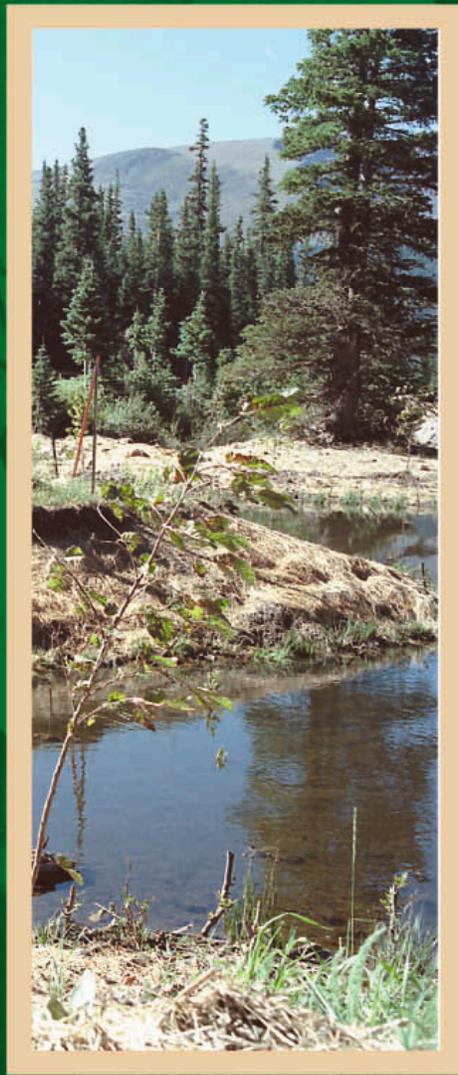


*The Colorado Department of Transportation*



# TABLE OF CONTENTS

---

## **CHAPTER I**

---

Introduction .....	1
A. Purpose of the Environmental Stewardship Guide.....	1
B. CDOT's Environmental Ethics Statement.....	2
C. CDOT Mission Statement and Commission Policies.....	3
D. Performance Based Transportation Investment Strategy.....	3
E. Environmental Policy Guidance.....	3
F. Environmental Considerations in Transportation Planning....	4

## **CHAPTER II**

---

Environmental Roles and Responsibilities.....	5
A. Colorado Transportation Commission.....	5
B. Colorado Department of Transportation .....	6
- CDOT Environmental Functions.....	6
C. Federal Highway Administration.....	8
D. Environmental Cooperation between CDOT and FHWA....	9
- CDOT Responsibilities.....	10
- FHWA Responsibilities.....	10

## **CHAPTER III**

---

Transportation Planning and Development Process.....	11
A. Planning Process.....	11
B. 20-year State Transportation Plan.....	14
C. Statewide Transportation Improvement Program.....	14
D. Local Agency Projects.....	14
E. Interchange Approval Process (1601).....	15
F. Corridor Planning.....	16
G. Environmental Considerations in Planning Process.....	18

## **CHAPTER IV**

---

Project Development.....	19
A. NEPA Documentation Process.....	19
- Environmental Consideration & Documentation.....	19
- Categorical Exclusion Projects.....	20
- Environmental Assessments and Impact Statements.....	22
- Sustainability in Transportation.....	34
- Environmental Justice.....	36
B. Post-NEPA Documentation Approval .....	37
- Project Design and Construction.....	37
- Maintenance and Operations.....	43
- Project Betterments and Enhancements .....	45

## **CHAPTER V**

---

Special Circumstances.....	48
A. Treatment of Private Requests and Public/Private Initiatives...48	
B. Design-Build Projects.....	48
C. Colorado Tolling Enterprise.....	48
D. Emergency Actions.....	49

## **APPENDICIES**

---

Appendix A – Glossary of Terms.....	50
Appendix B – Major Environmental Statutes.....	52
Appendix C – CDOT Commission Districts.....	62
Appendix D – Map of CDOT Regions.....	63
Appendix E – Map of Transportation Planning Regions.....	64
Appendix F – CDOT Environmental Forms.....	65
Appendix G – Cat Ex Determinations.....	70
Appendix H – CDOT Detailed Cat Ex Process.....	72

<b>Endnotes</b> .....	75
-----------------------	----

# CHAPTER I

---

## Introduction

### Purpose of the Environmental Stewardship Guide

**T**he Colorado Department of Transportation (CDOT) Environmental Stewardship Guide (Guide) documents CDOT's environmental ethic. It describes the process by which social, economic, environmental, and engineering considerations are integrated in all aspects of transportation decision-making, including policy development, systems and project development, and the design, construction, maintenance and operations of the system.<sup>1</sup> This Guide has been developed to



#### KEY NOTE

**At the policy level environmental considerations are broad and goal oriented. Through the planning and development processes, specific environmental considerations are identified for further analysis.**

assist internal and external users who want an overview of the transportation decision-making process and a better understanding of the environmental considerations contained in that process.

The term “environment” as used in this Environmental Stewardship Guide includes the natural environment, the built environment, the cultural and social fabric of our communities, and the quality of life of the people who live in Colorado.

Environmental Stewardship is more than just managing environmental clearances and ensuring regulatory compliance for transportation projects. Environmental Stewardship means that CDOT employees are environmentally conscientious and ensure that the statewide transportation system is constructed and maintained in an environmentally responsible, sustainable and compliant manner.

CDOT considers environmental factors to be an important part of every plan and decision in the same way that engineering, economic, and other factors are considered. CDOT’s environmental ethic establishes a moral foundation of environmental responsibility that helps guide policy and systems planning decisions. As the planning and decision-making process becomes more project-oriented, this environmental ethic is incorporated into environmentally responsible engineering, construction and maintenance practices.

An overriding theme of this Guide is consistent with the National Environmental Policy Act of 1969 (NEPA) in that it advocates the use of an interdisciplinary approach to decision-making. NEPA applies to all major

federal actions and decisions. CDOT recognizes that the development and evaluation of successful transportation concepts requires the involvement and collaboration of many people including the public, engineers, planners, local



#### KEY NOTE

**CDOT's Environmental Ethics Statement applies fundamental NEPA policy and principles to guide procedures and the decision-making process.**

entities, resource agencies, metropolitan planning organizations, environmental specialists, cultural resource specialists and others with expertise in project planning. This interdisciplinary approach has been adopted for all CDOT projects or projects involving CDOT approvals, reflecting CDOT's environmental ethic and commitment to meeting both the intent and requirements of NEPA and the requirements and processes outlined in this Guide.

### ■ CDOT's Environmental Ethics Statement

CDOT has adopted the following environmental ethics statement to guide its work and accomplish its mission:

*"CDOT will support and enhance efforts to protect the environment and quality of life for all of Colorado's citizens in the pursuit of providing the best transportation systems and services possible."*

- CDOT goes beyond environmental compliance and strives for environmental excellence.
- CDOT promotes a sense of environmental responsibility for all employees in the course of all CDOT activities.
- CDOT ensures that measures are taken to avoid or minimize the environmental impacts of construction and maintenance of the transportation system and that mitigation commitments are implemented and maintained.
- CDOT designs, constructs, maintains, and operates the statewide transportation system in a manner which helps preserve and sustain Colorado's historic and scenic heritage and fits harmoniously into communities and the natural environment.



#### KEY NOTE

**An overriding theme of this Guide is consistent with NEPA in the use of an interdisciplinary approach to decision-making. This is a key principle in NEPA. The successful application of this approach will lead to good transportation decisions that meet both the intent and requirements of NEPA.**

The approach described in this Guide is designed to streamline the environmental process by:

- encouraging early consideration of environmental issues;
- providing for early involvement and consultations with affected parties and resource agencies; and
- establishing a framework for cooperation and collaboration on an on-going basis.

## ■ CDOT's Mission Statement and Commission Policies

In November 1996, the Colorado Transportation Commission adopted as a matter of policy the *Department Mission, Values, and Goals*.<sup>2</sup> The mission of the Colorado Department of Transportation is:

*"To provide the best multi-modal transportation system for Colorado that most effectively moves people, goods and information"*

One important value recognized by the Commission for implementation of this mission is:

*"Making decisions which are compatible with Colorado's quality of life, environmental, and economic goals"*

The Commission has also adopted *Statewide Transportation Policies*.<sup>3</sup> CDOT's environmental ethic was adopted by the Transportation Commission as an official transportation policy in 2003. An additional policy also directly addresses CDOT's commitment to the environment:

- **BALANCING QUALITY OF LIFE FACTORS**

CDOT recognizes the complex interrelationship of the environment, economic vitality and mobility, and is committed to balancing these factors in the development and implementation of the statewide transportation plan. By working with local, regional and state interests, CDOT will advocate the development of a coordinated decision-making process that balances the long-range transportation, land use and quality of life needs in Colorado. It is not the Intent of the [Transportation] Commission or CDOT to prohibit or interfere with local land use decisions.

These CDOT Policy statements incorporate many of the NEPA principles and are implemented throughout CDOT procedures and decision making

## ■ Performance Based Transportation Investment Strategy Environmental Objectives

To aid the Commission in making effective investment decisions, CDOT has developed a transportation investment strategy and performance measurement system. As part of that strategy, there are three environmentally related objectives that have been adopted by the Commission consistent with the overall CDOT mission: (1) ensuring that investments in the transportation system sustain and/or improve quality of life; (2) ensuring environmental stewardship of the transportation system; and (3) implementing transportation improvements that enhance the quality of life and promote community values.

## ■ Environmental Policy Guidance

Moreover, the Commission has adopted a policy supporting pro-active 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 consistent with the mission of the Department; and
- Expedite project planning consistent with environmental goals and policies.

## ■ Environmental Considerations in Transportation Planning and Development



### KEYNOTE

#### NEPA mandates: Public and agency:

- Involvement
- Disclosure
- Review

#### Considerations of:

- Environmental
- Technical and economic factors

#### Thorough environmental analysis of alternatives.

Many CDOT transportation decisions are subject to more than 40 federal and State environmental laws.<sup>4</sup> The principal federal environmental law governing federal decisions regarding transportation planning and development activities is NEPA.<sup>5</sup> NEPA sets the tone for the federal government's environmental ethic in recognizing the need for systematic, interdisciplinary planning and decision-making that considers environmental factors for major federal actions that could significantly affect the quality of the human environment. It was signed into law on January 1, 1970 marking the beginning of the environmental decade of the 70's. The Congress recognized man's profound impact on the environment for present and future generations and the significant federal role and responsibilities associated with those impacts. It set a new standard for federal decision-making based on thorough environmental analysis, consideration of alternatives to proposed federal actions and public disclosure and review before action is taken.

NEPA regulations mandate that transportation decisions involving federal funds and approvals consider environmental as well as technical and economic factors in the assessment and decision-making process.<sup>6</sup> It also requires that the federal agency consider all reasonable alternatives to their proposed action and their environmental impacts. Finally, it mandates that the public have an opportunity to participate in the process.



### KEYNOTE

**NEPA principles have been incorporated into CDOT transportation planning development process whether or not projects are federally funded.**

Accordingly, CDOT has committed to complying with the intent and requirements of NEPA for all transportation activities, regardless of whether or not they are federally funded. Although non-federal projects will not require federal agency approval, the NEPA process is an excellent framework for ensuring environmental factors are considered consistent with CDOT environmental ethic. Thus, the guiding principles of NEPA have been incorporated into the CDOT transportation planning and project development process, as well as maintenance and operations of the state transportation system. It is the responsibility of all CDOT employees to recognize and consider these essential principles and to appropriately include them in the transportation decision-making process.

Documents referenced in this Guide and further information on CDOT environmental programs can be found on CDOT's website:

<http://www.dot.state.co.us/Environmental/>

# CHAPTER II

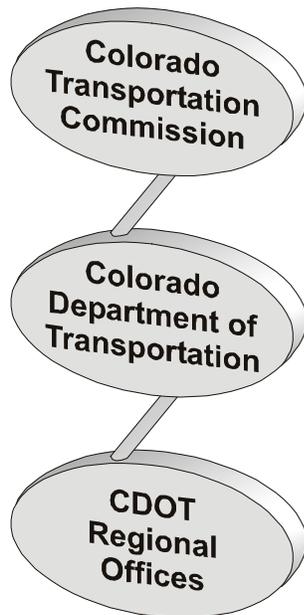
---

## Environmental Roles and Responsibilities

### ■ Colorado Transportation Commission

**C**olorado's transportation system is managed by CDOT under the direction of the Transportation Commission. The Commission is composed of eleven commissioners who represent specific districts. Each commissioner is appointed by the Governor, confirmed by the Senate, and serves a four-year term. To provide continuity on the commission, the expiration dates of six Commissioners' terms are staggered by two years. (See Appendix C for a map of the Transportation Commission Districts).

Under state law<sup>7</sup>, the powers and duties of the Transportation Commission include:



- Formulating general policy with respect to the management, construction, and maintenance of public highways and other transportation systems in the state;
- Advising and making recommendations to the Governor and the General Assembly relative to transportation policy;
- Promulgating and adopting Transportation Department budgets and programs, including construction priorities and approval of extensions or abandonment of the state highway system;
- Assuring that the preservation and enhancement of Colorado's environment, safety, mobility, and economics be considered in planning, selection, construction and operation of all transportation projects in Colorado;
- Reducing state transportation costs through coordination between different modes and integration of governmental functions; and
- Maximizing expenditures of state transportation funds by developing statewide transportation policies.

## ■ Colorado Department of Transportation

CDOT is authorized by state statute<sup>8</sup> to provide strategic planning for statewide transportation systems to meet Colorado's transportation challenges in the future. Its charge is to obtain the greatest benefit from state expenditures by producing a statewide transportation policy that addresses transportation problems and enhances the state's ability to obtain federal funds by responding to federal mandates for multi-modal transportation planning.

The Executive Director of CDOT is appointed by the Governor and is responsible for the overall direction and management of CDOT with an annual budget approved by the State legislature.

- **CDOT  
Environmental  
Functions**

CDOT's environmental functions at headquarters are integrated in the Environmental Programs Branch (EPB), Part of the Division of Transportation Development (DTD). The CDOT environmental program consists of numerous interrelated responsibilities requiring close coordination between all parts of CDOT.

Within CDOT headquarters, the DTD provides transportation policy analysis, environmental planning, and transportation system data and analysis. EPB

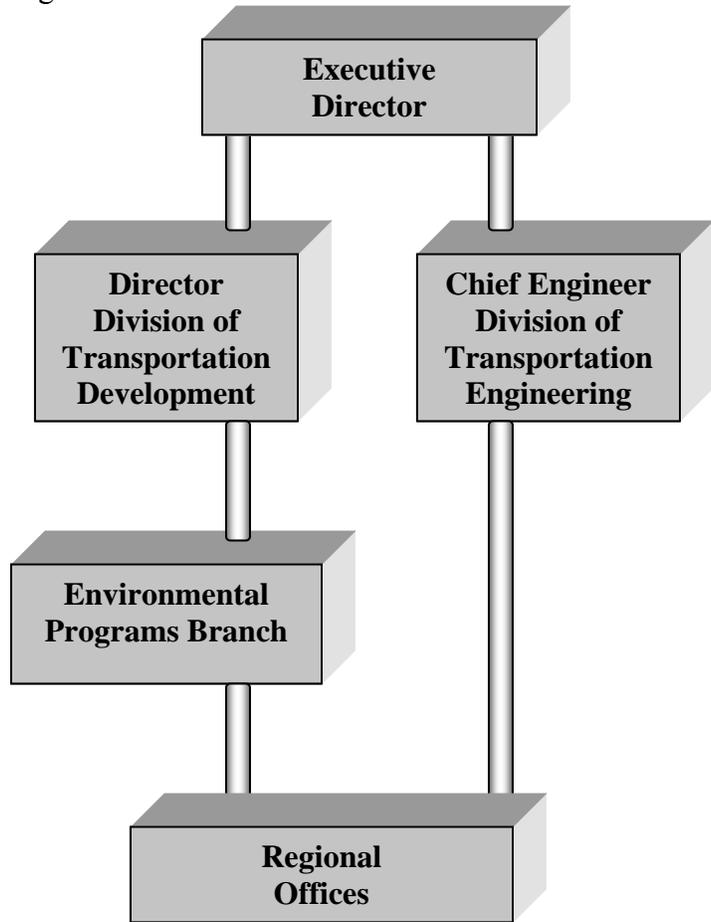
coordinates with executive management and the Regions on early corridor analysis and development of statewide, regional and corridor data and planning analysis.



### KEYNOTE

**CDOT DTD leads the environmental planning efforts & coordinates with EB and Regions on early corridor analysis and development of statewide, regional and corridor data and planning analysis.**

transportation corridors, and developing GIS systems and data in support of the



Generally EPB is the lead in environmental streamlining, environmental policy development, development of programmatic agreements, and development of environmental data for use in the planning and project development process, and assisting Regions in early corridor environmental analyses.

The Environmental Programs Branch is responsible for assisting the Transportation Commission, the Division of Transportation Engineering, and CDOT executive management in developing environmental policy, procedures for early evaluation of

Regions, resource agencies and the public. EPB develops Programmatic Agreements and Memorandums of Understandings with resource agencies and is the primary point of contact for agencies for policy and program level issues. EB is responsible for providing formal comment on new and changing regulations and keeping regions and management informed of the changes. EPB develops environmental procedural guidelines and manuals for CDOT and also provides and coordinates statewide environmental training. EPB provides statewide environmental specialty expertise to the Regions and consultants, including project level clearance actions. EPB is responsible for coordinating the formal NEPA document review process and conducting the formal Quality Assurance program for CDOT.

The staff organizations at headquarters are primarily responsible for assisting the Regions in delivering their program of projects.

