all individual elements of the project are eligible for FAHP funding, but all final eligibility and participation determinations are retained by FHWA.

---

<sup>1</sup> *The following are considered PoDI projects: Major Projects (>\$500M); Appalachian Development Highway Projects; TIGER Discretionary Grant Projects; NHS Projects with Retained FHWA Project Approval; Non-NHS Projects with Retained FHWA Project Approval; and Projects Selected by FHWA for Risk-based Stewardship & Oversight.* Regardless of retained project approval actions, any Federal-aid Highway Project either on or off the NHS that the Division identifies as having an elevated level of risk can be selected for risk-based stewardship and oversight and would then be identified as a PoDI. Please see *“Projects of Division Interest (PoDI)/Projects of Corporate Interest (PoCI) Guidance (available at <http://www.fhwa.dot.gov/federalaid/stewardship/>)*.

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015) (Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
<b>PROGRAMMING (All phases)</b>		
Ensure project in Statewide Transportation Improvement Program (STIP)/Transportation Improvement Program (TIP)	STATE	STATE
Identify proposed funding category	STATE(1)	STATE(1)
<b>FINANCIAL MANAGMENT (All phases)</b>		
Obligate funds/approve Federal-aid project agreement, modifications, and project closures (project authorizations) (Note: this action cannot be assumed by State)	FHWA	FHWA
Authorize current bill (Note: this action cannot be assumed by State)	FHWA	FHWA
Review and Accept Financial Plan and Annual Updates for Federal Major Projects over \$500 million [23 U.S.C. 106(h)] (Note: this action cannot be assumed by State)	FHWA	FHWA
Review Cost Estimates for Federal Major Projects over \$500 million [23 U.S.C. 106(h)] (Note: this action cannot be assumed by State)	FHWA	FHWA
Develop Financial Plan for Federal Projects between \$100 million and \$500 million. [23 U.S.C. 106(i)]	STATE	STATE
<b>ENVIRONMENT (All phases)</b>		
All EA/FONSI, EIS/ROD, 4(f), 106, 6(f) and other approval actions required by Federal environmental laws and regulations. (Note: this action cannot be assumed by STATE except under 23 U.S.C. 327)	FHWA(2)	FHWA(2)
Categorical Exclusion approval actions (Note this action cannot be assumed by the State except through an assignment under 23 U.S.C. 326 or 327, or through a programmatic agreement pursuant to Section 1318(d) of MAP-21 and 23 CFR 771.117 (g))	FHWA(2)	FHWA(2)
<b>PRELIMINARY DESIGN (Design Phase)</b>		
Consultant Contract Selection	STATE (3)	STATE (3)
Sole source Consultant Contract Selection	STATE (3)	STATE (3)

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015)</b> <b>(Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
Approve hiring of consultant to serve in a "management" role (Note: this action cannot be assumed by State) [23 CFR 172.9]	FHWA	FHWA
Approve consultant agreements and agreement revisions (Federal non-Major Projects) [23 CFR 172.9]	STATE	STATE
Approve consultant agreements and agreement revisions on Federal Major Projects [23 CFR 172.9] (Note: this action cannot be assumed by State)	FHWA	FHWA
Approve exceptions to design standards [23 CFR 625.3(f)]	STATE	STATE
Interstate System Access Change [23 USC 111] (Note: this action cannot be assumed by State)	FHWA	N/A
Interstate System Access Justification Report [23 USC 111] (Note: action may be assumed by State pursuant to 23 USC 111(e))	STATE	N/A
Airport highway clearance coordination and respective public interest finding (if required) [23 CFR 620.104]	STATE	STATE
Approve Project Management Plan for Federal Major Projects over \$500 million [23 USC 106(h)] (Note: this action cannot be assumed by State)	FHWA	FHWA
Approve innovative and Public-Private Partnership projects in accordance with SEP-14 and SEP-15 (Note: this action cannot be assumed by State)	FHWA	FHWA
Provide pre-approval for preventive maintenance project (until FHWA concurs with STATE procedures) (Note: this action cannot be assumed by State)	FHWA	FHWA
<b>DETAILED / FINAL DESIGN (Design Phase)</b>		
Provide approval of preliminary plans for unusual/complex bridges or structures on the Interstate. [23 USC 109(a) and FHWA Policy]	FHWA (4)	N/A
Provide approval of preliminary plans for unusual/complex bridges or structures (non-Interstate). [23 USC 109(a) and FHWA Policy]	STATE	STATE
Approve retaining right-of-way encroachments [23 CFR 1.23 (b) & (c)]	FHWA for Interstate STATE for Non-Interstate	STATE

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015)</b> <b>(Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
Approve use of local force account agreements [23 CFR 635.104 & 204]	STATE	STATE
Approve use of publicly owned equipment [23 CFR 635.106]	STATE	STATE
Approve the use of proprietary products, processes [23 CFR 635.411]	STATE	STATE
Concur in use of publicly furnished materials [23 CFR 635.407]	STATE	STATE
<b>RIGHT-OF-WAY (Design and Operational Phases)</b>		
Make feasibility/practicability determination for allowing authorization of construction prior to completion of ROW clearance, utility and railroad work [23 CFR 635.309(b)]	STATE	STATE
Make public interest finding on whether State may proceed with bid advertisement even though ROW acquisition/relocation activities are not complete for some parcels [23 CFR 635.309(c)(3)]	FHWA for Interstate STATE for Non-Interstate	STATE
Ensure ROW compliant certificate is in place [23 CFR 635.309(c)]	STATE	STATE
Approve Hardship and Protective Buying [23 CFR 710.503] (If a Federal-aid project) (Note: this action cannot be assumed by State)	FHWA	FHWA
Approve Interstate Real Property Interest Use Agreements [23 CFR 710.405] (Note: this action cannot be assumed by State)	FHWA	N/A
Approve non-highway use and occupancy [23 CFR 1.23(c)]	FHWA for Interstate STATE for Non-Interstate (3)	STATE (3)
Approve disposal at less than fair market value of federally funded right-of-way, including disposals of access control [23 U.S.C. 156] (Note: this action cannot be assumed by State)	FHWA	FHWA

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015)</b> <b>(Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
Approve disposal at fair market value of federally funded right-of-way, including disposals of access control [23 CFR 710.409] (Note: 23 CFR 710.201 authorizes FHWA and STATE to agree to scope of property-related oversight and approvals for all actions except those on the Interstate System)	FHWA for Interstate STATE for Non-Interstate (3)	STATE (3)
Requests for credits toward the non-Federal share of construction costs for early acquisitions, donations or other contributions applied to a project (note: this action cannot be assumed by State)	FHWA	FHWA
Federal land transfers [23 CFR 710, Subpart F] (Note: this action cannot be assumed by State)	FHWA	FHWA
Functional replacement of property [23 CFR 710.509] (Note: this action cannot be assumed by State)	FHWA	FHWA
<b>SYSTEM OPERATIONS AND PRESERVATION (Design Phase)</b>		
Accept Transportation Management Plans (23 CFR 630.1012(b))	STATE	STATE
Approval of System Engineering Analysis (for ITS) [23 CFR 940.11]	STATE	STATE
<b>PS&amp;E AND ADVERTISING (Design Phase)</b>		
Approve PS&E [23 CFR 630.201]	STATE	STATE
Authorize advance construction and conversions [23 CFR 630.703 & 709] (Note: this action cannot be assumed by State)	FHWA	FHWA
Approve utility or railroad force account work [23 CFR 645.113 & 646.216]	STATE	STATE
Approve utility and railroad agreements [23 CFR 645.113 & 646.216]	STATE	STATE
Approve use of consultants by utility companies [23 CFR 645.109(b)]	STATE	STATE
Approve exceptions to maximum railroad protective insurance limits [23 CFR 646.111]	STATE	STATE
Authorize (approve) advertising for bids [23 CFR 635.112, 309]	STATE	STATE
<b>CONTRACT ADVERTISEMENT AND AWARD (Design Phase)</b> All contracts to be done by competitive bidding unless otherwise authorized by law		

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015)</b> <b>(Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
Approve cost-effectiveness determinations for construction work performed by force account or by contract awarded by other than competitive bidding [23 CFR 635.104 &.204]	STATE	STATE
Approve emergency determinations for contracts awarded by other than competitive bidding [23 CFR 635.104 &.204]	STATE	STATE
Approve construction engineering by local agency [23 CFR 635.105]	STATE	STATE
Approve advertising period less than 3 weeks [23 CFR 635.112]	STATE	STATE
Approve addenda during advertising period [23 CFR 635.112]	FHWA or STATE, whichever approved PS&E	STATE
Concur in award of contract [23 CFR 635.114]	STATE	STATE
Concur in rejection of all bids [23 CFR 635.114]	STATE	STATE
Approval of Design-Build Requests-for-Proposals and Addenda [23 CFR 635.112]	STATE	STATE
<b>CONSTRUCTION (Construction Phase)</b>		
Approve changes and extra work [23 CFR 635.120]	STATE	STATE
Approve contract time extensions [23 CFR 635.120]	STATE	STATE
Concur in use of mandatory borrow/disposal sites [23 CFR 635.407]	STATE	STATE
Accept materials certification [23 CFR 637.207]	STATE	STATE
Concur in settlement of contract claims [23 CFR 635.124]	STATE	STATE
Concur in termination of construction contracts [23 CFR 635.125]	STATE	STATE
Waive Buy America provisions [23 CFR 635.410] (Note: this action cannot be assumed by State)	FHWA	FHWA
Final inspection/acceptance of completed work [23 USC 114(a)]	STATE	STATE
<b>CIVIL RIGHTS (All phases)</b>		

<b>PROJECT ACTION RESPONSIBILITY MATRIX (as of February 6, 2015)</b> <b>(Excluding PoDIs, which are subject to separate PoDI Plans)</b>		
<b>ACTION</b>	<b>AGENCY RESPONSIBLE</b>	
	<b>PROJECTS ON THE NHS</b>	<b>PROJECTS OFF THE NHS</b>
	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>	<b>Assumption of FHWA Responsibilities under 23 U.S.C. 106(c) or other statutory or regulatory authority</b>
Approval of Disadvantaged Business Enterprise (DBE) Project Contract Goal set by the State DOT under 49 CFR 26.51(d). [49 CFR 26.51(e)(3)]	STATE	STATE
Acceptance of Bidder's Good Faith Efforts to Meet Contract Goal [49 CFR 26.53] or of Prime Contractor's Good Faith Efforts to Find Another DBE Subcontractor When a DBE Subcontractor is Terminated or Fails to Complete Its Work [49 CFR 26.53(g)] (Note: this action cannot be performed by FHWA)	STATE	STATE
Equal Employment Opportunity (EEO) Contract Compliance Review Approval [23 CFR Part 230, Subpart D]).	STATE	STATE
Training Special Provision – Approval of Project Goal for training slots or hours [23 CFR Part 230, Subpart A]	STATE	STATE
Training Special Provision – Approval of New Project Training Programs (Note: this action cannot be assumed by State) [23 CFR 230.111(d), (e)]	FHWA	FHWA
<b>FOOTNOTES:</b>		
<p>(1) State is responsible for ensuring that all individual elements of the project are eligible. FHWA will check that the scope of the project as described in submitted project agreement is eligible for the category of funding sought. All final eligibility and participation determinations are retained by FHWA.</p> <p>(2) If there is a 23 U.S.C. 326 or 325 assignment or PCE agreement, decisions are handled in accordance with those assignments or agreements.</p> <p>(3) State's process and modifications to, or variation in process, require FHWA approval.</p> <p>(4) Unusual/Complex bridges and structures are those that the Division determines to have unique foundation problems, new or complex designs, exceptionally long spans, exceptionally large foundations, complex hydrologic (including climate change and extreme weather events) aspects, complex hydraulic elements or scour related elements, or that are designed with procedures that depart from currently recognized acceptable practices (i.e., cable-stay, suspension, arch, segmental concrete, moveable, truss, tunnels, or complex geotechnical walls or ground improvement systems)</p>		

## ATTACHMENT B: PROGRAM RESPONSIBILITY MATRIX

The following matrix is a list of program actions. Those in gray are actions that the CO Division and CDOT choose to track. They were not listed in FHWA national template. The “Nat. Template #” column is meant to help FHWA easily compare information in this matrix, as compared to the national template.

In some cases, additional information was added to “Action”, “FHWA Specific Roles” and “CDOT Specific Roles” columns, using the acronyms below. This is more specific information that the CO Division and CDOT choose to track. Finally, some information was added to the “Remarks” column, indicated in red text. In some cases, there is refined or explanatory information that is important to describe. In other cases, the CO Division and CDOT use different frequency or due dates than the national guidance.

Note about the Authority column: All actions taken on or after December 26, 2014, shall be governed by the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards in 2 CFR Part 200. Part 200 of 2 CFR supersedes 49 CFR Parts 18 and 19, and requirements from OMB Circulars A-21, A-87, A-110, and A-122 (which have been placed in OMB guidance documents); Circulars A-89, A-102, and A-133; and the guidance in Circular A-50 on Single Audit Act follow-up.

The file may be easier to review as an Excel spreadsheet, which is available on the [QIC SharePoint site](#).

Actions:	
A	Approve
DES	Design
C	Compliance
CON	Construction
F	Forward
R	Review
S	Submit

CDOT Roles:	
AO	CDOT Awards Officer
CMABM	CDOT Contract and Market Analysis Branch Manager
CE	CDOT Chief Engineer
CTMC	Colorado Transportation Management Center
DTD	CDOT Division of Transportation Development
EE	CDOT Engineering Estimator
EPB	CDOT Environmental Programs Branch
EPB T&E PM	CDOT EPB Threatened and Endangered Species Project Manager
OTS	CDOT Office of Transportation Safety
PDBM	CDOT Project Development Branch Manager
RE	CDOT Resident Engineer
RHE	CDOT Regional Hydraulics Engineer
RPEM	CDOT Regional Planning and Environmental Program Manager
RTD	CDOT Regional Transportation Director
SPC	CDOT Survey/Plans Coordinator
SSE	CDOT Standards and Specifications Engineer
STEB	CDOT Safety and Traffic Engineering Branch
TPBM	CDOT Transportation Performance Management Branch

FHWA Roles:	
AE	FHWA Area Engineers
BE	FHWA Division Bridge Engineer
CRS	FHWA Civil Rights Specialist
DA	FHWA Division Administrator
Env PM	FHWA Environmental Program Manager
FM	FHWA Financial Manager
FS	FHWA Financial Specialist
MTP	FHWA Metropolitan Transportation Planner
PA	FHWA Program Assistant
PDTL	FHWA Program Delivery Team Leader
RWPM	FHWA ROW Program Manager
STE	FHWA Safety/Traffic Engineer
STP	FHWA Statewide Transportation Planner
TS	FHWA Transportation Specialist

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

Nat. Temp. #	Activity	Authority	Frequency	Due Date	FHWA HQ Program Office	FHWA Division Responsible Program Office	State DOT Responsible Program Office	Remarks	Functional Area	Action	FHWA Specific Roles	CDOT Specific Roles
--------------	----------	-----------	-----------	----------	------------------------	--	--------------------------------------	---------	-----------------	--------	---------------------	---------------------

Engineering: Applied Research & Innovation												
98	Approval of State Research and Development Work Program (Part 2)	23 CFR 420.111, 23 CFR 420.115, and 23 CFR 420.209	Annually	Prior to Program Period	Office of Planning, Environment & Realty	Planning	Division of Transportation Development (DTD)	FHWA Division Office Approval.  In CO, SPR Part 1 and 2 are combined into the DTD SPR Work Plan.	Applied Research & Innovation	R & A	TS	
134	Approval of Local Technical Assistance Program (LTAP) Centers Work Plan and Budget	FHWA LTAP Field Manual	Annually	31-Mar	Office of Planning, Environment & Realty	Planning	Applied Research and Innovation Branch	FHWA HQ approval. (Suggest FHWA Division Office approval)  Frequency: May 1	Applied Research & Innovation	R & A	TS	
157	Approval of Management Process and Project Selection Procedures and Certification for Research, Development & Technology Transfer Program and Revisions to Process	23 CFR 420.115 and 23 CFR 420.209	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Applied Research and Innovation Branch	FHWA Division Office Approval.	Applied Research & Innovation			
158	Periodic Review of States Management Process of the Research, Development & Technology Transfer Program	23 CFR 420.209	Periodic	Not Applicable	Office of Planning, Environment & Realty	Planning	Division of Transportation Development (DTD)	FHWA Division Office Periodic Review.	Applied Research & Innovation			
159	Approval of Performance and Expenditure Reports for SPR Research Work Programs	23 CFR 420.117	No less frequently than annual and no more frequently than quarterly	90 Days After End Of Period	Office of Planning, Environment & Realty	Planning	Division of Transportation Development (DTD)	FHWA Division Office Approval.	Applied Research & Innovation			
160	Approval of SPR research reports	23 CFR 420.117	Prior to publication unless prior approval is waved	Not Applicable	Office of Planning, Environment & Realty	Planning	Applied Research and Innovation Branch	FHWA Division Office Approval unless waived.	Applied Research & Innovation			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

Engineering: Asset Management												
59	Determination on Adequacy of State's Asset Management Plan	23 USC 119(5)	Annually beginning second fiscal year after establishment of the process		Office of Infrastructure	Assistant Division Administrator (ADA)	Transportation Performance Branch		Asset Management	Certify	DA	
60	Certification and Recertification of States Process for Development of State Asset Management Plan	23 USC 119(6)	Recertification every four years after establishment of the process		Office of Infrastructure	Assistant Division Administrator (ADA)	Transportation Performance Branch		Asset Management	Certify	DA	
61	Review Reporting on Performance Targets	23 USC 150(e)	Beginning four years after enactment of MAP-21 and biennially thereafter		Office of Infrastructure	Assistant Division Administrator (ADA)	Transportation Performance Branch		Asset Management	R	DA	TPBM
62	Review National Highway System Performance Achievement Plan for Actions to achieve the targets (when State does not achieve or make significant progress toward achieving)	23 USC 119(7)	Required if State does not achieve targets (or significant progress) for 2 consecutive reports		Office of Infrastructure	Assistant Division Administrator (ADA)	Transportation Performance Branch		Asset Management	R	DA	TPBM
Engineering: Civil Rights												
11	Prepare / Review Title VI Plan Accomplishments and Next Year's Goals	23 CFR 200.9(b)(10)	Annually	1-Oct	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews and comments.	Civil Rights	R & A	CRS	
12	Prepare / EEO Contractor Compliance Plan accomplishments and next year's goals	23 CFR 230, Subpart C, Appendix A, Part I, III	Annually	1-Oct	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews and comments.	Civil Rights	R & A	CRS	
13	Prepare / Review State Internal EEO Affirmative Action Plan (Title VII) Accomplishments and Goals	23 CFR 230.311	Annually	1-Oct	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Courtesy copy to HQ.	Civil Rights	R & A	CRS	