**CDOT Headquarters' Responsibilities**

**THE PRIMARY RESPONSIBILITY OF HEADQUARTERS STAFF IS TO ASSIST REGIONS IN DELIVERING THEIR PROGRAM OF PROJECTS**

- Leads environmental Planning efforts and provide technical support to the Regions
- Development of programmatic Agreements and MOU's administration and implementation
- Assisting Executive Management and Transportation Commission develop environmental policy
- Developing methods, agreements and procedures for early evaluation of transportation corridors
- Early evaluation of transportation corridors
- Early environmental evaluation of corridors with Regions, resource agencies, and the public
- Provide Regions with information and analysis regarding
  - I. Federal and State Laws
  - II. Regulations
  - III. Procedures
  - IV. Practices
- Quality Assurance of all NEPA documents and processes

CDOT's environmental functions are divided between the headquarters staff and the six Regional offices. Regions are responsible for all project development, construction and maintenance related environmental activities, with assistance from central staff as necessary.

Within the Regions, the Region Planning and Environmental Manager (RPEM) is responsible for technical assistance, during planning and construction, for Region project and maintenance staff, leading the public involvement, compliance monitoring and quality assurance. The RPEM is also responsible for obtaining project environmental clearances and permits, NEPA compliance, and for the development of NEPA documents, which includes integrating all project delivery activities into the CDOT environmental process. The RPEM and regional engineering and maintenance staff within the Region are required to work together to develop environmental mitigation requirements for implementation on applicable projects. For active construction projects, the Program Engineer is responsible to implement the mitigation commitments

identified during project development and for maintaining environmental compliance as specified by law and regulation, with support of the RPEM. The goal is to integrate the regulatory requirements, skills and perspectives of the EB, DTD, RPEM and Maintenance Sections to achieve project compliance efficiently.

Most if not all of the NEPA responsibilities are shared among all participants and require a collaborative process in consultation with FHWA in order to achieve NEPA's systematic, interdisciplinary process. Nevertheless, the RPEM takes lead responsibility in many cases to ensure overall NEPA compliance.

<b>Regional Roles and Primary Responsibilities</b>		
<b>Region Planning and Environmental Manager</b>	<b>Program Engineer (including Resident &amp; Project Engineer)</b>	<b>Maintenance Superintendent</b>
<p>Responsible for:</p> <ol style="list-style-type: none"> <li>1. Management of systems planning</li> <li>2. Sign-off and quality control of overall NEPA compliance</li> <li>3. Development and preparation of NEPA documents</li> <li>4. Ensure that alternatives developed are responsive to environmental and public concerns.</li> <li>5. Preliminary identification of appropriate project designation under NEPA in consultation with FHWA</li> <li>6. Overall responsibility for ensuring adequate public involvement</li> <li>7. Coordination with other agencies to obtain permits and clearances.</li> <li>8. Development of project avoidance and mitigation measures.</li> <li>9. Coordination and delivery of environmental training to support program delivery</li> <li>10. Tracking and reporting of mitigation during and after project construction</li> </ol>	<p>Responsible for:</p> <ol style="list-style-type: none"> <li>1. Management of the project from design through construction, including any consultant contracts;</li> <li>2. Development of alternatives to be considered;</li> <li>3. Maintain environmental compliance of laws and regulations.</li> <li>4. During final design, refinement and implementation of project avoidance and mitigation measures</li> <li>5. Compliance with all permits, regulations, and commitments from project design through operations and maintenance of the transportation system</li> <li>6. Project design scoping and alternative refinement consistent with any environmental commitments.</li> <li>7. Coordination of public involvement with the RPEM.</li> </ol>	<p>Responsible for:</p> <ol style="list-style-type: none"> <li>1. Maintaining long-term mitigation measures</li> <li>2. Ensuring that maintenance operations do not affect mitigation measures</li> <li>3. Maintain environmental compliance of laws and regulations.</li> <li>4. Maintenance of project avoidance and mitigation measures.</li> </ol>

### ■ Federal Highway Administration<sup>9</sup>

The Federal Highway Administration (FHWA) is the federal agency responsible for establishing the priorities and direction for the Nation's highways and national transportation system. The FHWA directly administers a number of highway transportation activities including standards development, research and technology, training, technical assistance, highway access to federally owned lands and Indian lands, and commercial vehicle safety enforcement.

Further, FHWA has a significant role, working through partnerships, programs, policies, and allocation of resources, which facilitate the strategic development and maintenance of State and local transportation systems as effective and efficient elements of the national intermodal transportation system.

FHWA will:

1. Promote the construction, maintenance, and use of highways that are compatible with national transportation and environmental objectives;
2. Develop initiatives to protect and enhance ecosystems on a programmatic basis, including the use of inventories, partnerships with resource agencies, and practices such as wetland banking;
3. Provide resources, flexibility, and technical assistance for States and local agencies to ensure compliance with environmental standards, especially reducing transportation-related air emissions;
4. Streamline environmental processes, requirements and procedures to accelerate and improve decision-making to meet the goals of transportation, the community, and the natural environment; and
5. Provide environmental program oversight pursuant to the Stewardship Agreement with CDOT.

The Federal-aid Highway Program administered by FHWA provides federal financial and technical assistance to the States to plan, construct, and improve the National Highway System, urban and rural roads, and bridges. The program fosters the development of a safe, efficient, and effective highway and intermodal system nationwide. As part of that administration, FHWA has primary responsibility for complying with NEPA and the other environmental laws for the programs it supports. CDOT and FHWA have jointly developed a desired state program that outlines the responsibilities of the various CDOT and FHWA organizations in developing, reviewing, and approving NEPA documents.

- ***Other Federal Transportation Agencies***

The Federal Transit Administration, the Federal Aviation Administration and the Federal Railroad Administration have the same NEPA requirements as FHWA but a slightly different process for review and approvals. If a CDOT project involves federal funds or approvals from these other federal agencies, the RPEM should be consulted to determine specific requirements.

## ■ **Environmental Cooperation between CDOT and FHWA**

FHWA and CDOT have entered into a *Stewardship Agreement*<sup>10</sup> that identifies the duties and responsibilities of each entity for the Federal-aid Highway Program. The guiding principle of the Stewardship Agreement is the partnership between FHWA and CDOT for oversight of Federal-aid highway projects.



### **KEY NOTE**

**Under the Stewardship Agreement, FHWA and CDOT share the responsibility for oversight of projects using federal-aid funds on a project-by-project basis.**

*FHWA has stewardship and oversight responsibilities for all FHWA programs and program responsibilities under Title 23 and non-Title 23 program areas. FHWA is ultimately accountable for ensuring that the Federal highway program is delivered consistent with national environmental law and implementing regulations...*

Through the Stewardship Agreement, FHWA and CDOT

management pursue - within state and federal laws, regulations and policies - alternative methods for providing quality services and transportation products. The partnership also ensures that federal funds will be expended cost-effectively and its implementation provides justification for continued disbursement of federal funds.

The Stewardship Agreement requires full compliance with all federal rules and regulations except where TEA-21 allows state laws, policies, and regulations to apply

- ***CDOT's Responsibilities under Stewardship Agreement***



**KEYNOTE**

**Some actions require the approval of FHWA regardless of project funding and/or delegation of project oversight to CDOT.**

Generally, CDOT has responsibility under the Stewardship Agreement to ensure compliance with federal environmental requirements for projects on:

- Non-National Highway System Federal-aid highways
- Federally funded projects on local roads and non Federal-aid state highways
- National Highway System projects not on the Interstate System

- ***Federal Responsibilities under Stewardship Agreement***

FHWA has responsibility for all Title 23 requirements for federal-aid projects that are on the Interstate Highway System as follows:

- Addition of capacity to an existing corridor (rail<sup>11</sup> or highway)
- Roadway relocation
- Bridges
- Major widening
- Reconstruction of bridges, interchanges and over-crossings

Other projects that will be the responsibility of FHWA include:

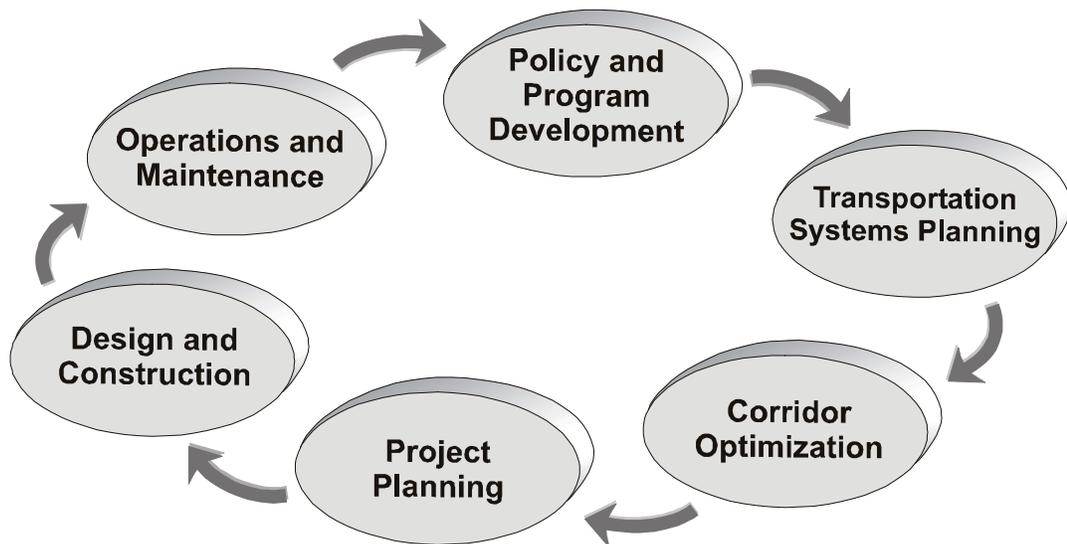
- Projects using emergency relief funds, unless oversight authority is specifically waived by FHWA
- Non-Title 23 federal actions subject to NEPA, Section 4(f); Civil Rights Act and Uniform Relocation Assistance and Real properties Acquisition Policies Act.

Further, FHWA approval is required for the following actions regardless of project funding and/or delegation of project oversight to CDOT:

- Changes in Interstate Access Control
- Lease of Interstate Right of Way Air Space
- Disposal of Interstate Right of Way
- Design exceptions affecting Interstate Highways

## Transportation Planning and Development Process

The development of transportation projects is a multi-phased, multi-year process that involves significant commitment of technical and financial resources. The transportation development process has several major phases including (1) policy and program development; (2) transportation systems planning; (3) corridor optimization (only for selected corridors); (4) project planning; (5) design and construction; and (6) operations and maintenance. Environmental factors must be considered in all phases of the process. An overview of each of these phases is described below. However not all activities must necessarily follow each step identified in this overview. The project planning and design and construction phases are covered in Chapter IV.



### ■ Planning Process

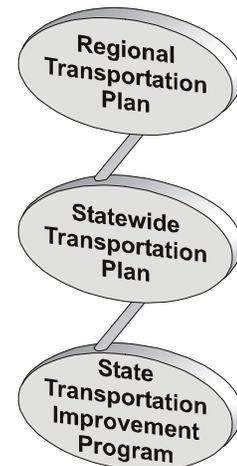
The transportation planning process is divided into two phases: policy and program development, and systems and project planning. The policy and program development phase directs and orients the systems planning phase and the other phases described in this Guide.

- ***Policy and Program Development***

The Transportation Commission establishes policies and provides direction for management of the state's public transportation system. The Transportation Commission holds regular open public meetings (usually monthly) with advanced notice and can make policy at any time. The CDOT staff conducts studies, collects data, and provides policy recommendations. The results of systems and project planning continually feed back into the policy and program development phase. The primary products resulting from the policy and program development process are Policy Directives adopted by the Transportation Commission and the 20-year State Transportation Plan. The 20-Year State Transportation Plan provides significant policy direction and forms the basis from which the transportation system is planned and developed.

- ***Transportation Systems and Project Planning***

The Statewide Transportation Planning Process was adopted to meet the intent of both the U.S. Congress and the Colorado General Assembly for developing an ongoing, comprehensive, coordinated planning process to address the most important transportation needs of the state. Statewide needs are identified and documented in a 20-Year State Transportation Plan. This Plan is implemented by systematic project prioritization and selection and budgeting of resources utilizing a comprehensive input process.<sup>12</sup> The State process is consistent with the federal transportation planning requirements<sup>13</sup> and implementing regulations.<sup>14</sup>



Colorado's General Assembly has directed that transportation planning occur as a cooperative process:

*"...the General Assembly recognizes the Department of Transportation as the proper body, in cooperation with regional planning commissions and local government officials, for developing and maintaining the state transportation planning process and the state transportation plan."<sup>15</sup>*

Fifteen Transportation Planning Regions (TPRs) prepare regional transportation plans identifying and prioritizing their long-range transportation needs for all modes. These regional plans and priorities are integrated and consolidated by the Transportation Commission into the state's 20-year State Transportation Plan, which serves as the blueprint for how transportation resources are invested and projects are selected for implementation.

The result of the statewide transportation planning process is a long range, financially feasible, environmentally sound inter-modal transportation system plan for Colorado.

- *Planning in Urbanized Areas*



**KEYNOTE**

**15 TPRs prepare regional Transportation plans that are integrated and consolidated into the state's 20-year intermodal plan, which serves as the blueprint for how transportation resources are invested and projects are selected for implementation.**

Five of the 15 TPRs are known as Metropolitan Planning Organizations (MPO) because they are in urban areas. An MPO is the entity designated by the Governor to be responsible, together with the state, for having a continuing, cooperative, and comprehensive transportation planning process that results in plans and programs consistent with the comprehensive plans of the urbanized area. Metropolitan planning areas with populations larger than 200,000 are designated as Transportation Management Areas (TMAs), which places additional federal requirements and responsibilities on the respective MPOs regarding long-range planning,

programming, project selection, etc. Colorado has three TMAs: the Denver, Fort Collins/Loveland and Colorado Springs metropolitan areas. The other two MPOs that are not TMAs are Mesa County and Pueblo.

MPOs prepare fiscally-constrained Regional Transportation Plans (RTPs), which identify the projects anticipated to be constructed over the next twenty years. The MPOs also prepare Transportation Improvement Programs (TIPs) to identify projects to be constructed in the next 6 years. The Commission and the Department actively participate in the MPO multi-modal transportation planning process and must incorporate the TIP adopted by the MPO into the State Transportation Improvement Program (STIP).

- *Non-urbanized Planning*

Ten TPRs are rural in nature and do not involve MPOs. In these rural areas, Regional Planning Commissions (RPCs) are responsible for developing regional transportation plans and establishing the regional priorities for projects within the regional transportation plans. Like their MPO counterparts, the RPCs in the rural transportation planning regions develop long-range transportation plans that have both a "preferred" and "financially-constrained" element. Both elements are integrated into the statewide transportation plan.

In TPRs that do not contain MPOs, a TIP is not required. However, regional priorities are established by the RPCs through their regional transportation planning process then discussed with CDOT and the Transportation Commission through the Project Priority Planning Process (4P) on a biennial basis. The 4P utilizes the fiscally-constrained, regionally-prioritized projects as the source for incorporating new projects into the STIP.

- *Tribal Planning Process*

Transportation planning also involves Indian Tribal Governments with Colorado's two Indian Nations, the Southern Ute Indian Tribe and the Ute Mountain Tribe. Both are members of the Southwest Regional Transportation Planning Commission for the Southwest TPR. The transportation plans for both Tribal Nations are incorporated into the regional transportation plan for the Southwest TPR and subsequently incorporated into the statewide transportation

plan. Both Tribes participated in establishing the regional priorities included in the Southwest Regional Transportation Plan and participate in the biennial 4P process for STIP development.

### ■ **20-year State Transportation Plan**

The 20-year State Transportation Plan is a long-range, statewide, multi-modal transportation plan that blends the 15 individual long-range regional transportation plans as well as statewide priorities established by the Transportation Commission. The Plan is a composite document that integrates the Transportation Commission's adopted policies, direction, statewide programs, and the priority projects contained in the 15 TPRs. It contains both a “preferred” and “financially-constrained” Plan.<sup>16</sup>

### ■ **Statewide Transportation Improvement Program**

The 20-Year State Transportation Plan is implemented by programming priority projects into the six-year document called the Statewide Transportation Improvement Program (STIP). The STIP is required under the federal transportation planning requirements and is a staged, multi-year, statewide inter-modal program of transportation projects that is consistent with the statewide transportation plan.

The STIP is mandated by federal regulation to be fiscally constrained. Consequently, only projects identified in the fiscally-constrained portion of the statewide transportation plan are eligible to be included in the STIP.

The first year of the STIP comprises CDOT's annual budget. An electronic database links projects in the STIP directly to the state transportation plan. This linkage ensures consistency between the long-range plan and the STIP, as well as provides tracking and accountability through the life of the project, from planning to implementation. The STIP is updated on a two-year cycle through the 4P. This 4P effort incorporates the state statutory requirement that CDOT must formally hear the transportation needs of the State's 64 counties through the Boards of County Commissioners of each county. The 4P also meets the federal requirement that CDOT work cooperatively with the MPOs to develop metro area TIPs prior to incorporating the TIP into the STIP.

### ■ **Local Agency Federal Aid Projects**

Local Agency federal-aid projects are sponsored and conducted by local units of government with federal funding. In such cases, the Local Agency enters into an agreement with CDOT to administer such funding for the project. CDOT has prepared a *CDOT Local Agency Manual* that provides guidance and forms for local agencies. Such projects will be subject to the same process and environmental requirements as outlined in this Guide. Interested local agencies should contact their CDOT Region office for more information.

## ■ Interchange Approval Process (1601 Process)

It is CDOT Commission's policy that all requests for new interchanges and major improvements to existing interchanges on the state highway system be reviewed and evaluated in a fair and consistent manner, that sufficient information be available to make an informed decision, and that duplicative analytical, regulatory and procedural requirements be minimized. To that end, the Commission recognizes that there must be flexibility to ensure a level of analysis appropriate to the circumstances surrounding each proposal.