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

14	Review DBE Program Revisions	49 CFR 26.21(b)(2)	As needed	Not Applicable	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division sends to HCR for review and approval as	Civil Rights	R & A	CRS	
15	Prepare / DBE Uniform Awards and Commitment Report	49 CFR 26, Appendix B	Semi-Annual	June 1st December 1st	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division Office reviews and sends to HCR	Civil Rights	R for C and send to HQ	CRS	
16	Prepare / Annual Analysis and Corrective Action Plan (if necessary)	49 CFR 26.47(c)	Annual (as necessary)	December 31st	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division Office approves sends copy to HCR	Civil Rights			
17	Prepare / State DBE Program Goals	49 CFR 26.45(f)(1)	Triennial	August 1st	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division reviews and approves; HCC provides legal sufficiency review and approval sends copy to HCR	Civil Rights	R & A	CRS	
18	Prepare / Review On-the-Job-Training (OJT) goals & accomplishments	23 CFR 230.111(b)	Annually	TBA	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews and comments.	Civil Rights	R for C	CRS	
19	Approval of OJT and DBE Supportive Services fund requests	23 CFR 230.113 & 23 CFR 230.204	Annual	TBA	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division recommends approval submits to HCR for final approval	Civil Rights	R & A	CRS	
20	Return of any unused discretionary grant program funding	23 CFR 230.117(2)	Annual	TBA	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division works with HCR and CFO	Civil Rights			
21	Prepare / Review of Report on Supportive Services (OJT & DBE)	23 CFR 230.113(g), 230.121(e), 230.204(g)(6)	Quarterly		Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews and comments.	Civil Rights	R for C and send to HQ	CRS	
22	Prepare / Review Annual Contractor Employment Report (Construction Summary of Employment Data (Form PR-1392)	23 CFR 230.121(a); Appendix D to Subpart A, Part 230, General Information and Instructions	Annually	1-Dec	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Recommendation sent to HQ for approval. <b>Frequency: Annually by Sept. 25</b>	Civil Rights	R for C and send to HQ	CRS	
23	Prepare / Review State DOT Employment Statistical Data (EEO-4)	23 CFR, Subpart C, Appendix A	Biannual	30-Sep	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Report sent to HQ quarterly for informational purposes and recommendation sent to HQ annually for approval.	Civil Rights	R for C and send to HQ	CRS	

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

24	Prepare / Review Annual Federal Projected Awards Reports - Historically Black Colleges & Universities/Tribal Colleges & Universities/Hispanic Serving Institutes, American Indian Alaskan Native, Asian Pacific & American Islander.	Presidential Executive Orders: 13230, 13256,13270, 13361, 13515	Annual	TBA	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Divisions submit data to HCR who prepares report for DOCR	Civil Rights	Prepare report & submit to HQ	CRS	
25	Prepare / Review ADA Complaint Reports of Investigation	28 CFR 35.190	As needed	Not Applicable	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews, FHWA HQ approves and issues finding.	Civil Rights	Conduct evaluation & correct or recommend action to HQ	CRS	
26	Review Americans with Disabilities Act (ADA) /Sec. 504 Program Plan accomplishments and next year's goals	49 CFR 27.11(c), EO 12250	Annually	1-Oct	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Division office reviews and comments. <i>Does not apply to Colorado.</i>	Civil Rights			
27	Return of unexpended funds used for Summer Transportation Institutes	23 CFR 230.117(2)	Annual	August 30; however, State procurement rules may govern	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Divisions work with HCR and CFO	Civil Rights			
28	Prepare / Review Request for National Summer Transportation Institute (NSTI) Proposals (SOWs)	23 USC 140(b)	Annual	TBA	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Divisions recommend approval. HCR gives final approval <i>Frequency: As needed or as revised by State</i>	Civil Rights	R for C	STP	
29	Prepare / Review NSTI Report (questionnaire)	23 USC 140(b)	Annual	October 15th	Office of Civil Rights	Civil Rights	Civil Rights & Business Resource Center (CRBRC)	Divisions provide to HCR	Civil Rights			

Engineering: Contracting, Engineering Estimates and Other Project Support												
31	Approval of Contracting Procedures for Consultant Selection	23 CFR 172.5 & 172.9	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Engineering Contracts	FHWA Division Office Approval.	Contracting	R & A	PDTL	

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

	Competitive Bidding Exceptions	23 CFR 635.104, 23 USC 112	As requested		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	DA	
	Concurrence in Award	23 CFR 635.114, 23 USC 112(d)	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	AO, RE
	Rejections of low bidder	23CFR 635.114(f)+(g)	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	EE, RE
	Addenda or Revisions under advertisement	23CFR 635.112(c)	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	RE
	Consultant Services and Management Roles	23 CFR 172.9 (d)	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	RE
	Rejections of all bidders	23CFR 635.114(h)	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	RE
	Authorization to Advertise (all projects)	23 CFR 635.309	Project by project		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	R & A	AE	
	Bid Opening/Tabulations	23 CFR 635.113	Per letting		Office of Infrastructure	Program Delivery	Engineering Contracts		Contracting	Periodically R for C (State takes action)		EE

Engineering: Environment												
30	Receipt of State Consultation Process with Tribal Governments	23 CFR 450.210(c)	As needed	Not Applicable	Office of Federal Lands Highway	Planning	Multimodal Planning Branch	Informational Purposes. <b>Part of Public Involvement for the Statewide Plan.</b>	Environment			
	Tribal Consultation	36 CFR 800.2(c)(2)(ii)(A)	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, A, F to Tribes	Env PM	EPB Cultural Resources Section Manager
136	Approval of NEPA Procedures, including Section 4(f)	23 CFR 771; 23 CFR 774; SAFETEA-LU 6007 & 6009, 23 USC 109(h)	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment or Program Delivery	Environmental Programs Branch (EPB)	<b>Section 4(f) Individual evaluation</b>	Environment	R, A, F to USDOJ	DA	EPB or RTD
	Section 4(f) Programmatic Evaluation	23 CFR 774	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment or Program Delivery	Environmental Programs Branch (EPB)	Section 4(f) programmatic evaluation	Environment	R & A	Env PM	EPB or RPEM
	Section 4(f) <i>de minimis</i> Determination		As needed	Not Applicable	Office of Planning, Environment & Realty	Environment and Program Delivery	Environmental Programs Branch (EPB)	Section 4(f) <i>de minimis</i> determination	Environment	R & A	AE or Env PM	EPB or RPEM
137	Approval of Noise Policies	23 CFR 772.7, 772.9, and 772.13, 23 USC 109(i)	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)	FHWA approves State' noise abatement policy.	Environment	R, F to HQ for A	Env PM	EPB Noise PM

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

	Reporting on Noise Walls	23 CFR 772	Annually	1-Nov	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, F to HQ	Env PM	EPB Noise PM
138	EIS Status Updates	FHWA Strategic Goal - EIS Timeliness	Quarterly	(Fiscal Year - Oct, Jan, Apr, Jul)	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)	Monitor time required to complete EIS's. Determine projects which have exceeded recommended timeline (3 years). Identify projects which should be listed as dormant. Submit to HEPE.	Environment	R, F to HQ	Env PM	EPB
	EIS Status Updates	EPA EIS Ratings	Annually	Calendar Year	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, F to HQ	Env PM	EPB
139	Endangered Species Act Cost Report		Annually	1-Mar	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, F to HQ	Env PM	EPB T&E PM
140	Exemplary Ecosystem Initiatives Applications		Annually	1-Apr	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, F to HQ	Env PM	EPB or RPEM
	Draft Environmental Impact Statement (EIS)	23 CFR 771.123	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	DA	EPB
	Final EIS	23 CFR 771.125	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	DA	EPB
	Record of Decision (ROD)	23 CFR 771.127		Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	DA	EPB
	Wetland Findings	23 CFR 777	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	Env PM	EPB
	Section 7 consultation	23 CFR 771.133	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, A, F to USFWS	Env PM	EPB
	Section 106 adverse effects and MOUs	23 CFR 771.133	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, A, F to ACHP	Env PM	EPB or Region Senior Historian

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

Annual reporting of wetland impacts and mitigations (Due 9/1 to FHWA HQ)	23 CFR 777	Annually	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, F to HQ	Env PM	EPB Wetland PM
Written re-evaluations or re-evaluation forms for EISs	23 CFR 771.129	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	DA	EPB or RPEM
Written re-evaluations or re-evaluation forms for EAs	23 CFR 771.129	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	ADA	EPB or RPEM
Written re-evaluations or re-evaluation forms for Ces	23 CFR 771.129	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	AE and Env PM	EPB or RPEM
Non- Programmatic Categorical Exclusion	23 CFR 771.117	As needed	Not Applicable	Office of Planning, Environment & Realty	Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	AE	RPEM
Filing of Notice of Intent	23 CFR 771.123	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment and Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	AE and Env PM	RPEM
Class of document determination	23 CFR 771.115 Thru - 119	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment and Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	AE, Env PM and PDTL	RPEM
Logical termini determination	23 CFR 771.111(f)	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment and Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	AE, Env PM and PDTL	RPEM
Environmental Assessment	23 CFR 771.119	As needed	Not Applicable	Office of Planning, Environment & Realty	Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	ADA	RPEM
Finding of No Significant Impact (FONSI)	23 CFR 771.121	As needed	Not Applicable	Office of Planning, Environment & Realty	Program Delivery	Environmental Programs Branch (EPB)		Environment	R & A	ADA	RPEM
Manage requirements of the CDPS Stormwater Construction Permit Program	41 CFR 122	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R & A	Env PM	EPB
Manage requirements of the CDOT Municipal Separate Stormsewer System Permit (MS4)	40 CFR 122	Annually	Not Applicable	Office of Planning, Environment & Realty	Environment	Environmental Programs Branch (EPB)		Environment	R, A, F to CDPHE	Env PM	EPB

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

Engineering: Hydraulics												
	Procedures and Fees for processing Map changes	44 CFR Part 72	As needed		Office of Infrastructure	Structures	Staff Bridge		Hydraulics	C	AE or BE	RE or RHE
	Location and Hydraulic Design of Encroachments on Flood Plains	23 CFR 650 Subpart B	As needed		Office of Infrastructure	Structures	Staff Bridge		Hydraulics	R & A	AE or BE	RE or RHE