In order to ensure consistency with local plans, needs and priorities, and the ability to have the long term contractual relationships that are necessary to maintain the infrastructure of the state highway system, the applicants must be local government units.

The CDOT Commission adopted an interchange approval process for new interchanges and major improvements<sup>17</sup> to existing interchanges on the State Highway system. All new interchanges on the interstate and freeway system must be approved by the Transportation Commission. Interchange improvements and new interchange modifications may be approved by the Chief Engineer, in accordance with this policy and associated procedural directive.<sup>18</sup> FHWA approval is required for any proposed improvements that require a federal action or may use federal funds.

Initial requests must be made to the CDOT Region by governmental and quasi-governmental entities or agencies.<sup>19</sup>

Further, the 1601 interchange approval process requires among other things that the interchange (1) be part of the Transportation Planning Region's approved fiscally-constrained Regional Transportation Plan, STIP and Statewide Transportation Plan; (2) be the subject of approved intergovernmental agreements which addresses the funding of the application development and review process, timeline and analytical expectations, and an IGA covering construction, operations, maintenance and replacement of the interchange; and (3) have sufficient environmental and other studies performed consistent with FHWA interchange approval and NEPA requirements as contained in this Guide. Any Commission or Department action on the interchange request is contingent on approval of the appropriate environmental documentation .

The first step in the approval process is a Pre-Application meeting with the CDOT Region staff to determine scope, anticipated process and schedule. At that time, the staff will make an initial assessment whether the proposal should be classified as a Categorical Exclusion, Environmental Assessment or Environmental Impact Statement as well as any other permits that may be required. The second step will be the development of an initial Intergovernmental Agreement (IGA) between the applicant and CDOT. The IGA will identify among other things the NEPA category of action. The third step involves the preparation of a System Level Analysis (SLA).

The purpose of the system level analysis is to identify the short and long-term environmental, community, safety and operational impacts of the proposed interchange, or interchange modification, on the State Highway system and

surrounding transportation system to the degree necessary for the Transportation Commission, Chief Engineer, and/or the Federal Highway Administration as appropriate, to make an informed decision whether a proposed new interchange or interchange modification is in the public interest.

The system level analysis should include substantive information necessary to identify the general location of the proposed improvement and a reasonable range of improvement alternatives necessary for the Chief Engineer and Transportation Commission to make an informed decision on whether to proceed with consideration of the proposed improvement. The data and analysis used to support the system level analysis should be used as appropriate in subsequent analysis in the NEPA process.

Unless otherwise determined by CDOT staff at the pre-application phase, the applicant will evaluate the most appropriate location for the proposed action based on the initial review and screening of all reasonable alternatives consistent with the NEPA process. The SLA report should include the draft purpose and need for the proposed interchange/modification and summarize the environmental implications of the feasible alternatives identified in the transportation systems analysis.

The analysis will not pre-determine a preferred alternative or screen out all other alternatives before the alternatives and supporting analysis are presented to the public through the appropriate NEPA process.

Documentation of the concerns and comments expressed through the public involvement and agency coordination efforts as specified in the Environmental Stewardship Guide should be addressed and documented in the SLA Report.

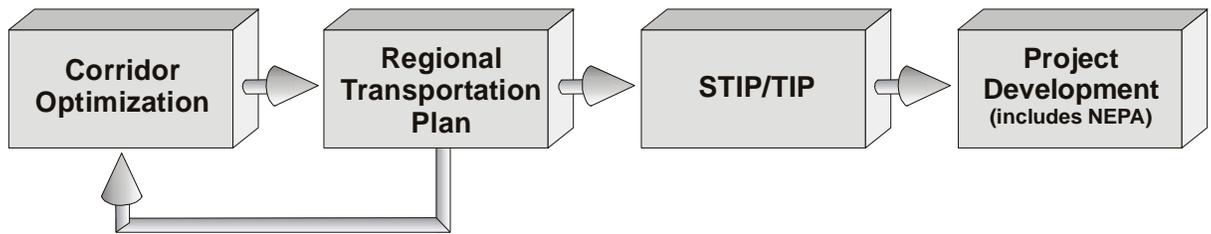
Information developed during the SLA should be incorporated into and support the appropriate NEPA documentation and decision document. The final environmental document must be of sufficient detail to comply with all applicable NEPA requirements and be consistent with the Environmental Stewardship Guide.

## ■ Corridor Planning

CDOT has adopted certain guidelines for evaluation of corridors called "corridor optimization". Corridor optimization will not apply unless an entire corridor is under evaluation prior to project development and implementation. Corridor optimization is intended to provide an initial conceptual assessment of how to best meet future travel demands in a given corridor. In order for the process to be useful, it must answer fundamental questions regarding modal mix, capacity, access, land use mix and density, cost, and potential funding options. The end product of the process is a document that defines the CDOT vision of alternatives in terms of opportunities for potential modal expansion (highways and transit), future right-of-way needs, and access for a given corridor. It also suggests the roles that transit, the parallel arterial street system and other alternatives could undertake to help meet future overall corridor demands.

- *Relationship to Other Planning Processes*

The corridor optimization process is designed to support and provide input to the overall regional and statewide transportation planning process. Depending on the outcome of the optimization process, changes to regional transportation plans may need to be considered by TPRs. The graphic below illustrates this relationship.



The results of a corridor optimization study represent a milestone decision at the start of the overall process. The final decision regarding what will actually be implemented does not occur until the end of the NEPA process. The study results also will provide a foundation for other activities and decisions formulated under CDOT Policy Directive 1601 and the State Highway Access Code<sup>20</sup>. Cooperation among the planning regions is essential where corridors span more than one region.

o *Corridor Optimization Selection Process*

CDOT Region staff will identify corridors that are either currently experiencing or are expected to experience significant traffic congestion, or other critical



**KEYNOTE**

**Corridor planning or optimization is intended to provide an initial assessment of how best to meet future demand in a given corridor.**

growth issues. Staff will then consult with regional and local officials including the TPR to prioritize the corridors for study. A key determinant in establishing a priority is the loss of an opportunity to improve corridor conditions if nothing is done. Corridors will be selected from throughout the State based upon criteria developed by CDOT. Transportation Commission approval is required prior to beginning a corridor optimization study.

Corridor optimization studies would be programmed for funding in either the Unified Planning Work Program<sup>21</sup> or the TIP/STIP like any major study process.

o *Corridor Optimization Study Process*

The corridor optimization study process consists of several steps including defining the limits of the study area, taking into account current and future travel markets affected by mobility problems /needs and possible transportation improvements. Once the study area is defined, public agency study participants are identified, their roles and responsibilities are determined, and a clear understanding of their expectations is developed. Then, alternatives need to be defined and evaluated to illustrate the trade-offs among costs, transportation benefits, key community and environmental constraints and other impacts. Once this is completed, a plan is developed that includes CDOT's vision in terms of modal expansion and new right-of-way needs as well as a financial plan. Ultimately, the Transportation Commission must approve each Corridor Optimization Report.

- *Relationship to NEPA and Regional Plan*

The corridor optimization study will aid in defining the problems, and therefore the vision and the potential purpose and need for future projects in a corridor. The study will be provided to the appropriate MPO or TPR and depending upon the outcome of the corridor optimization effort, the effected MPO or TPR may need to consider appropriate changes to their regional transportation plan.

In addition, by providing a corridor vision, the appropriate range of potential alternatives to consider in the NEPA process can be more easily defined through reference to the results of the corridor optimization study. Since NEPA documentation is only required when a “proposal for a major federal action” is made, corridor planning by itself does not require a NEPA document such as an EA or EIS.

- **Environmental Considerations in the Planning Process**

CDOT recognizes that early understanding of environmental issues, constraints and opportunities allows for more informed transportation decision-making. To that end, the Division of Transportation Development is developing a three-pronged approach to addressing environmental issues in the planning process.

- Environmental Data System: CDOT is developing and maintaining a statewide data system available to all CDOT personnel of key environmental information for use in their decision-making.
- Early Corridor Environmental Analysis: The DTD works with regions to develop techniques to analyze and document environmental conditions in transportation corridors using remote sensing techniques. This allows early identification of valuable environmental resources prior to project development, thus allowing more effective avoidance of important habitat and identification of early mitigation opportunities in developing corridors.
- Advance Environmental Mitigation: CDOT is working to identify and implement environmental mitigation opportunities in advance of projects development and impacts. These efforts can result in more effective mitigation, mitigation prior to actual impacts, more effective mitigation, and a more streamlined project development process.

For any of these efforts to be effective, early and continuous coordination with key resource agencies is encouraged.

## Project Development

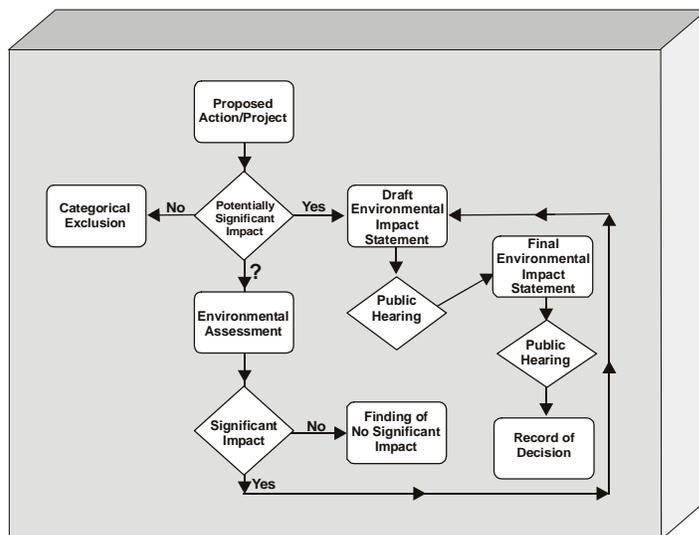
### NEPA Documentation Process

#### ■ Environmental Consideration and Documentation Process

**D**uring project development, proposed actions or projects are categorized for documentation purposes according to their likely environmental impact in accordance with FHWA and NEPA requirements.<sup>22</sup> These categories consider the environmental and interrelated economic and social impacts. FHWA's project category designation occurs after a proposed project is identified in the State Transportation Improvement Program by the Colorado Transportation Commission which authorizes the project for potential federal or state funding.

The CDOT RPEM and FHWA, as appropriate, assess each project's potential environmental effects using early environmental study data from various sources including the following:

- Corridor Optimization Studies
- The Project Data Form 463 or Project Scoping/Clearance Record Form 1048
- CDOT Design, Right-of-Way, Utilities, Traffic, and Safety Units and corresponding Staff branch reports



- Scoping comments from resource agencies, public or other agency input
- Early corridor environmental analysis
- Statewide environmental database
- Interdisciplinary studies
- Field scoping reviews

#### Using the NEPA Documentation Process

Since CDOT will be using a NEPA-like environmental documentation process for all projects that require a CDOT approval, those proposed

actions that require the preparation of an environmental document but do not require federal review or approval should be identified as a “CDOT Environmental Document” during the process in order to distinguish it

from an EA or EIS that is subject to federal review and approval. In such cases, only CDOT approval will be required.

Proposed CDOT projects that are likely to have "significant" environmental impacts are categorized as **Class I actions**<sup>23</sup> and require the preparation of an Environmental Impact Statement (EIS). Projects with impacts that have unclear significance are categorized as **Class III actions** for which an Environmental Assessment (EA) is prepared to determine if there are any "significant" environmental impacts. Projects with effects that "do not individually or cumulatively have a significant environmental impact" are considered "categorical exclusions" and are categorized as **Class II actions**.<sup>24</sup>

FHWA and CDOT CATEGORIES		
CLASS I	CLASS II	CLASS III
<p><b>Environmental Impact Statements (EIS)</b>            Actions that are likely to have significant effects on the environment.            Examples include:</p> <ul style="list-style-type: none"> <li>✦ A new controlled access freeway</li> <li>✦ A highway project of four or more lanes on a new location</li> <li>✦ New construction or extension of fixed rail transit facilities</li> </ul> <p>CDOT, or FHWA for federal projects, signs a Record of Decision that presents the basis for the decision, summarizes any mitigation measures to be incorporated in the project, and documents any 4(f) approval*.</p>	<p><b>Categorical Exclusions (Cat Ex) Programmatic and Non-Programmatic</b>            Actions that do not individually or cumulatively have a significant environmental effect. Examples may include:</p> <ul style="list-style-type: none"> <li>✦ Pedestrian facilities</li> <li>✦ Landscaping</li> <li>✦ Routine Maintenance including resurfacing, bridge replacement and rehabilitation, and minor widening.</li> </ul> <p>CDOT or FHWA approval is required on all Cat Ex projects. In Colorado, FHWA has programatically approved some Cat Exs. (See Guidance Memorandum in Appendix G)</p>	<p><b>Environmental Assessments (EA)</b>            The significance of the environmental impact of the action is not clearly established.            Examples include:</p> <ul style="list-style-type: none"> <li>✦ Actions that are not clearly Cat Exs</li> <li>✦ Actions that do not clearly require an EIS</li> <li>✦ An EA would assist in determining the need for an EIS</li> </ul> <p>CDOT or FHWA adopts "A Finding of No Significant Impact" (FONSI) if FHWA agrees for federal projects with the study findings that "no significant impacts" are created by the action.  <i>23 C.F.R. § 771.115 et seq</i></p>
<p>* In some cases, if during the course of the project it is determined the project will not have a significant impact, the project can be re-categorized to an EA (Class III) and result in a FONSI. FHWA retains final categorization determination for federal projects..</p>		

After considering the available information, the CDOT RPEM meets with the RTD and Program Engineer to review their preliminary conclusions and then consults with FHWA if it requires federal action in determining the most appropriate category. FHWA is the ultimate decision maker for federal project categorization. If the project changes in any significant way at any time during the process, the CDOT RPEM and FHWA jointly reconsider the appropriate category and the FHWA approves the categorical determination. If no federal action is anticipated, CDOT can make the determination without FHWA consultation.

## ■ Categorical Exclusion (Cat Ex) Projects

### • Overview

Because an estimated ninety percent of CDOT's projects are Categorical Exclusions (Cat Ex), understanding the requirements and procedures for projects that satisfy the Cat Ex definition is essential. CDOT has developed a process to ensure that Cat Ex projects investigate all relevant environmental

factors and comply with all environmental regulations. Although the level of documentation required for a Cat Ex is generally not as detailed as for EAs or EISs, it is comprehensive and requires attention to a wide array of factors.

The FHWA requirements<sup>25</sup> for a Cat Ex project are less stringent than for EA and EIS projects in several areas: public involvement, alternatives analysis, and the level of documentation required for FHWA approval.

The time required for completing the Cat Ex documentation process can be significantly less than for an EA, or EIS, but it is nonetheless essential to begin the process early in the planning stages in order to successfully coordinate the required clearances and permits with the project development, preliminary design, design and construction stages.

The RTD, RPEM, and Program Engineer should meet prior to TPR biennial project prioritization meetings to review and assign preliminary environmental categories to proposed projects. Following the assignment of projects at the County annual project prioritization meeting, the Region staff determine budgetary and schedule needs for each project. This early environmental category identification provides Region staff with the funding requirements associated with each project category, such as staff resources and the need for consultant assistance.

- ***Definition of Cat Ex Projects***

An action is categorically excluded (Cat Ex) from EA or EIS documentation if it meets the following Council on Environmental Quality (CEQ) definition:

*“Categorical exclusion” means a category of actions which do not individually or cumulatively have a significant effect on the human and environment and which have been found to have no such effect in procedures adopted by a Federal agency[...] and for which, therefore neither an Environmental Assessment nor an Environmental Impact Statement is required.”<sup>26</sup>*

The FHWA Regulations on Environmental Impact and Related Procedures provides a specific list of Cat Exs normally not requiring FHWA concurrence on the NEPA clearance.<sup>27</sup> Other projects may also qualify as Cat Exs if appropriately documented as explained in the CDOT Cat Ex guidance. (See Appendix G).

However, unusual circumstances may preclude some actions that would normally be classified as a Cat Ex from the Cat Ex category if it has:

- 1) Significant environmental impacts;
- 2) Substantial controversy on environmental grounds;
- 3) Significant impacts e.g. impacts on properties protected by section 4(f)<sup>28</sup> of the DOT Act or section 106 of the National Historic Preservation Act or wetlands; and
- 4) Inconsistencies with any Federal, State or local law, requirement or administrative determination relating to the environmental aspects of the action.

CDOT policy requires that documentation (CDOT Form 128) must be provided for all Cat Ex projects, regardless of whether they qualify as “actions that have

virtually no potential for significant environmental effects”. This ensures that CDOT is not only complying with NEPA, but systematically ensuring project and program compliance with Transportation Commission policies, the CDOT Environmental Ethic, and the numerous environmental regulations that may be required for a project.

- *CDOT Cat Ex Process*

When a project is identified to be added to the three-year TIP/STIP, the Region Project Manager initiates a CDOT Form 463 - *Design Data Form* and Form 1048 – *Project Scoping/Clearance Record* and holds an internal scoping meeting with all design and specialty disciplines. The RPEM or Project Environmental Coordinator attends this meeting and makes some preliminary determinations regarding the level of environmental documentation required and the environmental clearances and anticipated permits that will be needed for the project. The RPEM in consultation with EB staff then ensure that necessary environmental studies are conducted, that appropriate mitigation measures are developed, and all required clearances are obtained. If the project qualifies as a programmatic Cat Ex, the RPEM will sign the Form 128 certifying completion of all required environmental clearances. If the project is not a programmatic Cat Ex, FHWA must also sign-off on the Form 128. (See Appendix H for a detailed description of the Cat Ex process steps.)

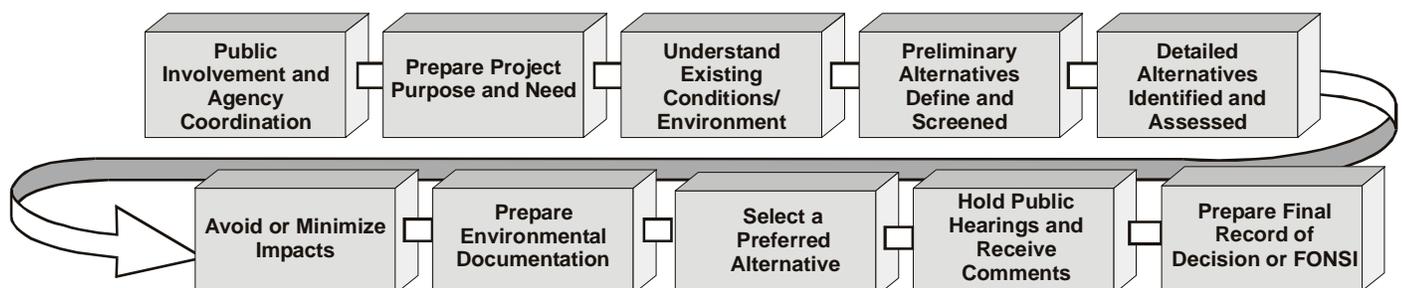
- *Public Involvement in Cat Ex Projects*

CDOT is committed to a pro-active public involvement process for all stages in the transportation development process and thus open houses, small group meetings and public meetings should be held as needed for Cat Ex projects. The RPEM and Program Engineer will determine the need for and level of involvement necessary for a Cat Ex project based on the amount of stakeholder interest or controversy.

## ■ Environmental Assessments and Environmental Impact Statements

- *Overview*

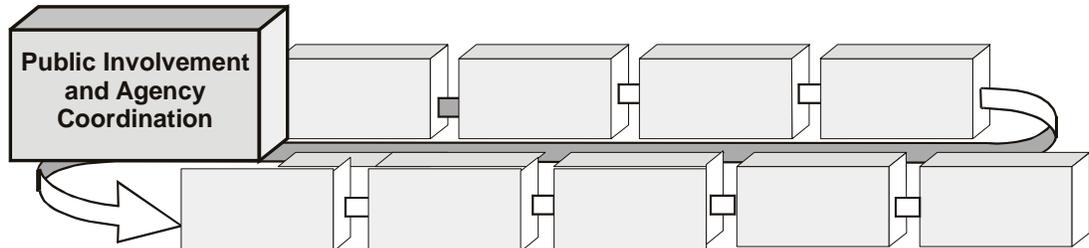
The preparation of an EA or EIS for category Class I and Class III actions is a more thorough and detailed process as compared to a Cat Ex. More issues are investigated for potential environmental impacts, greater public involvement and agency coordination is required, and greater overall public scrutiny accompanies the process. If the project is a federal project requiring NEPA documentation, a Notice of Intent is required to begin the EIS process.



- **Steps in the Environmental Documentation Process**

These are the steps of Project Development that are followed to comply with NEPA. Each of the following steps is explained in greater detail. Some of these activities will occur in parallel depending upon the complexity of the project and timing of the project schedule. The CDOT Environmental Guidance Notebooks may also be helpful in understanding the more specific environmental requirements of each step.

A public involvement program, assessment of impacts, consideration of project alternatives, and interdisciplinary review are integral elements of the Project Development NEPA process.



- ***Public involvement and agency coordination***

Agency coordination and public involvement serve to build consensus throughout the process and are essential components in determining the purpose and need for the project, alternatives to be evaluated as well possible avoidance and/or mitigation strategies. While agency coordination and public involvement are a regulatory requirement, CDOT is committed to involving the public in all phases of its statewide transportation planning and project development activities. CDOT views these coordination efforts as an opportunity to involve agencies and the public in decisions that affect them, gaining insight that may affect project design and implementation considerations.



**KEYNOTE**

**Early consultation with resource agencies in the scoping process is crucial to ensuring that the environmental process goes smoothly and efficiently.**

Agency coordination includes efforts and activities to consult with and involve federal, state, tribal, and local agencies in the Project Development process. It is an essential step of the study process and ensures that a proposed action is coordinated and consistent with the actions, policies, and regulations of other agencies and jurisdictions.

- *Scoping Meeting(s)*

The first public meeting to discuss the proposed project is usually part of a project scoping process. Project scoping usually begins for federal projects with a Notice of Intent to prepare an EIS that is published in the Federal Register.<sup>29</sup> To encourage and facilitate effective public involvement in CDOT transportation projects, early and frequent public participation is encouraged. One or more public meetings and agency scoping and coordination meetings may be held. Public meetings are generally held to convey and obtain ideas and information about the project in advance of preparing draft and final environmental documents. Public meetings may range from a gathering of

homeowners and project representatives to a large assembly of interested people called together to discuss one or more aspects of the project. This procedure allows the Region to explain the project and answer questions much more informally than a public hearing.<sup>30</sup> Public meetings are usually advertised in local newspapers.

Public involvement begins with and builds upon the basic information gathered in the statewide planning phase. CDOT Region offices maintain on-going coordination with federal, state, and local agencies, elected officials, community organizations and other interest groups, and the public, in their geographic area.

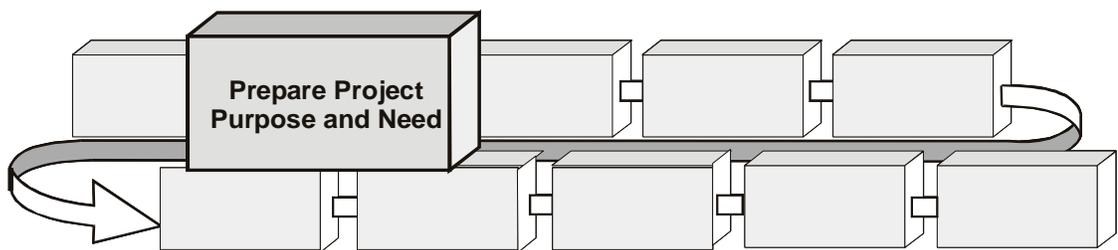
Public involvement includes efforts to inform property owners, neighborhoods, local officials, special interest groups, and other interested persons about a proposed action. Public involvement can occur at three levels: 1) making the public aware of a proposed action; 2) informing the public about a proposed action and its potential effects; and 3) involving the public in the decision-making process.

The RPEM maintains contact with various agencies, groups, and the public to generate interest and gain all possible information on environmental effects, which could influence projects studies. The RPEM also maintains contact with TPRs, MPOs and area-wide planning organizations. The RPEM then notifies people on this list of meetings, workshops and new developments.

CDOT encourages early public involvement in the transportation systems planning process conducted by Colorado's Metropolitan Planning Organization (MPOs) and Transportation Planning Regions (TPRs). Citizen participation on their local policy boards is encouraged and public participation is a regulatory requirement for CDOT.

- *Initial Meeting with Public Officials*

An initial meeting with local public officials is held to inform them of (1) the results of the Corridor Planning process, if one has occurred; (2) the objectives of the EA or EIS process; (3) a proposed project schedule; and (4) the range of proposed alternatives, if available. This meeting assists the Region staff in gaining input useful in the development of alternatives.



- *Project Definition and Purpose and Need*

Important tasks in early project development are to define the scope of the proposed action or project and its Purpose and Need.<sup>31</sup> In determining the proper project scope for NEPA documentation, it is important to ensure that the scope of the project (1) connects logical termini and be of sufficient length to address environmental matters on a broad scope; (2) has independent utility or

independent significance i.e. be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and (3) does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

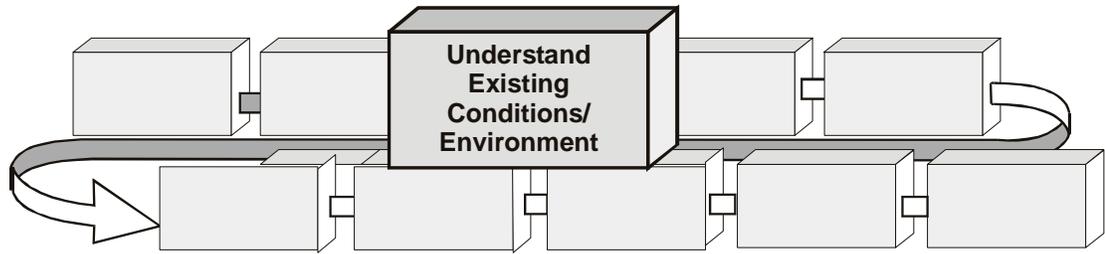
The Purpose and Need statement is intended to identify both the underlying need and purpose for the proposed action - what you are trying to accomplish and why you think it is necessary. Or, in other words, “what is the transportation problem or opportunity we are addressing.” As such, it is an early step in the project development process. It will be used to guide the development of alternatives, and it will be a fundamental element when developing criteria for selection between alternatives. CDOT has developed policy guidance on the development of the Purpose and Need statement for transportation projects.

The scoping meetings discussed above are an important source of information for identification of issues that assist in defining the Purpose and Needs section. Project Purpose is a broad statement of the overall objective to be achieved by a proposed transportation improvement. Need is a more detailed explanation of the specific transportation problems or deficiencies that currently exist, or that are expected to exist in the future. The Purpose and Need are generally defined early in the NEPA process and may be refined in the project development and design stages.

Since the project would normally have been identified earlier as part of the 20-year State Transportation Plan or during corridor planning/optimization, there is some description of why the project is needed available in these documents. The early scoping with agencies and the public will aid in refining the vision and Purpose and Need for the project. The input received from agencies and the public will also assist in identifying critical issues that should be addressed during project development. Often if these issues are not properly addressed early in the process, the project can be delayed or even stopped.

In an EA or EIS, a carefully prepared Purpose and Need statement provides a credible foundation for the subsequent study and promotes acceptance by the public and review agencies. The ability to address effectively the project need is a central factor used in the evaluation and comparison of alternatives. If the proposed project alternatives cannot meet the need identified, these alternatives may be screened out of further consideration.

The need for a proposed action is normally based on one or more factors including highway capacity, safety, physical deficiencies, system continuity, and/or economic development. In some instances, the need may be in response to a legislative mandate, although the mandate is usually rooted in one of the other factors such as safety or economic development. The stated need for a proposed action must be supported by data and analysis and documented in the EA or EIS. This may require comprehensive review and analysis of existing and future conditions involving the transportation system and socioeconomic trends within the study area.<sup>32</sup>



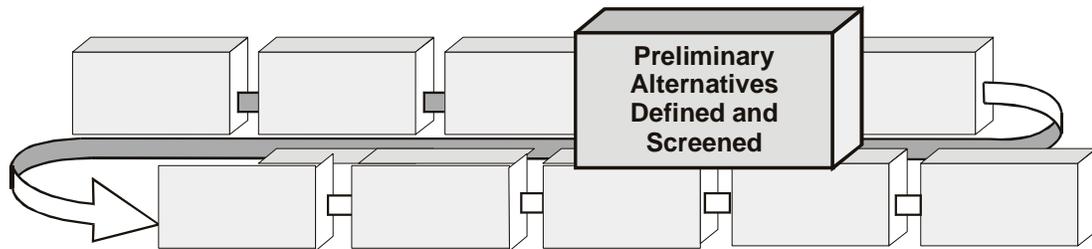
◇ *Understanding the Existing Conditions and Environment*

From the onset of the Project Development process, for all project categories, planners and engineers should strive to avoid important and sensitive cultural, social and environmental resources to the extent feasible. Specially protected areas e.g. 4(f) lands should also be avoided. This requires that the physical and environmental conditions that are present within the study area be identified and assessed so that sensitive areas and problem areas are recognized early in the process and are considered as alternatives are developed.

The assessment of existing conditions and trends involves three steps. The first is to inventory the existing physical, environmental, cultural, and social features within the study area. The second step is to evaluate these features to determine which, if any, could limit the location and/or type of transportation improvements that may be needed. The identification of features is typically developed from existing data sources and field reviews. Third is the projection of population and employment for the 20-year horizon in consultation with State and local planners to assess long term development scenarios.

The evaluation of existing physical and environmental features includes both qualitative and quantitative analysis. For features that do not present unusual or substantive constraints, a general discussion of their presence is adequate in the EA or EIS document. For others, a greater level of effort may be required to better define the geographic limits of a particular feature and their constraints to alternatives. For example, if geologically unstable areas occur within the study limits, the extent of the unstable area should be clearly defined so that the necessary action (avoidance or engineering solutions) can be anticipated in the development of alternatives. Similarly, the boundaries of sensitive environmental features, such as wetlands, Section 4(f) properties, historic sites, etc., should be identified in sufficient detail to determine if impacts to those properties can be avoided, or minimized, or if mitigation will be required.

The findings of the existing conditions inventory must be documented for inclusion in the EA or EIS. EAs and EISs are required to analyze and identify environmental impacts and appropriate mitigation measures. The documentation should include a description of the notable physical, cultural, environmental and social features that occur within the study area and a discussion of their importance in the development of improvement alternatives. The EA and EIS documentation should include quality graphics of sufficient scale to properly depict important features and convey their implications on alternatives.



◇ *Preliminary Alternatives Defined and Screened*

The next stage for EA and EIS documents is to identify and screen project alternatives that could be used to satisfy the Purpose and Need for the project. An interdisciplinary team is assigned to the study and develops alternatives, which define the scope of the project. Where appropriate, alternative configurations should be consistent with the corridor concept identified during the corridor optimization study, if one is performed, in the earlier transportation planning stages. An alignment for construction and a design suited to the project's needs and the environment are also identified. Input from citizens, special interests groups, and public agencies is an important step in identifying alternatives. County and community plans and the needs of special user groups may be affected by changes in accessibility and mobility and, therefore, should be carefully considered.

Alternatives range from “no-action” to those that respond to the needed change in the transportation system. The no-action alternative is used as the basis to measure the impacts and benefits of the proposed action or project and alternatives thereto.<sup>33</sup> Alternatives may include various types or scales of highway improvements, alternate highway locations or other transportation modes within the broad corridor identified in the planning stage. The range of alternatives includes such things as public transit, widening existing lanes, adding new lanes, exclusive bus or high occupancy vehicle (HOV) lanes, complete reconstruction in place, entirely new construction, or non-construction alternatives such as traffic and access management or Transportation System Management (TSM). Many times the preferred alternative is a combination of both highway improvements and transit.

Key factors that should be considered in selecting alternatives include:

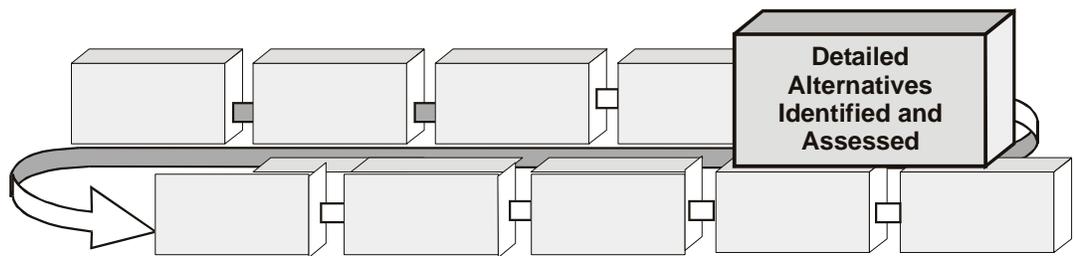
- The project's Purpose and Need
- The proper scope of the proposed action to address the Purpose and Need
- The comments and concerns of the public
- Avoidance of sensitive environmental, social and cultural resources
- Avoidance of terrain and other physical features that require complex and costly engineering solutions
- If a Section 404 authorization is required, compliance with 404(b)(1) guidelines

Although many alternatives may have been identified in the system planning stage in general terms, reasonable alternatives need to be defined and unreasonable alternatives screened out at this stage. Alternative design

standards and service-level variations may also be considered in determining the most cost-effective alternatives.

A screening process normally uses a few appropriate criteria e.g. technical and economic feasibility, avoidance of major environmental impacts, etc., to evaluate the set of alternatives identified. Alternatives are eliminated that are not viable or are clearly inferior to other alternatives in meeting the purpose and need. Public involvement and agency input can assist in the identification of alternatives that are least damaging and most practicable. The evaluation process includes both qualitative and simple quantitative analysis and uses information compiled in the previous steps. The screening evaluation is not intended to be extensive nor are the analyses intended to be detailed. Rather, the screening evaluation should focus on key factors that are germane to the decision at hand, and the analyses should be of sufficient detail to allow a comparison of the various alternatives.

The screening process should result in a set of "reasonable" alternatives that meet the purpose and need for the proposed action that will be given a more detailed evaluation in the next phase.



◆ *Detailed Alternatives Identified and Assessed*

The selected set of reasonable alternatives is now given a more detailed evaluation using the full set of environmental, social and economic (ESE) criteria to assess their impacts. This detailed evaluation examines all alternatives that have passed preliminary screening in approximately the same level of detail.

In judging the significance of project impacts, consideration is given to both *context* and *intensity*. *Context* is defined at several levels such as society as a whole (human, national), affected region, affected interests, and the locality. Significance varies with setting of the proposed action. Both short-and long-term effects are relevant. On the other hand, *intensity* refers to the *severity of impact* considering such things as (1) the degree to which the proposed action affects public health or safety, (2) unique characteristics of the geographic area such as proximity to historic or cultural resources, or (3) the degree to which the effects are likely to be highly controversial.<sup>34</sup>

The environmental analysis focuses on the detailed investigations of the direct and indirect impacts that would occur with each alternative. At this stage in the study process, the engineering and environmental investigations include in-depth quantitative analyses and serve as the basis for preparing the EA or EIS. Typically, all of the alternatives that are evaluated at this stage are discussed in

the environmental document prepared for final approval, although some alternatives may be eliminated as the alternatives are further evaluated.