Engineering: Pavement and Materials												
39	Approval of Pavement Design Policy	23 CFR 626.3	As needed	Not Applicable	Office of Infrastructure	Materials	Materials and Geotechnical Branch	FHWA Division Office Approval.	Pavements and Materials			
44	Approval of Quality Assurance Program	23 CFR 637.205	As needed	Not Applicable	Office of Infrastructure	Materials	Materials and Geotechnical Branch	State administrators, with programmatic agreement by the Division Office, as part of their materials testing and construction quality assurance/acceptance program.	Pavements and Materials			
45	Assure Central Laboratory accredited by AASHTO Accreditation Program or FHWA approved comparable program	23 CFR 637.209	As needed	Not Applicable	Office of Infrastructure	Materials	Materials and Geotechnical Branch	State administrators, with programmatic agreement by the Division Office, as part of their materials testing and construction quality assurance/acceptance program.	Pavements and Materials			
46	Assure Non-STD designated lab performing Independent Assurance sampling and testing accredited by AASHTO Accreditation Program or FHWA approved comparable program	23 CFR 637.209	As needed	Not Applicable	Office of Infrastructure	Materials	Materials and Geotechnical Branch	State administrators, with programmatic agreement by the Division Office, as part of their materials testing and construction quality assurance/acceptance program.	Pavements and Materials			
47	Assure Non-STD designated lab used in dispute resolution accredited by AASHTO Accreditation Program or FHWA approved comparable program	23 CFR 637.209	As needed	Not Applicable	Office of Infrastructure	Materials	Materials and Geotechnical Branch	State administrators, with programmatic agreement by the Division Office, as part of their materials testing and construction quality assurance/acceptance program.	Pavements and Materials			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

48	Review Independent Assurance Annual Report	23 CFR 637.207	Annually	1-Mar	Office of Infrastructure	Materials	Materials and Geotechnical Branch	State administrators, with programmatic agreement by the Division Office, as part of their materials testing and construction quality assurance/acceptance program.	Pavements and Materials			
50	Determination of Eligible Preventive Maintenance Activity - Cost-Effective Means of Extending Useful Life Determination	23 USC 116(e)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Materials and Geotechnical Branch	FHWA Division Office Approval - <b>FHWA notes that this is simply a means to ensure their concurrence that state agency new PM methods are effective pavement treatments</b>	Pavements and Materials			

Engineering: Planning												
97	Approval of State Planning Work Program and Revisions (Part 1)	23 CFR 420.111, 23 CFR 420.115, and 23 CFR 420.209	Annually	Prior to Program Period	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	FHWA Division Office Approval.	Planning			
99	Approval of State's Distribution of Planning Funds Formula - Allocation Formulas for PL Funds	23 CFR 420.109, 23 USC 104(d)(2)(A)(i)	When Revised	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	FHWA Division Office Approval.	Planning	R & A	MTP	
107	Approval of Transportation Management Area (TMA) MPO Unified Planning Work Programs (UPWP)	23 CFR 450.308(b) and 23 CFR 420 (Subpart A)	Prior to Program End	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	<b>Frequency: Updated every two years; amended at least annually.</b>	Planning	R & A	MTP	
109	Approval of UPWP Revisions and Amendments (All MPO's)	23 CFR 420.115	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning			
110	Review of UPWP Performance and Expenditure Reports (All MPO's)	23 CFR 420.117(b)	Not more frequently than quarterly	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	<b>Frequency: Annually by Sept. 30</b>	Planning	R for C and send to HQ	STP	
102	Review of Long-range Statewide Transportation Plan	23 CFR 450.214	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	FHWA Division Office Review to Assure Compliance	Planning	R for C	STP	
118	Review of Metropolitan Transportation Plan (MTP) in Attainment Areas (and Updates)	23 CFR 450.322	Every 4 years	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning	R for C	MTP	

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

119	Review of MTP in Non-Attainment and Maintenance Areas (and Updates)	23 CFR 450.322	Every 5 years	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning	R for C	MTP	
	Transportation plan conformity determination for non-attainment areas	40 CFR 93.104(b)(3)	Every 4 years or as needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning	R & A	MTP	
123	Review of TIP Amendments	23 CFR 450.324(a); 23 CFR 450.328(b)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Office of Financial Management and Budget / Multimodal Planning Branch	No succinct Federal approval action is required for the TIP. FHWA/FTA approval of the TIP is through the STIP approval process.	Planning	R & A	MTP, STP	
	TIP and corollary STIP amendments for attainment areas	23 CFR 450.324 - 330(a)	As requested by State - at least biennially	Not Applicable	Office of Planning, Environment & Realty	Planning	Office of Financial Management and Budget / Multimodal Planning Branch		Planning	R & A	MTP, STP	
124	Approval of Air Quality Conformity Determination on TIP	23 CFR 450.326; 23 CFR 450.328	At least every 4 years, or when the TIP has been modified (unless exempt projects)	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Applies to non-attainment and maintenance areas only. After receipt of MPO determination, joint determination with FTA (in cooperation with EPA).	Planning	R & A	MTP	
126	In Metropolitan Planning Areas, Review of State and MPO Self-certification that Planning Process is in Accordance with Applicable Requirements	23 CFR 450.334 (a), 23 CFR 218(a)	Annually or concurrent with the STIP/TIP cycle	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Required for all MPO's. Included in TIPs at least every 4 years.	Planning	R for C	MTP	
103	Approval of Statewide Transportation Improvement Program (STIP)	23 CFR 450.216, 23 CFR 450.218(a) & (c), 23 USC 135(g)(7)	At least every 4 years	Not Applicable	Office of Planning, Environment & Realty	Planning	Office of Financial Management and Budget / Multimodal Planning Branch	Joint FHWA and FTA approval. <b>Frequency: Federally mandated every 4 years – amended twice per year.</b>	Planning	R & A w/ FTA	STP	
104	Approval of STIP Amendments	23 CFR 450.218(a) & (c)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Office of Financial Management and Budget / Multimodal Planning Branch	Joint FHWA and FTA approval. <b>Frequency: Federally mandated every 4 years – amended twice per year.</b>	Planning	R & A w/ FTA	STP	
105	Finding of Consistency of Planning Process with Section 134 and 135	23 USC 135(g)(8), 23 CFR 450.218(b)	Concurrent with STIP approval	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	FHWA and FTA issue a joint finding concurrent with STIP approval.	Planning			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

106	Review of State Self-certification that Planning Process is in Accordance with Applicable Requirements	23 CFR 450.218(a)	Submitted with proposed STIP or STIP amendments	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Received with STIP.	Planning	R for C	STP	
80	Review Designation and Re-designation of Primary Freight Network	23 USC 167(d)	One year after enactment of MAP-21 and every ten years thereafter		Office of Operations	Planning	Multimodal Planning Branch	Under development, initial PFN designation scheduled for Spring 2014 completion.	Planning			
81	Review Development and Update of National Freight Strategic Plan	23 USC 167(f)	Three years after enactment of MAP-21 and every five years thereafter		Office of Operations	Planning	Multimodal Planning Branch	OST lead	Planning			
82	Review Freight Transportation Conditions and Performance Report	23 USC 167(g)	Two years after enactment of MAP-21 and every two years thereafter		Office of Operations	Planning	Multimodal Planning Branch	OST lead	Planning			
85	Operations Support Program	Annual Memo from HQ	Annually	1-Jul	Office of Operations	Planning	Multimodal Planning Branch	Eligibility determination made by HQ. July 1 date for approval to issue funding for current FY.	Planning			
91	Approval of National Network Modifications	23 CFR 658.11	As needed	Not Applicable	Office of Operations	Planning	Information Management Branch		Planning			
100	Review of State Public Involvement Procedures	23 CFR 450.210(a)	As needed	Not Applicable	Office of Planning, Environment & Realty	Environment	Multimodal Planning Branch	FHWA Division Office Review to Assure Compliance.	Planning	R for C	STP	
101	Receipt of State Consultation Process for Non- metropolitan Local Officials	23 CFR 450.210(b)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Informational Purposes. Frequency: 5 years following SAFETEA-LU	Planning	R for C	STP	
108	Approval of Non-TMA UPWA	23 CFR 450.308(b) and 23 CFR 420 (Subpart A)	Prior to Program End	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	May use simplified work statement.	Planning			
111	Approval of Report Before Publication (All MPO's)	23 CFR 420.117(e)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Waiver may be granted.	Planning			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

112	Approval to use Planning Funds outside Urbanized Areas for States Receiving Minimum Apportionment	23 USC 104(d)(1)(A)(ii)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning			
113	Review of Metropolitan Planning Area Boundary (Establishment and Changes)	23 CFR 450.312	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Approval by MPO and the Governor, shape files forwarded to HQ. (Comment: No action is required by FHWA/FTA).	Planning	R for C	MTP	
114	Review of Metropolitan Transportation Planning Organizations (MPO) Designation and Re-designation	23 CFR 450.310	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Require agreement between Governor and local governments.	Planning			
115	Review of Metropolitan Planning Agreements (MPA) for Attainment or Entire Nonattainment Area	23 CFR 450.314(a)	When Completed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Between MPO/State DOT/Transit Operator. Included in UPWP or Prospectus (23 CFR 450.314(d)).  Frequency: As needed or revised by MPO/State	Planning	R for C	MTP	
116	Review of MPA - for MPA that do not include the entire nonattainment or maintenance area	23 CFR 450.314(b), 23 USC 109(j)	When Completed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Between MPO/State DOT/State AQ Agency.	Planning			
117	Review of MPO Public Participation Procedures	23 CFR 450.316(a)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Must be developed and published.	Planning			
120	Review of MTP Amendments	23 CFR 450.322(c)	As Needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning			
121	Air Quality Conformity Determination on LRTP in Non-attainment and Maintenance Areas	23 CFR 450.322(d)	Concurrent with LRTP updates at least every 4 years and as needed on amendments	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	After receipt of MPO determination; Joint FHWA and FTA determination; In consultation with the Environmental Protection Agency (EPA).	Planning			
122	Review of Transportation Improvement Program (TIP)	23 CFR 450.300(a); 23 CFR 450.324(b); 23 CFR 450.328(a), 23 USC 134(j)(1)(D)	Prior to Program Period	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	No succinct Federal approval action is required for the TIP. FHWA/FTA approval of the TIP is through the STIP approval process.	Planning			

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

125	Federal Finding of Consistency of Planning Process with Section 134 and 135	23 CFR 450.218(b); 23 CFR 450.334(a)	Concurrent with (S)TIP submittal	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	At least every four years, joint finding with FTA when TIP is submitted.	Planning			
127	In TMA's, Certification that Planning Process is in Accordance with Applicable Requirements	23 CFR 450.334(b), 23 USC 134(k)(5)	Every 4 years		Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Joint FHWA and FTA Certification.	Planning		MTP	
128	Approval of Federal-Aid Urban Area Boundaries	23 CFR 470.105 (a), 23 USC 101(a)(33)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning	R & A	STP	
129	Approval of Revision of Functional Classification	23 CFR 470.105 (b)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Information Management Branch		Planning	R & A	STP	
130	Approval by Administrator of Interstate Additions & Revisions	23 USC 103(c)(1)(D), 23 CFR 470.111, 23CFR 470.115 (a)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Information Management Branch	Approval by HQ – Administrator.	Planning	R & Recommend action to HQ	STP	
131	Approval by Office Director of National Highway System (NHS) Additions and Revisions	23 USC 103(b)(3), 23 CFR 470.113 and 470.115(a)	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Approved by HQ - Office Director.	Planning	R & Recommend action to HQ	STP	
132	Review of CMAQ Annual Report	CMAQ Guidance Memo October 31, 2006	Annually	1-Mar	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Division provides information on CMAQ projects including: amount of obligation, project description and location, and air quality benefits. The report must be submitted via the web-based CMAQ Tracking System.	Planning	R & A and send to HQ	MTP	
133	Transportation Planning Excellence Awards		Annually	1-Feb	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch	Call for entries for the FHWA FTA Transportation Planning and Excellence Awards.	Planning			
135	Approval of Public Involvement Program Procedures	23 CFR 771.111(h), 23 USC 128	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Multimodal Planning Branch		Planning			
153	Approval of Railroad Agreement Alternate Procedure	23 CFR 646.220	As needed	Not Applicable	Office of Planning, Environment & Realty	Planning	Project Development Branch		Planning			
161	Annual Traffic Reports	Traffic Monitoring Analysis System and Traffic Monitoring Guide reporting	When Published	As needed	Office of Highway Policy information	Planning	Information Management Branch	When Published	Planning			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

162	Approval of Annual Field Review Report	HPMS Field Review Guidelines (June 2001) Continuous Process Improvement Model for HPMS( February 2003)	Annually	1-Nov	Office of Highway Policy information	Planning	Information Management Branch	Review memo to HQ.  Frequency: Annually by Dec. 15	Planning	Participate	STP	
163	Approval of Certified Public Road Mileage	23 CFR 460.3(b)	Annually	1-Jun	Office of Highway Policy information	Planning	Information Management Branch	Each year, the Governor of each State and territory or a designee must certify Public Road Mileage. FHWA division reviews the Mileage and sends to HQ with division review/concurrence. This is reported to NHTSA for Apportionment of Safety Funds.	Planning	Initiated by HPMS for HQ signature	STP	
164	Approval of Data Submittal	23 CFR 420.105(b), HPMS Field Manual	Annually	15-Jun	Office of Highway Policy information	Planning	Information Management Branch	State DOT sends directly to Division Office and HQ.	Planning	R for C (State sends direct to HQ w/copy to Div.)	STP	
165	Highway Statistics Reports	Guide to Reporting Highway Statistics			Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)	State DOT of Division Office sends directly to HQ.  Frequency: Quarterly is scheduled first weeks Oct., Jan., April., and then July 15 for final quarter/year-end (annual) publication	Planning	R for C (State sends direct to HQ w/copy to Div.)	STP	
167	Vehicles and Drivers (561, 562, 566, and 571)	A Guide to Reporting Highway Statistics, Chapters 3, 4, 5, and 6	1-Apr	1-Apr	Office of Highway Policy information	Planning	Information Management Branch		Planning			
168	Finance (531, 532, 541, 542, and 543 (optional))	A Guide to Reporting Highway Statistics, Chapters 8 and 9	1-Apr	1-Apr	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)	Frequency and Due Date: 1-June	Planning			
169	Transportation Bond Referendums	A Guide to Reporting Highway Statistics, Chapter 9	When Published	When Published	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)		Planning			
170	State DOT / Toll Authority Audits and Published Annual Reports and Form 539 (optional)	A Guide to Reporting Highway Statistics, Chapter 10	When Published	When Published	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)	Annually, Due as soon as available.	Planning			
171	Finance (536)	A Guide to Reporting Highway Statistics, Chapter 11	30-Sep	30-Sep	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)	Biennially for odd-numbered years. Due nine months after end of reporting year	Planning			

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

172	Finance (534)	A Guide to Reporting Highway Statistics, Chapter 12	15-Jun	15-Jun	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)	Annually for State, Biennially for local <b>Frequency and Due Date: 15-May</b>	Planning			
173	Highway Finance and Tax Legislation	A Guide to Reporting Highway Statistics, Chapter 13	When Published	When Published	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)		Planning			
174	State DOT Budgets and Published Annual Reports	A Guide to Reporting Highway Statistics, Chapter 13	When Published	When Published	Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)		Planning			
175	Motor Fuel Oversight Review	July 24, 2001 HQ Memo	Initial baseline reports no later than December 31, 2003		Office of Highway Policy information	Planning	Department of Revenue	Annual progress reports and statement of verification by June 30. Submitted via UPACS.	Planning			
177	State Highway Maps (Tourist)		When Published	When Published	Office of Highway Policy information	Planning	Information Management Branch	Two copies to each Division Office and 100 copies to HQ.	Planning			
178	Traffic Flow Maps		When Published		Office of Highway Policy information	Planning	Information Management Branch	When Published.	Planning			
179	Vehicle Classification Data	MAP-21, HPMS Field Manual, Traffic Monitoring Guide	15-Jun	15-Jun	Office of Highway Policy information	Planning	Information Management Branch	Part of Annual HPMS submittal.	Planning			
184	Permanent ATR Data	Heavy Vehicle Travel Information System Field Manual	Monthly	Monthly	Office of Highway Policy information	Planning	Information Management Branch	Submit monthly, within 20 days after the close of the month for which the data were collected.	Planning			
185	Continuous Automatic Vehicle Classifier Data	Heavy Vehicle Travel Information System Field Manual	Monthly	Monthly	Office of Highway Policy information	Planning	Information Management Branch	Send up to one week of data per quarter	Planning			
	Congestion Management System	23 CFR 500.109	As needed/revised by MPO/State		Office of Operations	Planning	Transportation System Management & Operations (TSM&O)		Planning	R for C	TS	CTMC
	CMAQ funds eligibility determination	10/2008 CMAQ guidance memo	As requested by State		Office of Highway Policy information	Planning	Multimodal Planning Branch		Planning	R & A	MTP	
	MPO/state air quality agency agreements	23 CFR 450.314(c)	As needed or revised by MPO/State		Office of Highway Policy information	Planning	Multimodal Planning Branch		Planning	R for C	MTP	
	Federal Lands Access Program (FLAP) discretionary funds application	23 USC 204	Periodic (usually annually, date varies)		Office of Highway Policy information	Planning	Office of Financial Management and Budget (OFMB)		Planning	R & Recommend action to HQ	STP	

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

	Traffic Monitoring System	23 CFR 500.203	As needed or revised by State		Office of Highway Policy information	Planning	Transportation System Management & Operations (TSM&O)		Planning	R for C	STP	
	Safe Routes to School Program	SAFETEA-LU 1404	Annually		Office of Highway Policy information	Planning	Multimodal Planning Branch		Planning	R C & A		DTD
68	Territorial Highway Program - Approval of Territory Agreement	23 USC 165(c)(5)	Reviewed and Revised as needed every two years		Office of Infrastructure			Division Office works with Office of Program Administration and HCC  Does not apply in Colorado	Planning			
84	Congestion Partnerships Assessment	Annual Memo from HQ	Annually	1-Jul	Office of Operations			Complete with partners and forward to HQ.  Does not apply in Colorado.	Planning			

Engineering: Program and Project Delivery - Design and Construction												
32	Determination of High Risk Categories - Limitation on Interstate Projects	23 USC 106(c)(4)(B)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	Office of Program Administration determines national categories and must concur on any State designations.	Design and Construction			
34	Verify adoption of Design Standards (National Highway System, including Interstate)	23 CFR 625, 23 USC 109(b), 23 USC 109(c)(2), 23 USC 109(o)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA HQ regulatory action to adopt NHS standards.	Design and Construction	R & A	PODI: Spec PM	Non-PODI: SSE
36	Approval of State Standard Specifications	23 CFR 625.3	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval.	Design and Construction	R & A	PODI: AE	Non-PODI: RE
37	Verify State Design Exception Policy complies with FHWA Policy	23 CFR 625.3	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval.	Design and Construction	R & A	PODI: AE ((PDTLs Mainline Interstate))	Non-PODI: RE
38	Approval of State Standard Detail Plans	23 CFR 625.3	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval.	Design and Construction	R & A	PODI: AE	Non-PODI: RE
40	Review of Value Engineering Policy and Procedures	23 CFR 627.1(b)&(c), 23 CFR 627.7; FHWA Order 1311.1B	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Review.	Design and Construction	R for C (State conducts study)	PODI: AE	Non-PODI: RE