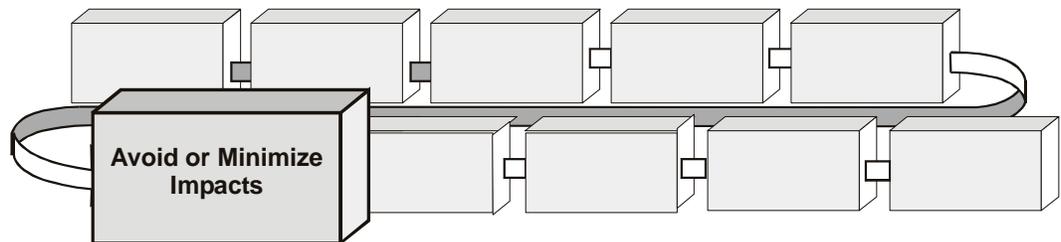
The cumulative impacts of the proposed project must also be considered in the EA or EIS that examine the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts must consider such actions and impacts regardless of what agency (federal or non-federal) or person is responsible and can result from individually minor but collectively significant actions taking place over a period of time.

The Region staff conducts an interdisciplinary review to assure that all environmental effects have been considered and that the process has been conducted in accordance with Federal and State regulations. This review is coordinated with the EP, FHWA and participating regulatory agencies.

The Program Engineer, RPEM, Region staff, EB staff, FHWA, cooperating agencies and interested agencies meet to review the design data and the environmental impacts of design alternatives. The RPEM arranges for appropriate personnel with expertise in such areas as landscaping, erosion control, hydrology, noise abatement, ecology, water quality, land use, sociology, economics, and history, etc. to attend numerous formal and informal meetings.

The conclusion of the EIS Alternatives Evaluation may include public meetings to update interested groups on the progress and key findings and recommendations. Public feedback can provide valuable information and insight to the project team. Briefings to local officials, community associations and other interested groups should also be considered.

The result of this detailed evaluation of alternatives is a selected alternative to be proposed for the project.



◆ *Avoidance and Minimization of Impacts/Project Enhancements*

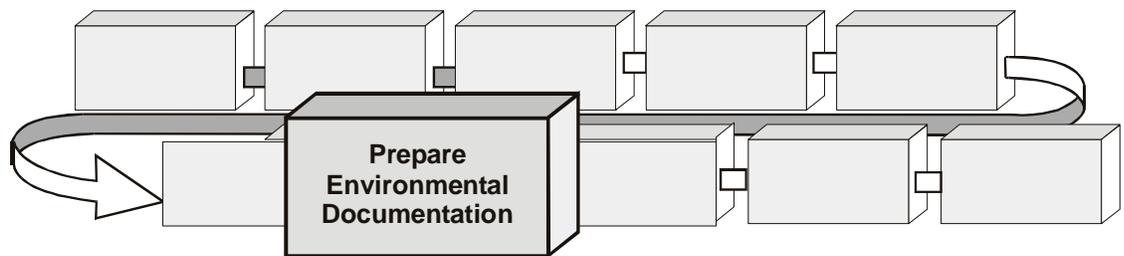
Identification and description of possible mitigation measures and monitoring procedures is required to assure that all environmental and interrelated economic and social effects have been addressed and that the process has been conducted according to all pertinent policies, regulations and this Guide. Mitigation should be proposed if avoidance is not feasible, or, if as a result of interagency coordination, mitigation is preferable to avoidance.<sup>35</sup> One way to avoid environmental impacts is to consider environmental factors early in the planning and design process with an eye to avoiding impacts or enhancing the environment when possible. Throughout the process, significant attention should be given to including project enhancements in a cost-effective manner

consistent with the mission of the department. In any case, all relevant, reasonable mitigation measures and project enhancements that could improve the project are to be identified and included in the project.

Council on Environmental Quality (CEQ) regulations define mitigation to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree or magnitude of the action
- Rectifying the impact by repairing, rehabilitating or restoring the affected environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments<sup>36</sup>

For federal projects, publicly owned parks, recreation or wildlife and waterfowl refuge and historic properties considered as 4(f) properties require separate evaluation and analysis and must meet higher standards for avoidance and mitigation. Similarly, for both federal and state projects, impacts to “Waters of the United States” also must demonstrate a higher degree of avoidance. The alternative selected must demonstrate it is the least damaging, to the aquatic environment, practicable alternative.



#### ◆ *Environmental Documentation*

Regardless of whether an EA or EIS is prepared, the environmental document should provide basic information about the process that was followed to establish the need and to develop and evaluate alternatives. The document should also address whether: (1) the proposed action causes significant impacts to the environment, and (2) that the environmental consequences of the proposed action have been considered and avoided or mitigated if possible in order to provide transportation benefits to the users and surrounding communities.

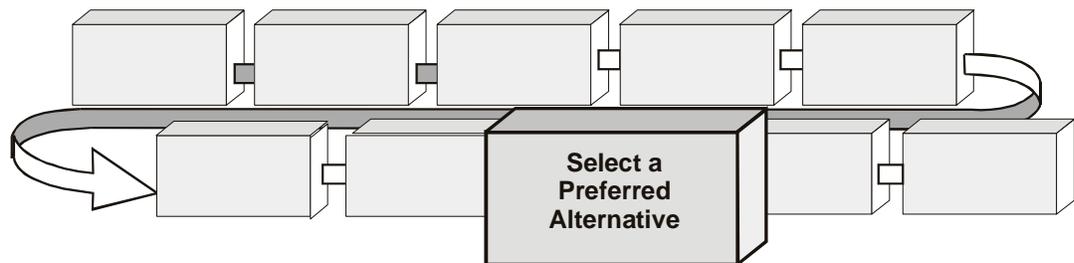
If, after consultation with FHWA for federal projects, it is determined that substantial changes in the proposed action have been made, or significant new circumstances or new information relevant to environmental concerns has been discovered after a NEPA document has been prepared or completed, a supplemental analysis of changed circumstances or new information in the NEPA documentation may be required. In those cases, consultation with the RPEM and FHWA is necessary.<sup>37</sup>

The organization and format of an EA or EIS should follow the general NEPA format<sup>38</sup>. Key elements of environmental documents include:

- A discussion of the project Purpose and Need
- A description of the alternatives under consideration and a brief description, discussion and justification of alternatives that were dismissed
- The designation of a preferred alternative when the analyses clearly favor one alternative over the others
- A summary of the engineering and environmental analyses that were conducted for each alternative
- A discussion of impacts and measures identified to mitigate adverse impacts
- A description of the activities used to coordinate with agencies and involve affected communities and stakeholders

When a preferred alternative is identified, the document should explain why it is preferred e.g. its ability to achieve the Purpose and Need with fewer environmental impacts. Because environmental documents are intended to inform the public and assist decision makers, they should be clear, concise, and focused on issues that are germane to the decision at hand. The discussion of unnecessary information should be avoided. The documents should make use of matrices, tables, graphs, and other exhibits where appropriate to enable readers to access and understand information quickly and easily. While environmental documents address technical issues, it should be remembered that the documents are meant for public review and comment. Accordingly, the use of excessive technical terminology should be avoided.

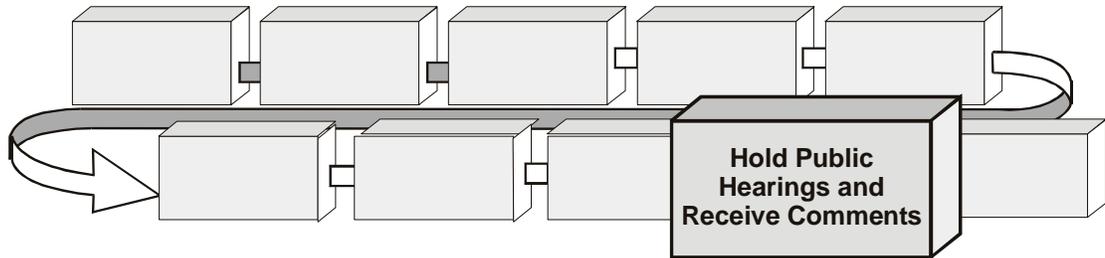
An EA is prepared for all Class III actions in order to determine the level of the impacts of the action. An EA is a concise public document which briefly provides sufficient evidence and analysis for determining whether there are any “significant” impacts associated with the proposed action that would require that an EIS be prepared. If the results of the EA support the conclusion that there will be "no significant impact", a Finding of No Significant Impact (FONSI) is prepared. If, however, the EA indicates that there will be significant impacts, which cannot be fully mitigated, the project is then categorized as a Class I action and an EIS is prepared. When undertaking an EA, the outcome of the analysis should not be prejudged as a FONSI or EIS.



◆ *Select a Preferred Alternative*

A preferred alternative should be identified by the CDOT staff if a preference exists in order to assist the public comment process. If a preferred alternative is not identified in the draft, a preferred alternative will be identified in the final

EIS and selected in preparation of the Record of Decision. The selection of the preferred alternative may be based on numerous factors including environmental, economic, technical, and social including how well it meets the project's purpose and need. The process of selecting a preferred alternative should be the result of a consultative process that may include the Program Engineer, RPEM, RTD, EP, FHWA, key stakeholders, and in some cases CDOT executive management and the Commission.

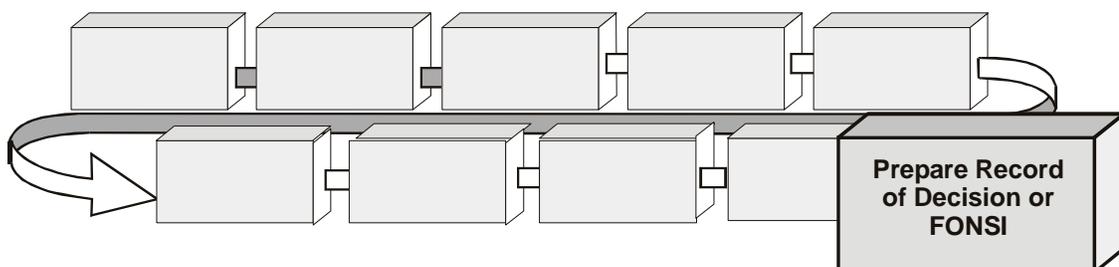


◆ *Public Hearings*

Public hearings are more formal and require that a transcript of the entire meeting be prepared or that the public have an opportunity to have oral testimony recorded and transcribed for the official project record. Formal legal notice of all public hearings must be published in local newspapers at least ten days prior to the hearing. Two public hearings must be held for all Class I actions or projects – one following the distribution of the draft and one for the final EIS. The notice of availability of the EA offers the opportunity for the public to request a hearing. Often the Region has already scheduled a public hearing for the project when the EA is distributed.

Agency representatives and members of the public are encouraged to comment on the proposed project and its economic, social, and environmental impacts as early as possible and at key points in the process. These comments are then considered by the CDOT Region as it develops and evaluates alternative solutions to the identified transportation problem. One or more subsequent meetings may be held to resolve as many issues as possible before completion of a draft or final EIS or EA.

All comments received are used to evaluate the alternatives defined in the draft EIS or EA. If necessary, additional studies are performed, a preferred alternative is identified, mitigation commitments are set forth, and all comments are addressed in the final EIS or FONSI.



◆ *Record of Decision/FONSI*

The Record of Decision (ROD) or Finding of No Significant Impact (FONSI) represents the final decision made on the project and the basis of the decision. It briefly describes the project, documents the basis for the decision, describes the

mitigation measures that will be incorporated into the project, and documents any additional approval actions required for the project. The project must proceed ahead with the decision as outlined in the ROD or FONSI. In the event that circumstances or events change sufficiently to merit reexamination, coordination with FHWA must occur to determine appropriate actions.

A draft and final federal EIS shall be circulated for comment. The draft EIS must be made available to the public and transmitted to agencies for comment no later than the time the document is filed with the Environmental Protection Agency.<sup>39</sup>

◆ *NEPA Documentation Issues*

Shelf-life of the EA or EIS – Once an EA or EIS has been prepared, the question often arises about how long the EA or EIS is good for before the project is undertaken. The FHWA regulations<sup>40</sup> provide some direction by stating that:

(a) A written evaluation of the draft EIS shall be prepared by the applicant in cooperation with the Administration if an acceptable final EIS is not submitted to the Administration within 3 years from the date of the draft EIS circulation. The purpose of this evaluation is to determine whether or not a supplement to the draft EIS or a new draft EIS is needed.

(b) A written evaluation of the final EIS will be required before further approvals may be granted if major steps to advance the action (e.g., authority to undertake final design, authority to acquire a significant portion of the right-of-way, or approval of the plans, specifications and estimates) have not occurred within three years after the approval of the final EIS, final EIS supplement, or the last major Administration approval or grant.

(c) After approval of the EIS, FONSI, or CE designation, the applicant shall consult with the Administration prior to requesting any major approvals or grants to establish whether or not the approved environmental document or CE designation remains valid for the requested Administration action. These consultations will be documented when determined necessary by the Administration.

In cases where the project or proposed action or surrounding circumstances change after an EA or EIS is completed, the FHWA regulations<sup>41</sup> provide that an EIS must be supplemented whenever the FHWA determines that:

- (1) Changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or
- (2) New information or circumstances relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS.

Avoiding Segmentation of a Project - One of the ongoing concerns in the NEPA documentation process is insuring that the proper scope of the project has been identified and defined. Early in NEPA's history, federal agencies would attempt to avoid preparing a NEPA document by inappropriately "segmenting"

the project into smaller pieces to avoid “significant impacts”. Under current FHWA guidance<sup>42</sup>, a project must demonstrate that:

1. The project connects logical termini and is of sufficient length or scope for environmental evaluation.
2. The project is a reasonable expenditure of funds even if no other transportation improvements are made in the area.
3. The project does not restrict consideration of alternatives for other reasonably foreseeable transportation projects.
4. The project does not irretrievably commit federal funds for closely related projects in order to justify the present project.

## ■ Sustainability in Transportation

CDOT is committed to managing and operating the statewide transportation system in a sustainable manner. Sustainable can be defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainability in transportation embodies the following concepts for assessing present needs:

- Comprehensive analyses – Assessment of transportation needs must include comprehensive analyses and outreach to the various communities affected or involved. The outreach and assessment process should be designed to be transparent, accountable and inclusive of the diverse interests.
- Meeting Community Objectives – The transportation analyses should support the community’s long-term strategic objectives including economic, environmental, social, etc.
- Affordable and balanced choices – In all cases, the analyses should include examining a balance of affordable multimodal transportation choices for the citizenry. These objectives should be based in part on full-cost pricing and economic neutrality.

Examples of what should be considered to preserve the ability of future generations to continue to meet their transportation needs include giving full consideration of environmental, social and economic impacts, protection of public health and ecosystems, conservation and protection of natural resources, and giving consideration to multigenerational equity.

### CDOT Sustainability Efforts

CDOT has incorporated the following guiding principles and practices to implement transportation sustainability:

- CDOT Environmental Ethic – This ethic recognizes the responsibility of CDOT to support and enhance efforts to protect the environment and quality of life for Colorado citizens.
- Environmental Stewardship Guide – This Guide provides the guidance to implement the CDOT Environmental Ethic and address many of the concepts of sustainability described above. The Guide applies the procedures and considerations of the National Environmental Policy Act for all of CDOT’s

actions, with new emphasis on maintenance, operations and construction activities.

- CDOT's Environmental Programmatic Initiative Commitments – CDOT program initiatives have established a list of commitments to reduce environmental contaminant loads, improve air quality, increase the use of recycled material, preserve Colorado's heritage and improve overall environmental performance and accountability above and beyond regulatory compliance requirements. Some examples include adopting low sulfur fuel requirements for CDOT vehicles, wetland replacements, stream restoration and enhancements and use of recycled pavement materials.
- Environmental enhancements and betterments – These two concepts addressed in this Guide are another example of CDOT's efforts to go beyond minimal legal and regulatory requirements to improve the present environment and institute programs that will benefit future generations.
- Corridor Visioning – This program planning approach incorporates a process which is responsive to the community's plans and needs on both a short and long term basis.
- Construction specifications – CDOT's construction specifications require long-lasting and high quality highway features which are designed to last beyond current needs.

### **CDOT's Commitment to Environmental Sustainability**

Highway operations affect regulated and unregulated environmental resources at the federal, state, or local level. Unregulated impacts can include the consumption of non-renewable resources like fossil fuels and renewable resources which may be limited in availability, either now and/or later, such as gravel, landfill capacity, energy and water. Generally, such impacts cannot be entirely avoided or quantified. It is recognized that these impacts should be minimized to the extent practicable. Sustainable practices incorporated into the project planning, construction, and maintenance can minimize resource impacts.

In addition to the steps listed above and as part of its environmental ethic, policy, and stewardship responsibilities, CDOT encourages its staff, consultants, partners and contractors to identify and utilize opportunities and methods to reduce the impact of projects and programs on environmental resources through innovative programs and by providing flexibility in project planning, construction, and maintenance for the use of sustainable processes and materials. This includes such concepts as: renewable and non-renewable resource conservation, waste minimization, minimal use of native virgin materials, conservation and efficient use of water and energy, air pollution prevention.

CDOT encourages the identification and incorporation of proven alternative materials that are as long or longer-lasting, and which require the same or less amount of maintenance, as long as such materials meet the primary obligation for providing a safe and efficient transportation system. CDOT is developing procedures to give preference for "green" products and materials which are reused, recycled, minimally processed and packaged, locally-available, and produced using sustainable methods.

Use of sustainable materials must be cost competitive. However, cost considerations may include life cycle analysis for materials and practices which may cost more up-front but will perform more cost-effectively over time. Cost considerations also may include social and community benefits, and the value of helping communities preserve local resources.

Finally, CDOT commits to systematically evaluating and improving the social, economic, and environmental sustainability of its transportation system.