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

41	Review of Value Engineering Annual Report	23 CFR 627.7, FHWA Order 1311.1B	Annual	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office collects, reviews, and submits to HQ for review and reporting.  Frequency: Annually by Nov 1	Design and Construction	R & send to HQ	PDTL	
43	Approval of Liquidated Damages Rate	23 CFR 635.127	Every 2 years	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval.	Design and Construction	R & A	PODI: PDTL	Non-PODI: PDBM
51	Approval of Utility Agreement / Alternate Procedure	23 CFR 645.119	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval	Design and Construction	R & Accept	PDTL	
52	Approval of Utility Accommodation Policy	23 CFR 645.215, 23 USC 109(l), 23 USC 123	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	FHWA Division Office Approval	Design and Construction	R & A	PDTL	
66	Local Public Agency (LPA) Oversight	49 CFR Part 18 – 18.37 and 18.40; OMB Circular A-133; 23 USC 106(g)(4)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Project Development Branch	States are responsible to ensure that LPAs are aware of all the applicable Federal-aid Program requirements; States are responsible to ensure monitoring and oversight to assure compliance with Federal requirements. 23 USC further reinforces stressing accountability on “project delivery systems” and “accounting controls.”	Design and Construction	R & A	PDTL	
	Buy America waiver (all projects)	23 CFR 635.410	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	DA	
	Competitive Bidding Exceptions not defined by 23CFR635B		As requested		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	DA	
	Termination of Contract	23 CFR 635.125	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: CE
	Advertisement Period	635 112(b)	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: CMABM
	Concurrence in Award	23 CFR 635.114, 23 USC 112(d)	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: CMABM
	Rejection of all bidders	23 CFR 635.114 (h)	Project by Project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: CMABM
	Defense Access Roads	23 CFR 660 Part E	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R	AE	

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

	Project Authorizations (FMIS) Preconstruction	23 CFR 630.106	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	AE	
	Authorization to Advertise - Construction (FMIS)	23 CFR 635.309	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	AE	
	Claims	23 CFR 635.124	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	AE	
	Public Agency Furnished Material	23 CFR 635.407	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R	PODI: AE	Non-PODI: RE
	Consultant Services	23 CFR 172.5	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Approve Design RFP's	23 CFR 635.112, 23	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Competitive Bidding Exceptions (Force Account)	23 CFR 635.104, 23 USC 112, 23 CFR 635B	As requested		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Warranties	23 CFR 635.413	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Convict Produced Material	23 CFR 635.417	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Patented/Proprietary Products (Finding in Public Interest)	23 CFR 635.411	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Use of Public Owned Equipment	23 CFR 635.106	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	D/B and CM/GC RFP	CFR 636.109	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Addenda During Advertisement	635 112(c)	Project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Final Inspection/Final acceptance	23 CFR 637	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Major CMOs	23 CFR 635.120, 121, 102	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	Non-PODI: RE
	Projects Near Airports	23 CFR 620.103	As requested project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	RE

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

	Railroad Agreement	23 CFR 646.216	As requested project by project		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: AE	RE
	Subcontract Process	23 CFR 636.116	One time		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PODI: PDTL	Non-PODI: CE
	Railroad Agreement Alternate Procedure	23 CFR 646.220	One time		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	PDTL	
	Bid Opening/Tabulations	23 CFR 635.113	Per letting		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	Periodically R for C (State takes action)		Non-PODI: CMABM, PODI: RE
	Payroll	23 CFR 635.118	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R		RE
	Non-major CMOs	23 CFR 635.120	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A		RE
	Dispute Review Board Recommendations	23 CFR 635.124	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A		RE
	Construction Inspection	23 CFR 637	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R for C		RE
	Emergency Repair/Projects	23 CFR 635.204	As requested		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A	BE	
	Patented/Proprietary Products Certifications (1)	23 CFR 635.411	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A		SSE
	Changed Conditions	23 CFR 635.109	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A		Non-PODI: RE
	Changes and Extra Work	23 CFR 635.120, 121	As needed		Office of Infrastructure	Program Delivery	Project Development Branch		Design and Construction	R & A		Non-PODI: RE

Engineering: Right-of-Way												
141	Approval of Acquisitions, Appraisals, and Relocations Program and Procedures	49 CFR Part 24, The UA	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW			
142	Early Acquisitions	23 CFR 710.501	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

143	Local Public Agency Oversight	49 CFR 24.4(b); 23 CFR 710.201	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	Periodically R for C (State takes action)	RWPM	
144	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Property Management Program	Highway Facility Relinquishment , highway superseded on new location, old removed from federal-aid route	ROW	R & A	DA	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Highway Facility Relinquishment of reconstructed local facilities outside control of access	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Frontage Roads not integral to operations of system (frontage road NOT in Interstate ROW)	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Frontage Roads used as access between ramps and public streets. (OFF Interstate System)	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Ramps (OFF Interstate System)	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Frontage Roads not integral to operations of system (frontage road in Interstate ROW)	ROW	R & A	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Frontage Roads used as access between ramps and public streets. (On Interstate System)	ROW	R & A	RWPM	
	Approval of Highway Facility Relinquishment	23 CFR 620.203	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Relinquishment of Ramps (On Interstate System)	ROW	R & A	RWPM	
145	Approval of ROW Disposal Authorization Request	23 CFR 710.409	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Property Management Program	Changes in Access Control / ROW Disposal authorization request (On Interstate System)	ROW	R & A	RWPM	
	Approval of ROW Disposal Authorization Request	23 CFR 710.409	As needed		Office of Planning, Environment & Realty	ROW	Property Management Program	Changes in Access Control / ROW Disposal authorization request (Off Interstate System)	ROW	Periodically R for C (State takes action)	RWPM	

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

146	Approval of ROW Operations Manual (Organization, Policies and Procedures), Updates, and Certification	23 CFR 710.201	January 1, 2001 and every 3 years thereafter or as required by changes in State law or Federal regulation or law	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	State ROW Manual changes	ROW	R & A	RWPM	
	Approval of ROW Operations Manual (Organization, Policies and Procedures), Updates, and Certification	23 CFR 710.201	By Jan. 1, 2001 and updated as needed		Office of Planning, Environment & Realty	ROW	Project Development Branch	Develop ROW oversight agreement	ROW	R & A	RWPM	
	Approval of Exception to Charging Fair Market Value	23 CFR 710.403 and 23 CFR 710.409	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Fair market Value not charged (Off Interstate System)	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Interstate Real Property Use Agreements	23 CFR 710.405	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Use of ROW Air Space authorization request (off Interstate system)	ROW	Periodically R for C (State takes action)	RWPM	
	Approval of Interstate Real Property Use Agreements	23 CFR 710.405	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Lease agreements for oil and gas with no surface improvements in the highway ROW	ROW	Periodically R for C (State takes action)	RWPM	
149	Approval of Request for Federal Land Transfer	23 CFR 710.601	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW			
150	Approval of Request for Direct Federal Acquisition	23 CFR 710.603	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Lead Agency Uniform Act monitoring activities	ROW	R for C	RWPM	
151	Approval of Outdoor Advertising Policies and Procedures, and Regulation and Procedure Approval	23 CFR 750.304, 23 CFR 750.705, 23 USC 131	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R&A	RWPM	

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

152	Approval of Requests to Exempt Certain Nonconforming Signs, Displays, and Devices	23 CFR 750.503	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW			
154	Approval of Uniform Act Waivers and Waivers from Availability of Comparable Replacement Dwelling before Displacement	49 CFR 24.7, 49 CFR 24.204(b)	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Requests reviewed and approved by HEPR Office Director.	ROW			
155	Review of Uniform Relocation Assistance & Real Property Acquisition Report -(OMB Form 2125-0030)	49 CFR 24.9c & Appendix B 49 CFR 24.603	Annually	15-Nov	Office of Planning, Environment & Realty	ROW	Project Development Branch	Submitted to FHWA Headquarters (HQ).	ROW			
156	Review of Real Property Acquisition Statistical Report	FHWA Order 6540.1	Annually	15-Nov	Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	Prepare & submit to FWHA HQ	RWPM	
	Functional Replacement	23 CFR 710.509	As needed		Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R & A	RWPM	
	Outdoor Advertising sign removal projects	23 CFR 750.307	As needed		Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R & A	RWPM	
	Hardship and Protective Buys	23 CFR 710.503	As needed		Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R & A	RWPM	
	ROW Plan Authorization	23 CFR 710.201 (i)	As needed		Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R for C & A		SPC
	ROW Conditional Clearance Certification	23 CFR 635.309	As needed		Office of Planning, Environment & Realty	ROW	Project Development Branch		ROW	R & A		PDBM

<b>Engineering: Structures</b>												
35	Approval of preliminary plans of Major and Unusual Bridges on the Interstate Highway System	(M1100.A)	As needed	Not Applicable	Office of Infrastructure	Structures	Staff Bridge	Director of HIBT has approval of preliminary plans of Major and Unusual Bridges on the Interstate Highway System (M1100.A)	Structures			