## ■ Environmental Justice

CDOT has developed *Environmental Justice Guidelines* for CDOT staff and consultants to follow throughout the NEPA process. The guidelines are used around the state as a basis from which to 1) evaluate Census, formulas, and other data regarding the make-up of communities; 2) develop required public involvement plans (while incorporating Environmental Justice principles); 3) conduct individual interviews with the affected public as appropriate; and finally, 4) make a determination of whether a particular population of low-income and/or minority people may be disproportionately affected by the proposed action being address via NEPA. Furthermore, the *Environmental Justice Guidelines* are used before and throughout the NEPA process as a guiding principle to remember to "avoid, minimize, and mitigate" wherever impacts may occur. The *Environmental Justice Guidelines* are available from CDOT's website.

# Post-NEPA Documentation Approval

## ■ *Project Design and Construction*

### ◇ *Preparation of Design for the Project*

Project Design and Construction involves implementation of the projects described in the Record of Decision or FONSI. A project is developed in the Project Design and Construction stage by the Program Engineer's staff after scoping the project and a preliminary design concept has been developed. Technical details to accomplish environmental, engineering and transportation objectives are finalized along with mitigation commitments and obtaining permits. Construction plans are advertised and awarded, and the project is constructed.

### ◇ *Scoping Design Projects*

When a project is initially budgeted for construction in the TIP/STIP, the project scope is defined by a multi-disciplinary team that will have future involvement on the project. This project scope is reviewed in a Design Scoping Review (DSR) meeting. The DSR is held to familiarize the various disciplines with the objectives of the project determined by the planning and NEPA process, and to establish the specific criteria and direction that will be used for preliminary design. An on-the-site review to define the project characteristics and identify potential conflicts that may require resolution in the project development process is suggested. During this meeting, the design characteristics of a project are defined, the estimated cost of the project is refined and the proposed design schedule is established.

Although the responsibility for implementation of Project Development rests with the Program Engineer (PE), the RPEM will be consulted in the design and implementation of the public involvement process. It is also important to involve FHWA, CDOT engineering and environmental staffs and the rest of the interdisciplinary team in all preliminary design processes to ensure all environmental commitments are properly addressed. RPEMs will very often need to include specialty expertise and regulatory agencies to develop appropriate mitigation measures in coordination with design engineers.

CDOT also provides for and encourages public involvement during the design and construction of transportation facilities and the on-going maintenance of the statewide transportation system. CDOT may provide the public with project updates through the media, newsletters, project websites and meetings. CDOT's commitment to an Environmental Ethic also means that CDOT employees are committed to providing the public with timely information.

### ◇ *Incorporation of Mitigation Measures Identified*

When the RTD requests staff to finalize plans for a project, special design features identified in the NEPA document must be included in the final plans in addition to those that are already in the selected preliminary design concept. The

PE must ensure that commitments made to avoid or mitigate adverse impacts or to produce beneficial results are included in final plans.

During the Design process, CDOT should continue to coordinate with concerned agencies and the public to provide for environmentally sound engineering solutions to implement the project and to ensure that all



#### KEY NOTE

**The PE must ensure that commitments made to avoid or mitigate adverse impacts or to produce beneficial results are included in the final plans.**

commitments made during previous stages are incorporated into the final design of the project. Outside agencies concerned with the highway design may request or be requested to review final plans as they develop so that certain design features are properly defined, particularly features to mitigate adverse impacts. The PE, the RPEM, Region staff, EB staff, FHWA, cooperating agencies and interested agencies meet in the field to review the design data and the environmental impacts of design alternatives. The Region arranges for appropriate personnel with expertise in such areas as landscaping, erosion control, hydrology, noise abatement, ecology, water quality, land use, sociology, economics, etc. to attend the meeting. Design staff and FHWA, if applicable, coordinate the development of final plans on a continuing basis.

#### ◇ *Field Inspection Review (FIR)*

When preliminary plans are essentially complete, the Project Engineer sets up a field review of the plans. The most effective methods to incorporate all environmental and engineering factors will be addressed in the construction plans, specifications, and estimate. Region personnel (including representatives from the Construction, Right-of-Way, Materials, Utilities, Environmental, and Maintenance Sections), EB and FHWA, as appropriate, meet to review details in the plans from a technical standpoint. The conclusions of this meeting are documented by the Region Resident Engineer who transmits them to the Region Program Engineer.

An additional field review may be scheduled by the Project Engineer to review certain design elements with other agencies involved in the project. For projects requiring right-of-way from BLM or US Forest Service, project specific Memoranda of Understanding are required that should be reviewed prior to the FIR.<sup>43</sup> Several meetings may be held between the FIR and the Final Office Review with agencies to assure that their concerns are being addressed by the project team.

#### ◇ *Preparation of Construction Plans*

Some design features, such as structures, hydraulics, erosion control measures, lighting, signing, traffic signals, landscaping, re-vegetation, etc., may be submitted to staff sections for assistance and review to ensure compliance with environmental commitments.

Certain outside agency approvals or agreements may be required under special circumstances as noted below. Consultation with the RPEM is essential to ensure that all environmental requirements have been met. To the extent

possible, all permits and agreements should be coordinated during the project development process.

"Special provisions" may be prepared to supplement CDOT "Standard Specifications for Road and Bridge Construction." Special provisions are frequently necessary to address unique environmental impacts that occur on a project-by-project basis. All commitments to mitigate adverse impacts or to produce beneficial impacts are shown in the construction plans or specifications. It is the responsibility of the Resident Engineer and RPEM to be certain that all actions or measures are properly incorporated into the plans and specifications. When there are unique environmental considerations, a special notice to contractor may be included in the special provisions that explains the purpose for the environmental mitigation.

### Examples of Additional Clearances or Permits from Other Agencies

<p>■ <b>Placement of Dredge or Fill Material in Streams or Water Bodies</b> -Approval by the U.S. Army Corps of Engineers in 404 Permit application.</p> <p>■ <b>Structures over Waters Traditionally Navigable</b> - Approval by the US. Coast Guard (applies only to the Colorado River downstream from Grand Junction) and U.S. Corps of Engineers.</p>	<p>■ <b>Stream Encroachment</b> - Approval by Division of Wildlife and Department of Health. (401 and 404 permits).</p> <p>■ <b>NPDES (National Pollutant Discharge Elimination System)</b> - Point source discharge permit issued by the Colorado Department of Health.</p> <p>Other permits or approvals as prescribed in the CDPHE <b>Colorado Environmental Permit Directory</b> and the CDOT <b>Environmental Guidance Notebooks</b>.</p>
--	--

#### ◇ *Final Office Review (FOR)*

The Regional staff conducts a final office review of PS&E to assure that all technical details are coordinated, mitigation commitments included, and that it reflects the CDOT Environmental Ethic prior to advertising. The same individuals are involved who attended the field inspection review. Copies of the completed plans, specifications, and special project provisions are distributed by the Region staff for review in preparation for the FOR. The staff documents all revisions and corrections resulting from the plans review during the FOR and finalizes the plan package.



#### **KEY NOTE**

**The finalized construction plans incorporate any mitigations to minimize adverse environmental impacts, and pertinent data from the Project Development phase are also incorporated in the plans so that the prospective contractors are aware of actions or measures needed to meet environmental requirements.**

#### ◇ *Completion of Construction Plans, Specifications, and the Engineering Estimate (The PS&E Package)*

All mitigation commitments to minimize adverse environmental impacts and /or enhance the community and pertinent data from the NEPA Project Development stage should be included in the PS&E so that the prospective contractors are aware of actions or measures needed to meet environmental requirements and commitments. The RPEM reviews the plans, specifications and estimates to ensure all environmental commitments have been addressed. Permits are obtained to comply with Federal, State or local requirements

◇ *Environmental Permits*

It should be noted that although the NEPA requirements may be satisfied, other environmental clearances, approvals or permits may still be required by Federal or State laws before construction can begin. Some permits may be acquired by CDOT and others by the construction contractors. The PS&E should include a designation of who is responsible for obtaining any required environmental permits as determined by the RPEM. Consultation with the RPEM is advisable on the specific permit requirements. If environmental permits are required, the construction contractor must have all required permits on file.

◇ *Federal Highway Administration Approval*

For federal oversight projects, the RPEM prepares a “Project Certification” memo to be sent to FHWA as part of the PS&E package which certifies that the project is being constructed in accordance with the approved NEPA document and that all environmental clearances and permits have been updated as required and mitigation has been included in the plans.

The PS&E package includes the final construction plans, specifications, the engineering estimates, the status of permits, certification of right-of-way clearance letter and a clearance regarding utilities is submitted to FHWA.

FHWA reviews the information and must give PS& E approval prior to advertisement of the project for construction bids.

◇ *Right-of-Way Clearances*

When final design is sufficiently refined, a final Right-of-Way (ROW) plan can be completed. ROW clearances are accomplished in accordance with the ROW Manual and procedural directives. The Region ROW Section and Staff ROW Branch jointly complete the acquisition stage Relocation Plan.

The ROW certification procedure for federally assisted highway projects essentially identifies the acquisition status of necessary ROW for the purpose of advancing a project to the physical construction stage. It also addresses the status of any required relocation activities necessary on the project.<sup>44</sup>

The acquiring agency must be able to certify that the ROW is clear, that all individuals and families have been relocated to decent, safe and sanitary housing or the agency has made available to relocatees adequate housing in accordance with applicable FHWA directives.<sup>45</sup>

Conflicts with any utility rights-of-way are resolved and relocation arrangements are made. Applications for grants and easements needed from federal land management agencies are submitted through the FHWA<sup>46</sup>. All ROW acquisition and relocations must be complete or in accordance with applicable MOUs prior to advertising the project for construction bids.

◇ *Advertisement for Bids and Award of Construction Contract*

Construction activities begin with advertisement of the project so that contractors may offer bids. Bidders are informed in the construction plans and specifications of the environmental mitigation commitments that must be implemented during construction activities. The Project Engineer is responsible for monitoring the project to ensure mitigation measures are implemented during construction.



---

**KEY NOTE**

---

**The Program Engineer is responsible for ensuring that final design and construction are accomplished in a manner consistent with Transportation Commission Policy and with good engineering practices, and that commitments made in the previous stages are**

---

During the advertisement period, interested contractors develop work programs, schedules and estimates to bid on the construction plans. In order for the contractor to have a complete understanding of project requirements, he may have to consult the Resident or Project Engineer. If the project requires special environmental expertise, that expertise and method of payment must be defined in the PS&E.

Contracts are awarded to the lowest responsive and responsible bidder. After the contract has been awarded, the Public Information Office notifies newspapers of award details and the construction project schedule. As may be determined appropriate, Project Engineer may also notify local elected officials, concerned citizens and businesses.

The Project Engineer is responsible for ensuring that the construction is accomplished in conformance with the contract and in a manner consistent with the CDOT Environmental Ethic and with good engineering practices, and that commitments made in the previous stages are implemented.

◇ *Tracking Changes of Mitigation Commitments*

It is the responsibility of FHWA and CDOT to assure that the mitigation and enhancement measures committed to in the environmental documents and permits are carried out. A summary of mitigation/enhancement commitments included in the environmental decision document (Cat Ex, FONSI, or ROD) should be made available to project personnel to help ensure that they are properly implemented. If substantial changes to project design and mitigation measures occur during the design process, such changes require documentation and consultation with the RPEM, and perhaps also with FHWA (if it is a federal-aid project), the affected communities, and appropriate resource agencies.<sup>47</sup>

Tracking these changes begins with specific descriptions of the mitigation commitments included in the FONSI, ROD or Cat Ex. These commitments should be tracked by the RPEM through a tracking system initiated during the project development phase to be used throughout the remainder of the process, including maintenance and operations of the transportation system. The mitigation commitment tracking system provides design, construction and maintenance with a detailed inventory of mitigation commitments made in earlier stages of the process and the level of effort required by each for the fulfillment of each commitment.

The Project Engineer oversees construction to ensure that the contractor complies with design features such as required environmental mitigation measures, shown in the construction plans and specifications. The Project Engineer should maintain records adequate to show that mitigation commitments are being implemented during construction. The Region Environmental staff, and the Environmental Branch monitor and provide support to the Project Engineer for resolving environmental problems related to construction. The RPEM may periodically visit the construction site to assist the Project Engineer with questions about mitigation measures committed to in the final EIS or EA/FONSI.

In some cases, outside agencies (such as the Colorado Division of Wildlife, Colorado Department of Public Health & Environment, U. S. Forest Service, Bureau of Land Management, EPA, etc.) may also monitor construction activities. Post construction activities may also require monitoring by CDOT or outside agency personnel to ensure compliance with permits or project commitments.

#### ◇ *During Construction*

Once the project is under construction, the Project Engineer may utilize the weekly toolbox meetings to discuss environmental issues. In some cases, it may be prudent to invite a CDOT Environmental Program specialist to provide a field briefing on some special environmental aspects of their work e.g. erosion control methods.

A Region Environmental Advisory Team (REAT) should be formed and utilized similar to the Region Erosion Control Advisory Team (RECAT). The REAT would be broader in its scope and possibly incorporate the responsibilities of the RECAT and periodically review construction and maintenance activities for environmental compliance.

#### ◇ *Consultant Contracts*

Consultant contracts for the preliminary design process may be utilized. Pre-qualification of consultants is performed according to CDOT policy and procedural directives, and quality control of work is the responsibility of the Region. When consultants are used, the responsibility for conclusions and determinations remains with the CDOT and FHWA. However, CDOT requires consultants in all of the project development phases to follow the environmental ethics, policies, requirements and processes as outlined in this Guide. If the project involves federal monies or approvals, the consultant must ensure that the NEPA requirements for guidance and oversight by the FHWA or FTA are observed.<sup>48</sup>

Work by consultants must be reviewed by the Region and staff interdisciplinary team to assure that complete and objective consideration is given to alternative project design concepts, impacts and environmental avoidance or mitigation measures.

## ■ Maintenance and Operations (System Preservation and Performance Monitoring)

*Highway maintenance and operation is preserving and keeping all roads, roadsides, structures and miscellaneous facilities in as close to their original or improved condition as possible*

### ◇ *CDOT Responsibilities*

Maintenance of the transportation facility is necessary to maintain the roadway and right-of-way and to keep the facility in safe operating condition. CDOT owns and manages the highway rights-of-way and property statewide, and must comply with all federal, state, and local laws and regulations that require coordination with environmental regulatory agencies. The CDOT RPEM in each region is familiar with these requirements. Many activities will require coordination with the RPEM.

The Maintenance and Operations Branch coordinates the Statewide Maintenance Program with the RTDs, Maintenance Superintendents and Traffic Engineers. Their staff coordinates the performance of inspections statewide to ensure uniform maintenance practices, develop and implement standardized plans, techniques, and methods of performing highway maintenance as part of the CDOT Maintenance Levels of Service.

### ◇ *Continuing Oversight of Mitigation Measures and Funding*

CDOT Maintenance must not be overlooked from an environmental perspective. It is CDOT's policy that all transportation activities should “objectively consider all reasonable alternatives to avoid or minimize adverse impacts” to the environment. In keeping with this guiding principle and in conjunction with the Colorado Department of Transportation Commission Policies, each Maintenance activity is subject to some degree of environmental compliance depending upon earlier environmental mitigation commitments.

Consistent with these policies, it is essential to identify the on-going environmental requirements for these activities early in order to provide adequate funding for Maintenance to carry out commitments made during the Corridor Planning and/or Project Development process as well as throughout the maintenance and operations of the transportation system. In order for this to work, each project must identify as early as possible in the planning process the specific areas and activities that will involve maintenance responsibilities and actions. Early in the project planning and development process, the project manager should develop a checklist of when to involve maintenance in the project reviews. For example, a Maintenance and Operations representative should be involved in both the Field Inspection Review and in the Final Office Review. Early maintenance involvement should also be considered when draft NEPA documents identify a short list of alternatives and later at permit review.

Once projects go into the design phase or begin construction, changes may occur that will affect Maintenance responsibilities. Any CMO (Contract Modification Order) or an MCR (Minor Contract Revision) that has

environmental implications affecting Maintenance should be communicated to Maintenance by sending them a copy of the same form.

As environmental commitments increase in size and complexity, and the requirements for Maintenance to comply with Department policy and these commitments expand, adequate funding provisions are essential. Early identification and frequent review of transportation system maintenance needs from an environmental perspective is vital to determine the level of funding required to fulfill CDOT's responsibilities.

#### ◇ *Development of Maintenance Projects*

The planning and development of Maintenance projects are subject to environmental requirements and are designed using a hybrid or fast-track contract process called "M-Projects". These contracts do not follow the same process as those described in the Project Development process section. By definition, all M-Project work is classified as a categorical exclusion. If they involve "any significant impacts", they will not be pursued under the M-Projects procedures. Minor environmental impacts of M-Projects should be assessed, avoided or mitigated to the extent possible and documented in the Form 128. In such cases, the Maintenance Superintendent should consult with the RPEM to identify appropriate mitigation.

Innovative maintenance contracting processes allow for the efficient implementation of Maintenance projects and are furthered by the active participation and coordination between the RPEM, Maintenance Superintendent and RE. The goal of this coordination effort reflects the guiding principles of NEPA, CDOT's Environmental Ethic Statement and the Colorado Transportation Commission Policy to integrate disciplines in an effort to foster good decisions, expedite project completion, comply with all applicable laws and regulations and preserve the natural environment.

#### ◇ *Maintenance Operations*



#### KEY NOTE

**It is CDOT's policy that all transportation activities have minimal environmental impact. In keeping with this guiding principal and in conjunction with the Colorado Department of Transportation Policies, each Maintenance and Operations activity is subject to environmental analysis.**

reviewed at this time.

There are eight highway maintenance sections, one tunnel maintenance section and six traffic maintenance sections. The Maintenance Sections perform basic operations designed to protect and preserve the surface condition of the roadway and the adjoining right-of-way. Coordination with the RPEM and PE is vital to ensure compliance with mitigation commitments made in environmental decision documents. Clarification of maintenance procedures such as wetland maintenance and habitat preservation, identification of necessary permits (404, MS4, and NPDES), and identification of maintenance procedures for other mitigation measures can be

The use of best management practices (BMPs) to avoid or minimize environmental impacts are essential during Maintenance operations. The

Maintenance Manual contains a table that identifies the Environmental Programs that contain the BMPs for various Maintenance activities.