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

53	Review Bridge Construction, Geotechnical, and Hydraulics	23 CFR 650	As needed	Not Applicable	Office of Infrastructure	Structures	Staff Bridge		Structures			
54	Review Plans of Corrective Action established to address NBIS compliance issues	23 CFR 650, 23 USC 144	Annually		Office of Infrastructure	Structures	Staff Bridge	Division office performs annual compliance review and reports results to HQ.	Structures			
55	Review NBI Data Submittal	23 CFR 650 Subpart C, Annual Memo from HQ, 23 USC 144	Annually	1-Apr	Office of Infrastructure	Structures	Staff Bridge	Division resolve errors with States; States submit to HQ.	Structures	R for C	BE	
56	Review structurally deficient bridge construction Unit Cost submittal	23 USC 144	Annually	1-Apr	Office of Infrastructure	Structures	Staff Bridge	Submit to HQ.	Structures			
57	Review Section 9 of the Rivers and Harbors Act Submittals (Bridge Permits)	23 CFR 650 Subpart H; 33 CFR 114 & 115	As needed	Not Applicable	Office of Infrastructure	Structures	Staff Bridge		Structures			
58	Approval for reduction of expenditures for off-system bridges	23 USC 133(g)(2)(B)	As needed	Not Applicable	Office of Infrastructure	Structures	Staff Bridge	The FHWA Administrator may reduce the requirement for expenditures for off-system bridges if the FHWA Administrator determines that the State has inadequate needs to justify the expenditure.	Structures			
	HBP Unit Cost Submittal & NBI Tape Submittal	23 CFR 650 Subpart D	Annually	1-Apr	Office of Infrastructure	Structures	Staff Bridge		Structures	R & A	BE	

**Financial Management**

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

3	FIRE Program Activities	FHWA Order 4560.1B (or as superseded)	Ongoing		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	State will continue to provide oversight and conduct reviews to ensure Federal-aid compliance. FHWA will review and monitor. State responsibilities include multiple tasks in support of risk assessments, conducting reviews and implementation of recommendations.  <i>Includes: Management Decision Letter on SW Annual Audit findings if any and Grant Process Review</i>  <i>Includes reference to FIRE Order 4560 1.c</i>  <i>Frequency: Annually by June 1</i>	Financial Management	R, C & S	FM, FS	
	FIRE Program Activities – Inactive Projects Review	FIRE Order 4560 1.c	Quarterly	Dec 31, Mar 31, June 30, and Sept 30	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	R, C & S	FM, FS, PA	
1	Appropriations, Allotments, Obligations	31 USC 1341(a)(1)(A)& (B); 31 USC 1517(a); 23 USC 118(b), 23 USC 121	As needed	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	State will monitor appropriations, allotments and obligations to ensure that all funding is used efficiently within each quarter and use all Obligation Authority (OA) by the end of the year.	Financial Management			
2	Approval of Indirect Cost Allocation Plans (ICAPs)	49 CFR Part 18; 2 CFR 200 Subpart E (previously 2 CFR 225); ASMBC-10	As needed	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	The State will certify that the ICAP was prepared in accordance with 2 CFR 200 Subpart E.	Financial Management			
4	Audit Coordination/FHWA Financial Statement Audit/State External Audit Reviews/State Internal Audit Reviews	FMFIA, 49 CFR 18.26; OMB Circular A-123, 133; GAAP, CFO Act of 1990; DOT Order 8000.1C	As needed	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	State assures corrective action is taken to resolve audit findings and FHWA will monitor activities to ensure implementation.	Financial Management			

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

5	Improper Payments Review	Improper Payments Information Act of 2002, PL 107-300, Improper Payments Elimination and Recovery Act of 2010, PL 111-204, Improper Payments Elimination and Recovery Improvement Act of 2012, PL 112-248	Annually		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	State will provide all information necessary to document sampled payments and FHWA offices will review and complete appropriate data submittal forms.	Financial Management			
6	Transfer of Funds between programs or to other FHWA offices or agencies as requested by State	23 USC 126	As needed	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	State will submit requests for transfer and FHWA approves and processes the funding transfers between programs, to other States, to other agencies, and to FHWA HQ, Federal Lands, or Research offices.	Financial Management	R & A	FM, FS	
7	Reviews of State Transportation Departments Financial Management Systems - Financial Integrity	23 USC 106(g)(2)(A)	Annually	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	23 USC 106(g)(2)(A) states that the Secretary shall perform annual reviews that address elements of the State transportation departments' financial management systems that affect projects approved under subsection (a).	Financial Management			
8	Review Adequacy of Sub-recipient Project Delivery Systems and Sufficient Accounting Controls to Manage Federal Funds	23 USC 106(g)(4)(A)(i)	As needed	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management			
9	Periodic Reviews of States Monitoring of sub-recipients	23 USC 106(g)(4)(B)	As needed	Not Applicable	Office of Infrastructure	Finance	Office of Financial Management and Budget (OFMB)		Financial Management			
10	Approval of Increased Federal Share Agreement (Sliding Scale)	23 USC 120(b)(2)	As determined by the Federal Share Agreement	Not Applicable	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)	A State must enter into an agreement with FHWA for use of the increased Federal share allowable under this section, which must be reviewed and updated periodically as agreed to in the agreement. States must demonstrate that they are in compliance with the statute and the agreement.	Financial Management			

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

65	Toll Credit and Maintenance of Effort (MOE) Calculation and Agreement	23 USC 120(i)	Annually		Office of Infrastructure	Finance	Office of Financial Management and Budget (OFMB)	State will calculate the amount of eligible toll credit and submit for approval. FHWA will review and approve the request.	Financial Management			
70	GARVEEs	23 USC 122;GARVEE Guidance 3/14	As needed	Not Applicable	Office of Innovative Program Delivery	Finance	Office of Financial Management and Budget (OFMB)	MOUs strongly suggested for each GARVEE issue. FM contacts OIPD for review/concurrence before final approval	Financial Management			
71	State Infrastructure Banks	NHS Act Section 308; 23 USC 610; SIB Guidance 3/14	Annual Report	Not Applicable	Office of Innovative Program Delivery	Finance	Office of Financial Management and Budget (OFMB)	Division sends copy of report to OIPD. SIB submits annual report to Division Office.  Frequency: CDOT submits by Dec. 31	Financial Management	R & S to HQ	FM	
166	Motor Fuels Report	A Guide to Reporting Highway Statistics, Chapter 2	Due 60 days after end of each reporting month		Office of Highway Policy information	Planning	Multimodal Planning Branch		Financial Management	R for C (State sends direct to HQ w/copy to Div.)	STP	
180	Highway Use Tax Evasion Grant Awards	23 USC 143	Annual	Not Applicable	Office of Highway Policy information	Planning	Multimodal Planning Branch	FHWA along with the Internal Revenue Service will review applications and select awardees for projects designed to reduce or eliminate fuel tax evasion. FHWA will also review annual progress reports on projects.	Financial Management	R & A	MTP	
181	Heavy Vehicle Use Tax (HVUT) – Certification of verifying proof-of-payment of HVUT	23 CFR 669.7	1-Jul	1-Jul	Office of Highway Policy information	Planning	Multimodal Planning Branch	Each year, the Governor of each State, or a designee must certify that the State is verifying that the HVUT has been paid before they issue or renew registrations on vehicles over 55,000 lbs. The HVUT program is administered by the Internal Revenue Service.	Financial Management	R for C and send to HQ	STP	
182	Heavy Vehicle Use Tax (HVUT) – Certification of verifying proof-of-payment of HVUT	23 CFR 669	Annual	1-Jan	Office of Highway Policy information	Planning	Multimodal Planning Branch	Each year, the Governor of each State, or a designee must certify that the State is verifying that the HVUT has been paid before they issue or renew registrations on vehicles over 55,000 lbs. The HVUT program is administered by the Internal Revenue Service.	Financial Management			

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

183	Heavy Vehicle Use Tax (HVUT) – Triennial review of State program	23 CFR 669.21	Triennial	Not Applicable	Office of Highway Policy information	Planning	Multimodal Planning Branch	Every 3 years, the local Division Office will perform a review of the State process for verifying that the HVUT has been paid before a registration can be issued or renewed for vehicles over 55,000 lbs. The HVUT program is administered by the Internal Revenue Service.	Financial Management	Conduct	STP	
	Quality Financial Management Initiative (QFMI) and Quality Assurance Reviews (QAR)	Memo HFS-40, 12/01/97	Continuous		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	Encourage	FM	
	Monitoring of projects for end dates and closure	2 CFR 200	Continuous		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	R, C & S	FM	
	Annual Update of the Major Project Financial Plan(s)	FHWA Financial Plan Guidance May 2000 & Interim Dec 2005; MAP-21 Interim Major Project Financial Plan Guidance	As required and according to initial plan for due dates		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	R & S to HQ, A and C	FM, FS	
	Federal Managers Financial Integrity Act Assurance Statement	Congressional Act 1982	Annually	1-Oct	Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	S	FM, FS	
	Project Agreements	23 CFR 630 Subpart C	As needed		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	A	FM, FS, PA	
	Fed-aid billing reimbursement of eligible expenditures	23 CFR 140 and 635.122	As requested by CDOT Accounting		Office of Chief Financial Officer	Finance	Office of Financial Management and Budget (OFMB)		Financial Management	R & A	FM, FS, PA	
	Highway taxes and fees report	HQ memo of request	Annual for State system, Biannual for non-state system		Office of Highway Policy information	Planning	Multimodal Planning Branch		Financial Management	R for C and send to HQ	STP	

**Maintenance and Operations**

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

63	States and sub-recipient failure to maintain projects - Notice and withholding Federal-aid Funds	23 USC 116(d)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Division of Highway Maintenance		Maintenance and Operations			
----	--	---------------	-----------	----------------	--------------------------	------------------	---------------------------------	--	----------------------------	--	--	--

Property Management												
147	Approval of Exception to Charging Fair Market Value	23 CFR 710.403 and 23 CFR 710.409	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Fair market Value not charged (On Interstate System)				
148	Approval of Interstate Real Property Use Agreements	23 CFR 710.405	As needed	Not Applicable	Office of Planning, Environment & Realty	ROW	Project Development Branch	Use of ROW Air Space authorization request (on Interstate system)				

TSM&O - Intelligent Transportation Services (ITS)												
92	Intelligent Transportation System Architecture & Standards	23 CFR Part 940	As needed	Not Applicable	Office of Operations	Planning	Transportation System Management & Operations (TSM&O)		ITS			
	Conformity with National ITS Architecture and Standards	23 CFR 940.5			Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	ITS projects using Highway Trust Funds shall conform to the National ITS Architecture and standards	ITS	R & A	TS	
	Regional ITS Architecture	23 CFR 940.9			Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	Regional ITS Architecture shall be in conformance with National ITS Architecture	ITS	R & A	TS	
	ITS Project Implementation (Systems Engineering Analysis)	23 CFR 940.11			Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	ITS projects funded with Highway Trust Funds shall be based on a systems engineering analysis	ITS	R & A	AE	
86	Traffic Incident Management Self-Assessment	Annual Memo from HQ	Annually	1-Jul	Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	Complete with partners and forward to HQ.	ITS	R & A	TS	
	Real-Time System Management Information Program	23 CFR Part 511 Subpart C	Annually	As prescribed by the Rule	Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	Report traffic and travel conditions on Interstate highways and on Routes of Significance in accordance with the Rule.	ITS	R,A,C	TS	CTMC

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

	Project Administration - ITS	23 CFR 940.13			Office of Operations	Planning	Transportation System Management & Operations (TSM&O)	Demonstrate compliance with 940.11 prior to authorization of Highway Trust Funds	ITS	R & A	AE	
--	------------------------------	---------------	--	--	----------------------	----------	---	--	-----	-------	----	--

TSM&O - Safety and Traffic												
87	Work Zone Self-Assessment	Annual Memo from HQ	Annually	7/1/2013, This project is currently on hiatus and has not been determined whether it will be reestablished or not.	Office of Operations	Safety	Transportation System Management & Operations (TSM&O)	Complete with partners and forward to HQ.	Safety & Traffic			
88	Approval of State-Prepared Manual on Uniform Traffic Control Devices - State Traffic Control Manuals	23 CFR 655.603, 23 USC 109(d)	As needed	Not Applicable	Office of Operations	Safety	Transportation System Management & Operations (TSM&O)		Safety & Traffic			
93	Approval of Work Zone Significant Project Determination	23 CFR 630.1010	As needed		Office of Operations	Safety	Transportation System Management & Operations (TSM&O)		Safety & Traffic			
94	Approval of Exceptions to Work Zone Procedures for Interstate Projects	23 CFR 630.1010	As needed		Office of Operations	Safety	Transportation System Management & Operations (TSM&O)		Safety & Traffic			
95	Approval of Work Zone Policy and Procedures Conformance Review	23 CFR 630.1014	At appropriate intervals		Office of Operations	Safety	Transportation System Management & Operations (TSM&O)		Safety & Traffic			
96	Process Review of Work Zone Safety and Mobility Procedures	23 CFR 630.1008, 23 USC 109(e)(2), 23 USC 112(g)	Every 2 years		Office of Operations	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Report to D.A. Frequency: Due January 1st	Safety & Traffic	R & A	STE	STEB
	Repeat Offender law	23 USC 164, 1406	Update as amended		Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: No update in compliance	Safety & Traffic	C, A (if anything changes)		OTS

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

	Primary Seat belt law	23 CFR 1215.6	Annually (Each FY)		Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Colorado does not have a primary seat belt law	Safety & Traffic	R		OTS
	Zero tolerance law & enforcement certification	23 CFR 1210.5	Update as amended		Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: No update in compliance	Safety & Traffic	R		OTS
	Drug offender DL revocation or suspension certification by Governor	23 USC 159, 23 CFR 192.5	Annually	Jan. 1	Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Certification sent to FHWA	Safety & Traffic	R & C		OTS
	MUTCD Adoption and Colorado Supplement	23 CFR 655.603	2 yrs. after MUTCD update is released		Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: MUTCD Adopted	Safety & Traffic	R & A	STE	STEB
	Rail Highway Grade Crossing Program	23 USC 130	Annually	31-Aug	Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Report to HQ by 30-Sept	Safety & Traffic	R C & A	STE	STEB
	Highway Safety Improvement Program	23 USC 148	Annually	31-Aug	Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Report to HQ by 30-Sept	Safety & Traffic	R, C & A process	STE	STEB
	Project crash data	23 CFR 630.1008	Continuous		Office of Safety	Safety	Transportation System Management & Operations (TSM&O)		Safety & Traffic	R	STE & AE	STEB
	Strategic Highway Safety Plan	23 CFR 924.9 (a)(ii) 23 CFR 924.13 (2)	Every 3 years or as deemed necessary	6/30/2015	Office of Safety	Safety	Transportation System Management & Operations (TSM&O)	Outcome: Updated SHSP	Safety & Traffic	R, C & A		STEB

Miscellaneous												
33	Approval of State 3R Program	23 CFR 625.4(a)(3), 23 USC 109(n)	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Division of Project Support	FHWA Division Office Approval.				
72	Section 129 Tolling Authority Requests	23 USC 129(a)	As needed	Not Applicable	Office of Innovative Program Delivery	Program Delivery	High Performance Transportation Enterprise (HPTE)	At the option of the project sponsor, may execute a Tolling Eligibility MOU with the Division Office; HIN coordinates FHWA HQ review				

*FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement*

73	Section 166 HOV/HOT Lanes Tolling Authority Requests	23 USC 166(d)	As needed	Not Applicable	Office of Innovative Program Delivery	Program Delivery	High Performance Transportation Enterprise (HPTE)	At the option of the project sponsor, may execute a Tolling Eligibility MOU with the Division Office; HIN coordinates FHWA HQ review				
74	Value Pricing Pilot Program Tolling Authority Requests	ISTEA Section 1012(b)	As needed	Not Applicable	Office of Innovative Program Delivery	Program Delivery	High Performance Transportation Enterprise (HPTE)	Requests submitted to HIN to coordinate review; approval by the Administrator				
75	Interstate System Reconstruction and Rehabilitation Pilot Program Tolling Authority Requests	TEA-21 Section 1216(b)	As needed	Not Applicable	Office of Innovative Program Delivery	Program Delivery	High Performance Transportation Enterprise (HPTE)	Applications submitted to HIN to coordinate review; approval by the Administrator				
76	Annual Audit of Toll Facility Records and Certification of Adequate Maintenance - Report Submittal	23 USC 129(a)(3)(B); TEA-21 Section 1216(b)(5)(B); SAFETEA-LU Section 1604(b)(3)(A); ISTEA Section 1012(b)(3)	Annually		Office of Innovative Program Delivery	Program Delivery	High Performance Transportation Enterprise (HPTE)	Division Office to receive the reports.				
176	Review of Biennial - Toll Facilities in the United States	23 CFR 450.105(b) HPMS Field Manual	Biennially - Odd Years	June 15 (Odd Years)	Office of Highway Policy information	Program Delivery	High Performance Transportation Enterprise (HPTE)	Division Office sends to HQ.				
64	Emergency Relief (ER) Damage Assessments and Reports	23 CFR 668 23 USC 120 and 125	As needed	Not Applicable	Office of Infrastructure	Program Delivery	Office of Emergency Management	Perform with State.				
69	TIFIA Credit Program	23 USC 601-609	As needed	Not Applicable	Office of Innovative Program Delivery	Program Delivery	Office of Major Projects	Project sponsors submit requests for credit assistance to the TIFIA JPO for review; approval by the Secretary				
77	Project Management Plan (Major Projects)	23 U.S.C. 106(h)(2)	Prior to first federal authorization of construction funds for a Major Project	Not Applicable	Office of Innovative Program Delivery	Division Office will conduct concurrent review with HQ Office of Innovative Program Delivery.	State DOT or Project Sponsor will prepare and submit Project Management Plan.	Division Office will provide approval after receiving concurrence from HQ Office of Innovative Program Delivery.				

FHWA-Colorado Division and Colorado Department of Transportation  
Stewardship and Oversight Agreement

78	Financial Plan (Major Projects)	23 U.S.C. 106(h)(3)	Prior to first federal authorization of construction funds for a Major Project and then annually.	Annually as noted in the approved Initial Financial Plan	Office of Innovative Program Delivery	Division Office will conduct concurrent review with HQ Office of Innovative Program Delivery.	State DOT or Project Sponsor will prepare and submit annual Financial Plans.	Division Office will provide approval after receiving concurrence from HQ Office of Innovative Program Delivery.				
79	Financial Plan (Other Projects)	23 U.S.C. 106(i)	Prior to first federal authorization of construction funds for an Other Project and then annually.	Annually as noted in the approved Initial Financial Plan	Office of Innovative Program Delivery	Division Office will review and approve Financial Plans for Other Projects in accordance with its stewardship and oversight agreement with the State DOT or Project Sponsor.	State DOT or Project Sponsor will prepare and submit annual Financial Plans to the Division Office, only upon request.	Other Projects are defined as projects with an estimated total cost of \$100 million or more that have not been designated as Major Projects.				

Not Applicable												
67	Approval to Sell, Lease or Otherwise Dispose of a Ferry Purchased with Federal-aid Funds	23 USC 129 (c)(6)	As needed	Not Applicable	Office of Infrastructure	N/A	N/A	Division Office reviews and submits for Office of Program Administration for Administrator Approval				
89	Review Vehicle Size & Weight Enforcement Plan	23 CFR 657.11, 23 USC 127	Annually	1-Oct	Office of Operations	Planning	N/A	CDOT is not responsible for this activity; it is completed by the Colorado State Patrol Motor Carrier Services Branch.		R&A w Evaluation Report	STP	
90	Review Vehicle Size & Weight Enforcement Certification	23 CFR 657.13, 23 USC 141	Annually	1-Jan	Office of Operations	Planning	N/A	CDOT is not responsible for this activity; it is completed by the Colorado State Patrol Motor Carrier Services Branch.		R for C	STP	