The Maintenance Environmental BMPs recommended should be incorporated into each tailgate meeting and used along with the environmental databases of sensitive areas.

The Maintenance Academy has incorporated environmental BMPs and mitigation measures maintenance into their training courses. These efforts will assist in ensuring maintenance operations are implemented consistent with CDOT's environmental policies.

#### ◇ *Monitoring of Environmental Impacts*

The need for post-NEPA documentation phase monitoring of environmental impacts and mitigation commitments becomes apparent when the transition from conceptual design to final design and construction is understood. Because the final design of a transportation project is an evolving process, changes to the environmental impacts listed in the project's FEIS, EA/FONSI or Cat Ex are likely to occur and should be addressed appropriately. These changes must be adequately conveyed to the maintenance manager in order for appropriate maintenance and monitoring to occur as planned.

Modifications and refinements often occur during final design regardless of the level of detail used during conceptual design during the NEPA phase. Consequently, tracking systems need to be dynamic and continuously updated to reflect the progression of the projects through final design and construction. Maintenance is involved with closing NPDES permits after the project is closed since the contractor is gone and Maintenance has to remove temporary control devices. Every effort must be made by the contractor to close as many temporary control devices as possible prior to closing the Construction Project.

Once the project is implemented and completed, Maintenance should be involved in the final walkthrough and sign-off. At this time, a written list of continuing Maintenance responsibilities should be prepared by Construction Project Engineer and submitted to Maintenance.

### ■ **Project Betterments and Enhancements**

#### ◇ *Environmental Enhancements*

CDOT's environmental programs have historically focused on meeting and maintaining compliance with applicable requirements and implementing mitigation commitments contained in NEPA documents. Although these efforts are essential to continue to maintain stewardship principles, going beyond minimum requirements advances our environmental stewardship to the next level.

The opportunities for environmental enhancements in CDOT's daily operations are limitless. CDOT staff, like most Coloradoans, feels strongly about preserving our cultural, natural, and historic resources. They point with pride to projects like Glenwood Canyon and they resonate with public expectations for

adequate consideration of environmental effects in the planning and implementation of project and operational activities.

CDOT is committed to creating a culture that recognizes, re-enforces, and rewards staff, teams, and projects that go beyond the minimum standard of achieving environmental compliance.

The following are typical examples of environmental enhancements or betterments that were implemented on a project or in conjunction with a maintenance activity. Additional opportunities like these are presented to CDOT personnel daily; it's only a question of whether we take advantage of them.

- SH 270 – Region 6 hydraulics engineers and maintenance staff worked together on a bridge pier repair project and put several J-hooks in the river to form eddies for fish habitat and installed 'boat able' grade control structures and toe protection to stabilize the river bank.
- Rather than installing a standard Concrete Box Culvert on a Region 2 project, an historic arch culvert was used to minimize impacts to the adjacent environment.
- Region 3 maintenance forces fenced off some ponds within our ROW to protect habitat for endangered fish. Region 3 also constructed expanded wildlife crossings at Muddy Pass originally designed for lynx that now can be used by much larger wildlife such as elk.
- The US 36 corridor EIS in Regions 4 and 6 will be evaluating the completion of a link in the Regional Bikeway System as a project alternative.
- A Region 5 maintenance bank stabilization project in Norwood designed to prevent erosion also created wetland in addition to stabilizing the bank away from the road.
- A change in the alignment for a Region 3 project south of Crested Butte resulted in the preservation of Native American rock art panels.
- The Boulder Broadway bridge project in Region 4 reconstructed the old deteriorating bridge utilizing the same architectural treatment of railing like the old bridge.
- The Parker/I-225 project in Region 6 relocated and built a new bike path in Cherry Creek State Park and improved the Park's main entrance/access point.
- The project team in Region 1 on the Berthoud Pass project used artistic design fascia on many of the retaining walls. On I-7, creating berms with reclaimed roadway sand is reducing noise levels.

These are only a few examples of projects or maintenance activities that have gone beyond the basic minimums and achieved a level of environmental

improvement or enhancement consistent with the Environmental Stewardship Guide principles and CDOT's Environmental Ethic.

◇ *Betterments or Partnering on Projects*

Specific environmental elements or facilities requested and funded by others (e.g. municipalities, other agencies, environmental groups) may, wherever practicable, be incorporated in CDOT capital projects. These elements or facilities may include, but not be limited to, landscaping, park amenities, historic building preservation, created wetlands, stream restorations, storm water basins, and habitat improvements.

These environmental betterments should benefit from the “economies of scale” possible on large public works projects and could cost the sponsors less than individual projects designed, constructed and bid by them.

CDOT Regions should invite local municipalities, environmental groups and agencies to combine their funded and designed environmental elements or facilities with ongoing CDOT projects. CDOT will provide added design services to assure that the environmental betterment work is appropriately integrated into the transportation project plans and specifications. Depending on the scale of the environmental betterment the Department may provide contract letting and construction inspection for the work at no charge to the municipality, other agency or environmental group.

A recent example of a betterments project is the construction of pedestrian overpasses as part of the T-REX project. The pedestrian overpasses were funded by local agencies and constructed by CDOT to improve pedestrian access to the light rail stations along the west side of I-25

## Special Circumstances

### ■ Treatment of private requests and public/private initiatives

**T**he occasion arises when CDOT is asked to approve or participate in actions that are initiated by the private sector. Whether or not federal monies or actions are involved triggering the requirements of NEPA or other federal laws, it is the policy of CDOT to use the same planning and environmental analysis process in making decisions regarding these actions or projects. Utility and access permits issued by CDOT should be coordinated with the RPEM to ensure adequate environmental consideration.

### ■ Design-build projects

The design-build method of project delivery allows CDOT to contract with one entity to provide both the design and construction of a transportation project. Section 1307 of the federal TEA-21 permits a State or local transportation agency to award a design-build contract during project development provided that final design shall not commence before the NEPA process has been completed. This situation is different than the normal process in that the design-build contractor is selected prior to completion of the NEPA process.

CDOT will be responsible for planning and environmental analyses as it would for any project. In such instances, the environmental process must be closely coordinated with the designer-builder to ensure that appropriate environmental planning is completed and appropriate mitigation is implemented as specified in the EA or EIS. The CDOT Project Engineer in consultation with the RPEM should ensure that all required mitigation is included in the Request for Proposals and the contract with the selected design-build contractor. As with all CDOT projects, it is the responsibility of the CDOT Project Engineer to ensure that the mitigation commitments specified in the EA or EIS are implemented by the design-build contractor. CDOT will need to institute a QA/QC program with the design-build contractor to insure compliance with environmental requirements to that end.

### ■ Colorado Tolling Enterprise

The Colorado Tolling Enterprise was created by the Colorado Legislature to provide for the financing, construction, operation, regulation and maintenance of a statewide system of toll highways. It is considered a public entity, government-owned business and division of the Colorado Department of Transportation. Thus, Enterprise's projects will be subject to the environmental requirements outlined in this Guide. CDOT will be responsible for planning and environmental analyses as it would for any project.

## ■ Emergency Actions

Emergency situations may arise where immediate response actions are required to protect life and property. In such instances, the RPEM should be consulted immediately to determine the appropriate course of action to avoid or minimize potential environmental impacts.

# Appendix A

## Glossary of Terms

<b>Agency Coordination</b>	The process followed to involve other federal, state, and local agencies in the decision-making process for plans, programs, and projects.
<b>Americans with Disabilities Act (ADA)</b>	A federal law that prohibits discrimination on the basis of disability in the services, programs, or activities of all state and local governments. Under the provisions of ADA, the CDOT must take steps to make all public involvement activities accessible to persons with disabilities.
<b>Alignment</b>	The horizontal and vertical location of the centerline of a proposed or existing highway.
<b>Alternatives</b>	Potential solutions to a transportation problem. Alternatives may consist of different alignments, lane configurations, type of access control, or transportation modes and strategies (i.e., transit, high occupancy vehicle lane, systems management, demand management, etc.).
<b>Authorization</b>	A document from FHWA which authorizes the expenditure of federal funds for a particular project.
<b>Categorical Exclusion (CE)</b>	A classification of actions that do not have a significant effect on the environment, either individually or cumulatively.
<b>Conformity</b>	The requirement for transportation plans, programs, and projects to be consistent with the local or state air quality plans.
<b>Cooperating Agency</b>	A federal agency other than a lead agency that has jurisdiction by law, or special expertise, with respect to any environmental impact of a proposed action.
<b>Corridor</b>	A linear route or geographic area that accommodates travel or potential travel.
<b>Cumulative Impact</b>	The impact on the environment which results from the incremental impact of an action when added to other past, present or reasonably foreseeable future actions.
<b>Design</b>	The process by which engineering plans, estimates, and specifications for a transportation project are developed.
<b>Design Phase</b>	The project development phase from the time a project has been cleared and authorized by an environmental document to the start of the construction.
<b>Draft Environmental Impact Statement (DEIS)</b>	The detailed environmental document required by the National Environmental Policy Act when an agency proposes an action that is likely to significantly affect the environment. The draft EIS includes a discussion of purpose and need, alternatives, environmental conditions and effects, and public involvement activities.
<b>Environmental Assessment (EA)</b>	A concise document which includes a brief discussion of the need for a proposed action, of potential alternatives, and the environmental impacts of the proposed action.
<b>Environmental Documents</b>	Includes Social, Economic, and Environmental studies prepared for CEs, Environmental Assessments, and Environmental Impact Statements.
<b>Fatal Flaw</b>	Factors that render an alternative as impractical or unfeasible.
<b>Federal Highway Administration (FHWA)</b>	An agency of the United States Department of Transportation (DOT) charged with carrying out highway transportation programs of the DOT.
<b>Final Environmental Impact Statement (FEIS)</b>	A detailed statement on a Class I action which significantly affects the quality of the human environment, as required by Section 102(2) (C) of the National Environmental Policy Act of 1969. It contains the same supporting information required by the draft EIS with appropriate revisions to reflect comments received from circulation of the draft EIS and the public hearing process.
<b>Finding of No Significant Impacts (FONSI)</b>	A document by a federal agency (FHWA) that presents the reasons why the action will not have a significant effect on the human environment, and for which an Environmental Impact Statement, therefore, will not be prepared. The FONSI authorizes a project for design.
<b>Interdisciplinary Approach</b>	An analysis which involves the application of the training and knowledge of persons from many professions.
<b>Lead Agency</b>	The agency having primary responsibility for preparing an Environmental Impact Statement.
<b>Level of Effort</b>	The degree of engineering and environmental analyses required to evaluate a proposed action.
<b>Metropolitan Planning Organization (MPO)</b>	The organization designated by the Governor to carry out the continuing cooperative and comprehensive transportation planning process for an urbanized area. It is composed of elected representatives of municipal and county governments supported by a permanent staff.
<b>Mitigation</b>	Action taken to avoid or to minimize adverse environmental impacts.
<b>National Environmental Policy Act of 1969 (NEPA)</b>	The basic national charter for protecting the environment.
<b>No-Action Alternative</b>	An alternative that assumes doing nothing is a feasible and logical alternative solution to the problem under investigation.
<b>Notice of Availability</b>	A notice published to announce that an environmental document is available for public review.

<b>Notice of Intent</b>	A notice published in the Federal Register which briefly describes the proposed action and alternatives and indicates that the lead agency intends to prepare an Environmental Impact Statement.
<b>Purpose and Need</b>	A Project purpose is a broad statement of the overall objective to be achieved by a proposed action. Need is more detailed explanation of the specific transportation problems that exist, of are expected to occur in the future.
<b>Public Hearing</b>	A public meeting to formally present and gather comments on project alternatives in an Environmental Assessment or Environmental Impact Statement.
<b>Public Involvement</b>	The process by which the public is informed, made aware, and involved in the transportation project development process.
<b>Public Information Meeting</b>	A meeting to provide information to the public and/or to receive input from the public with regards to a proposed action
<b>Public Involvement Plan/Program</b>	A plan developed for a specific study or project that identifies the specific steps and activities to coordinate with agencies and jurisdictions, and to involve the public in the decision-making process.
<b>Right-of-Way (ROW)</b>	Real property or interests therein, acquired, dedicated or reserved for the construction, operation, and maintenance of a highway.
<b>Section 4(f) Evaluation</b>	A document that describes the consideration, consultations and alternative studies for a determination that there are no feasible and prudent alternatives to the use of land from a publicly owned park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, as determined by the federal, state or local official having jurisdiction thereof; or any land from a historic site of national, state or local significance as so determined by such official. The Section 4(f) statement is also used to support a determination that the proposed action includes all possible planning to minimize harm.
<b>Section 106</b>	The section of the National Historic Preservation Act which requires that federal, federally assisted and federally licensed Historic Places be submitted to the Advisory Council on Historic Preservation for review and comment prior to the approval of any such undertaking by the federal agency. As with Section 4(f), adequate documentation is required.
<b>Significant Impact</b>	An action in which the cumulative primary and secondary effects significantly alter the quality of the human environment, curtail the choices of beneficial uses of the human environment, or interfere with the attainment of long-range human environmental goals. Significance considers the context and intensity of a proposed action. This means that the action must be analyzed in different contexts such as society as a whole, the affected region, the affected interests, and the locality. Intensity refers to the severity of impact

# Appendix B

## Summary of Federal Environmental Legislation and Regulations

<b>General Environmental Statutes</b> .....	<b>45</b>
National Environmental Policy Act .....	45
Section 4(f), DOT Act.....	45
Economic, Social, and Environmental Effects 23 USC109H .....	45
Uniform Relocation Assistance Act (Acquisition and relocation).....	45
Title VI, Civil Rights.....	46
Executive Order - Environmental Justice .....	46
Public Hearings, 23 USC128 .....	46
Historic Bridges.....	46
Wildflowers .....	47
Highway Beautification .....	47
<b>Historic and Archeological Preservation</b> .....	<b>47</b>
Section 106, Historical Preservation Act .....	47
Section 110, Historical Preservation Act .....	47
Archeological and Historic Preservation Act (Moss-Bennett).....	48
Archeological Resources Preservation Act .....	48
Preservation of American Antiquities .....	48
American Indian Religious Freedom Act .....	48
Native American Grave Protection and Repatriation Act.....	48
<b>Land Use and Water Usage</b> .....	<b>49</b>
Wild and Scenic Rivers .....	49
Land and Water Conservation Fund Act.....	49
Executive Order 11990 Protection of Wetlands.....	49
Wetland Mitigation Banking (ISTEA).....	50
Rivers and Harbors Act.....	50
Federal Water Pollution Control Act .....	50
Executive Order 11988 - Floodplain Management .....	50
Water Bank Act.....	50
Farmland Protection Policy Act.....	51
Resource Conservation and Recovery Act .....	51
Superfund (CERCLA).....	51
Endangered Species Act.....	51
Fish and Wildlife Coordination Act .....	53
Transportation Enhancements Activities (ISTEA).....	53
Scenic Byways Program (ISTEA) .....	53
<b>Noise</b> .....	<b>53</b>
Standards 23 USC109 .....	53
<b>Air Quality</b> .....	<b>54</b>
Clean Air Act (Conformity) .....	54
Congestion Mitigation and Air Quality Improvement (CMAQ) .....	54

## General Environmental Statutes

### National Environmental Policy Act

<b>Legislative Reference (1)</b>	National Environmental Policy Act (NEPA): 42 U.S.C. 4321-4347; (P.L. 91-190) (P.L. 94-83)
<b>Regulations Reference</b>	23 CFR 770-772; 40 CFR 1500-1508 Executive Order 11514 as amended by Executive Order 11991 on NEPA responsibilities
<b>Purpose</b>	Consider environmental factors through systemic interdisciplinary approach before committing to a course of action.
<b>Applicability</b>	All FHWA actions.
<b>General Procedures</b>	Procedures set forth in CEQ regulations and 23 CFR 771
<b>Agency for Coordination and Consultation</b>	Appropriate Federal, State, and local agencies

### Section 4(f), DOT Act

<b>Legislative Reference (2)</b>	Section 4(f) of The Department of Transportation Act: 23 U.S.C. 138; 49 U.S.C. 303; (P.L. 100-17); (P.L. 97-449); (P.L. 86-670)
<b>Regulations Reference</b>	23 CFR 771.135
<b>Purpose</b>	Preserve publicly owned public parklands, waterfowl and wildlife refuges, and significant historic sites.
<b>Applicability</b>	Significant publicly owned public parklands, recreation areas, wildlife and waterfowl refuges, and all significant historic sites “used” for a highway project.
<b>General Procedures</b>	Specific findings required: 1. Selected alternative should avoid protected areas, unless not feasible or prudent; and 2. Includes all possible planning to minimize harm.
<b>Agency for Coordination and Consultation</b>	DOI, DOA, HUD, State, or local agencies having jurisdiction and State historic preservation officer (for historic sites).

### Economic, Social, and Environmental Effects 23 USC109H

<b>Legislative Reference (3)</b>	Economic, social, and environmental effects: 23 U.S.C. 109(H); (P.L. 91-605); 23 U.S.C. 128
<b>Regulations Reference</b>	23 CFR 771
<b>Purpose</b>	To assure that possible adverse, economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest.
<b>Applicability</b>	Applicable to the planning and development of proposed projects on any Federal-Aid system for which the FHWA approves the plans, specifications, and estimates, or has the responsibility for approving a program.
<b>General Procedures</b>	Identification of economic, social, and environmental effects; consideration of alternative courses of action; involvement of other agencies and the public; systematic interdisciplinary approach. The report required by Section 128 on the consideration given to E.S. E. impacts, may be the N.E.P.A. compliance document.
<b>Agency for Coordination and Consultation</b>	Appropriate Federal, State, and local agencies.

### Uniform Relocation Assistance Act (Acquisition and Relocation)

<b>Legislative Reference (4)</b>	Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (42 U.S.C. 4601 ET SEQ., P.L. 91-646) as amended by the Uniform Relocation Act Amendments of 1987 (P.L. 100-17).
<b>Regulations Reference</b>	49 CFR 24
<b>Purpose</b>	To implement the Uniform Act as amended in an efficient manner; to ensure property owners of real property acquired for and persons displaced by Federal-Aid projects are treated fairly, consistently, and equitably; and so they will not suffer disproportionate injuries.
<b>Applicability</b>	All projects involving Federal-Aid funds.
<b>General Procedures</b>	Procedures set forth in 49 CFR 24.
<b>Agency for Coordination and Consultation</b>	DOT/FHWA has lead responsibility. Appropriate Federal, State, and local agencies.

## Title VI, Civil Rights

<b>Legislative Reference (5)</b>	Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000D ET SEQ) and related statutes.
<b>Regulations Reference</b>	49 CFR 21 and 23 CFR 200.
<b>Purpose</b>	To ensure that no person shall, on the grounds of race, color, national origin, age, sex, or disability to subjected to discrimination under any program or activity receiving federal financial assistance.
<b>Applicability</b>	All Federal programs and projects.
<b>General Procedures</b>	Procedures set forth in 49 CFR 21 and 23 CFR 200.
<b>Agency for Coordination and Consultation</b>	FHWA headquarters and field offices.

## Executive Order - Environmental Justice

<b>Legislative Reference (6)</b>	Executive Order 12898: Environmental Justice
<b>Regulations Reference</b>	Federal Register Vol. 60 No. 125, pp 33896-33903
<b>Purpose</b>	Avoid Federal actions, which cause disproportionately high and adverse impacts on minority and low-income populations with respect to human health and the environment.
<b>Applicability</b>	All Federal programs and projects.
<b>General Procedures</b>	Procedures set forth in DOT Final Environmental Justice Strategy and Proposed DOT order dated June 29, 1995.
<b>Agency for Coordination and Consultation</b>	FHWA headquarters and field offices.

## Public Hearings, 23 USC128

<b>Legislative Reference (7)</b>	Public hearings: 23 U.S.C. 128
<b>Regulations Reference</b>	23 CFR 771.111
<b>Purpose</b>	To ensure adequate opportunity for public hearings on the effects of alternative project locations and major design features; as well as the consistency of the project with local planning goals and objectives.
<b>Applicability</b>	Public hearings or hearing opportunities are required for projects described in each State's FHWA-approved public involvement procedures.
<b>General Procedures</b>	Public hearings or opportunity for hearings during the consideration of highway locations and design proposals are conducted as described in the State's FHWA-approved, public involvement procedures. States must certify to FHWA that such hearings or the opportunity for them have been held and must submit a hearing transcript to FHWA.
<b>Agency for Coordination and Consultation</b>	Appropriate Federal, State, and local agencies.

## Historic Bridges

<b>Legislative Reference (8)</b>	Surface Transportation and Uniform Relocation Assistance Act of 1987: Section 123 (F) Historic Bridges 23 U.S.C. 144(O) (P.L. 100-17)
<b>Regulations Reference</b>	
<b>Purpose</b>	Complete an inventory of on and off system bridges to determine their historic significance. Encourage the rehabilitation, reuse, and preservation of historic bridges.
<b>Applicability</b>	Any bridge that is listed on, or eligible for listing on, the National Register of Historic Places.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Identify historic bridges on and off system.</li> <li>2. Seek to preserve or reduce impact to historic bridges.</li> <li>3. Seek a recipient prior to demolition.</li> </ol>
<b>Agency for Coordination and Consultation</b>	State Historic Preservation Officer Advisory Council on Historic Preservation

## Wildflowers

<b>Legislative Reference (9)</b>	Surface Transportation and Uniform Relocation Assistance Act of 1987: Section 130 Wildflowers 23 U.S.C. 319 (B) (P.L. 100-17)
<b>Regulations Reference</b>	23 CFR 752
<b>Purpose</b>	To encourage the use of native wildflowers in highway landscaping.
<b>Applicability</b>	Native wildflowers are to be planted on any landscaping project undertaken on the Federal-Aid highway system.
<b>General Procedures</b>	At least 1/4 of 1% of funds expended on a landscaping project must be used to plant native wildflowers on that project.
<b>Agency for Coordination and Consultation</b>	FHWA State, Division, Regional contacts.

## Highway Beautification

<b>Legislative Reference (10)</b>	Highway Beautification Act of 1965 23 U.S.C. 131, 23 U.S.C. 136, 23 U.S.C. 319, (P.L. 89-285)
<b>Regulations Reference</b>	23 CFR 750, 23 CFR 751, 23 CFR 752
<b>Purpose</b>	To provide effective control of outdoor advertising and junkyards, to protect the public investment, to promote the safety and recreational value of public travel and preserve natural beauty, and to provide landscapes and roadside development reasonably necessary to accommodate the traveling public.
<b>Applicability</b>	Interstate and primary systems including toll sections thereof.
<b>General Procedures</b>	Procedures set forth in 23 CFR 750, 751, and 752
<b>Agency for Coordination and Consultation</b>	DOT/FHWA, State, and local agencies.

## Historic and Archeological Preservation

### Section 106, Historical Preservation Act

<b>Legislative Reference (14)</b>	Section 106 of the National Historic Preservation Act, as amended: (P.L. 89-665) (P.L. 91-243) (P.L. 93-54) (P.L. 94-422) (P.L. 94-458) (P.L. 96-199) (P.L. 96-244) (P.L. 96-515)
<b>Regulations Reference</b>	Executive Order 11593 23 CFR 771, 36 CFR 60, 36 CFR 63, 36 CFR 800
<b>Purpose</b>	Protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, archeology, and culture.
<b>Applicability</b>	All properties on or eligible for inclusion on the National Register of Historic Places.
<b>General Procedures</b>	<ol style="list-style-type: none"><li>1. Identify and determine the effects of project on subject properties.</li><li>2. Afford Advisory Council an early opportunity to comment, in accordance with 36 CFR 800.</li><li>3. Avoid or mitigate damages to greatest extent possible.</li></ol>
<b>Agency for Coordination and Consultation</b>	State Historic Preservation Officer, Advisory Council on Historic Preservation DOI (NPS)

### Section 110, Historic Preservation Act

<b>Legislative Reference (15)</b>	Section 110 of the National Historic Preservation Act, as amended: 16 U.S.C. 470H-2 (P.L. 96-515)
<b>Regulations Reference</b>	36 CFR 65 36 CFR 78
<b>Purpose</b>	Protect National historic landmarks. Record historic properties prior to demolition.
<b>Applicability</b>	All properties designated as National historic landmarks. All properties on or eligible for inclusion on the National Register of Historic Places.
<b>General Procedures</b>	<ol style="list-style-type: none"><li>1. Identify and determine the effects of project on subject properties.</li><li>2. Afford Advisory Council an early opportunity to comment, in accordance with 36 CFR 800</li></ol>
<b>Agency for Coordination and Consultation</b>	State Historic Preservation Officer Advisory Council on Historic Preservation DOI (NPS)

### Archeological and Historic Preservation Act (Moss-Bennett)

<b>Legislative Reference (16)</b>	Archeological and Historic preservation Act: 16 U.S.C. 469-469C (P.L. 93-291) (Moss-Bennett Act)
<b>Regulations Reference</b>	36 CFR 66 (Draft)
<b>Purpose</b>	Preserving significant historical and archeological data from loss or destruction.
<b>Applicability</b>	Any unexpected archeological resources discovered as a result of a Federal construction project or Federally licensed activity or program.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Notify DOI (NPS) when a Federal project may result in the loss or destruction of a historic or archeological property.</li> <li>2. DOI and/or the Federal agency may undertake survey or data recovery.</li> </ol>
<b>Agency for Coordination and Consultation</b>	DOI (NPS) Departmental consulting archeologist State Historic Preservation Officer

### Archeological Resources Preservation Act

<b>Legislative Reference (17)</b>	Archeological Resources Protection Act: 16 U.S.C. 470 AA-11 (P.L. 96-95)
<b>Regulations Reference</b>	18 CFR 1312, 32 CFR 229, 36 CFR 79, 36 CFR 296, 43 CFR 7
<b>Purpose</b>	Preserve and protect paleontological resources, historic monuments, memorials, and antiquities from loss or destruction.
<b>Applicability</b>	Archeological resources on Federally or native American-owned property.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Ensure contractor obtains permit, and identifies and evaluates resource.</li> <li>2. Mitigate or avoid resource in consultation with appropriate officials in the State.</li> <li>3. If necessary, apply for permission to examine, remove, or excavate such objects.</li> </ol>
<b>Agency for Coordination and Consultation</b>	Department or agency having jurisdiction over land on which resources may be situated (BIA, BLM, DOA, DOD, NPS, TVA, USFS, State Historic Preservation Officer, Recognized Indian Tribe, if appropriate).

### Preservation of American Antiquities

<b>Legislative Reference (18)</b>	Act for the Preservation of American Antiquities, 16 U.S.C. 431-433 (P.L. 59-209)
<b>Regulations Reference</b>	36 CFR 251.50-.64 43 CFR 3
<b>Purpose</b>	
<b>Applicability</b>	
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Notify DOI (NPS) when a Federal project may result in the loss or destruction of a historic or archeological property.</li> <li>2. DOI and/or the federal agency may undertake survey or data recovery.</li> </ol>
<b>Agency for Coordination and Consultation</b>	DOI (NPS) Departmental consulting archeologist State Historic Preservation Officer

### American Indian Religious Freedom Act

<b>Legislative Reference (19)</b>	American Indian Religious Freedom Act: 42 U.S.C. 1996 (P.L. 95-341)
<b>Regulations Reference</b>	
<b>Purpose</b>	Protect places of religious importance to American Indians, Eskimos, and Native Hawaiians.
<b>Applicability</b>	All projects which affect places of religious importance to Native Americans.
<b>General Procedures</b>	Consult with knowledgeable sources to identify and determine any effects on places of religious importance. Comply with Section 106 procedures if the property is historic.
<b>Agency for Coordination and Consultation</b>	BIA State Historic Preservation Officer, State Indian Liaison Advisory Council on Historic Preservation if appropriate.

---

## Native American Grave Protection and Repatriation Act

<b>Legislative Reference (20)</b>	Native American Grave Protection and Repatriation Act: (P.L. 101-601)
<b>Regulations Reference</b>	43 CFR 10
<b>Purpose</b>	Protect human remains and cultural material of Native American and Hawaiian groups.
<b>Applicability</b>	Federal lands and Tribal lands.
<b>General Procedures</b>	Consult with Native American group.
<b>Agency for Coordination and Consultation</b>	DOI (NPS), BIA, State Historic Preservation Officer

---

## Land Use and Water Usage

### Wild and Scenic Rivers

<b>Legislative Reference (22)</b>	Wild and Scenic Rivers Act: 16 U.S.C. 1271-1287
<b>Regulations Reference</b>	36 CFR 251, 297 43 CFR 8350
<b>Purpose</b>	Preserve and protect wild and scenic rivers and immediate environments for benefit of present and future generations.
<b>Applicability</b>	All projects which affect designated and potential wild, scenic, and recreational rivers, and/or immediate environments.
<b>General Procedures</b>	Coordinate project proposals and reports with appropriate Federal Agency.
<b>Agency for Coordination and Consultation</b>	DOI (NPS) and/or AGRICULTURE (USFS) State agencies.

### Land and Water Conservation Fund Act

<b>Legislative Reference (23)</b>	Land and Water Conservation Fund Act (Section 6F): 16 U.S.C. 460 –4 to –11 (P.L. 88-578)
<b>Regulations Reference</b>	
<b>Purpose</b>	Preserve, develop, and assure the quality and quantity of outdoor recreation resources for present and future generations.
<b>Applicability</b>	All projects which impact recreational lands purchased or improved with land and water conservation funds.
<b>General Procedures</b>	The Secretary of the Interior must approve any conversion of property acquired or developed with assistance under this act to other than public, outdoor recreation use.
<b>Agency for Coordination and Consultation</b>	DOI State agencies.

### Executive Order 11990 Protection of Wetlands

<b>Legislative Reference (24)</b>	Executive Order 11990: Protection of Wetlands
<b>Regulations Reference</b>	DOT Order 5660.1A 23 CFR 777
<b>Purpose</b>	To avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.
<b>Applicability</b>	Federally undertaken, financed, or assisted construction, and improvements in or with significant impacts on wetlands.
<b>General Procedures</b>	Evaluate and mitigate impacts on wetlands. Specific finding required in final environmental document.
<b>Agency for Coordination and Consultation</b>	DOI (FWS), EPA, USCE, FS, State agencies.

### Wetland Mitigation Banking (ISTEA)

<b>Legislative Reference (25)</b>	Intermodal Surface Transportation Efficiency Act of 1991. Wetlands Mitigation banks: Sec.1006-1007 (P.L. 102-240, 105 STAT 1914)
<b>Regulations Reference</b>	23 CFR 771
<b>Purpose</b>	To mitigate wetland impacts directly associated with projects funded through CDOT and STP, by participating in wetland mitigation banks, restoration, enhancement and creation of wetlands authorized under the Water Resources Dev.

	Act, and through contributions to statewide and regional efforts.
<b>Applicability</b>	Federally undertaken, financed, or assisted construction, and improvements, or with impacts on wetlands.
<b>General Procedures</b>	Evaluate and mitigate impacts on wetlands. Specific finding required in final environmental document.
<b>Agency for Coordination and Consultation</b>	DOI (FWS), EPA, USCE, State agencies.

### Rivers and Harbors Act

<b>Legislative Reference (29)</b>	Rivers and Harbors Act of 1899: 33 U.S.C. 401, ET SEQ., as amended and supplemented.
<b>Regulations Reference</b>	23 CFR 650, Subparts D & H, 33 CFR 114-115
<b>Purpose</b>	Protection of navigable waters in the U.S.
<b>Applicability</b>	Any construction affecting navigable waters and any obstruction, excavation, or filling.
<b>General Procedures</b>	Must obtain approval of plans for construction, dumping, and dredging permits (Sec. 10) and bridge permits (Sec. 9)
<b>Agency for Coordination and Consultation</b>	USCE, USCG, EPA, State agencies.

### Federal Water Pollution Control Act

<b>Legislative Reference (30)</b>	Federal Water Pollution Control Act (1972), as amended by the Clean Water Act (1977 & 1987): 33 U.S.C. 1251 – 1376 (P.L. 92-500), (P.L. 95-217), (P.L. 100-4)
<b>Regulations Reference</b>	DOT Order 5660.1A, 23 CFR 650 Subpart B, 771, 33 CFR 209, 320-323, 325, 328, 329, 40 CFR 121-125, 129-131, 133, 135- 136, 230, 231
<b>Purpose</b>	Restore and maintain chemical, physical, and biological integrity of the Nation's waters through prevention, reduction, and elimination of pollution.
<b>Applicability</b>	Any discharge of a pollutant into waters of the U.S.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Obtain permit for dredge or fill material from USCE or State agency, as appropriate. (Section 404)</li> <li>2. Permits for all other discharges are to be acquired from EPA or appropriate State agency (Section 402) Phase 1 – NPDES – Issued for municipal separate storm sewers serving large (over 250,000) populations or medium (over 100,000). Storm water discharges assoc. with industrial waste. Activities including construction sites &gt; 5 acres. Water quality certification is required from State Water Resource Agency. (Section 401)</li> <li>3. All projects shall be consistent with the State Non-Point Source Pollution Management Program. (Section 319)</li> </ol>
<b>Agency for Coordination and Consultation</b>	USCE, EPA, designated State Water Quality Control Agency, designated State Non-Point Source Pollution Agency

### Executive Order 11988 - Floodplain Management

<b>Legislative Reference (31)</b>	Executive Order 11988; Floodplain Management, as amended by Executive Order 12148
<b>Regulations Reference</b>	DOT Order 5650.2 23 CFR 650, Subpart A, 23 CFR 771
<b>Purpose</b>	To avoid the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to restore and preserve the natural and beneficial values served by floodplains.
<b>Applicability</b>	All construction of Federal or Federally -Aided buildings, structures, roads, or facilities which encroach upon or affect the base floodplain.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Assessment of floodplain hazards.</li> <li>2. Specific finding required in final environmental document for significant encroachments.</li> </ol>
<b>Agency for Coordination and Consultation</b>	FEMA, State and local agencies.

### Water Bank Act

<b>Legislative Reference (34)</b>	Water Bank Act: 16 U.S.C. 1301 – 1311, (P.L. 91-559), (P.L. 96-182)
-----------------------------------	---

<b>Regulations Reference</b>	7 CFR 752
<b>Purpose</b>	Preserve, restore, and improve wetlands of the nation.
<b>Applicability</b>	Any agreements with landowners and operators in important migratory waterfowl nesting and breeding areas.
<b>General Procedures</b>	Apply procedures established for implementing Executive Order 11990.
<b>Agency for Coordination and Consultation</b>	Secretary of Agriculture, Secretary of Interior.

### Farmland Protection Policy Act

<b>Legislative Reference (37)</b>	Farmland Protection Policy Act of 1981: 7 U.S.C. 4201-4209, (P.L. 97-98), (P.L. 99-198)
<b>Regulations Reference</b>	7 CFR 658
<b>Purpose</b>	Minimize impacts on farmland and maximize compatibility with state and local farmland programs and policies.
<b>Applicability</b>	All projects that take Right-of-Way in farmland, as defined by the regulation.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Early coordination with the NRCS.</li> <li>2. Land evaluation and site assessment.</li> <li>3. Determination of whether or not to proceed with farmland conversions, based on severity of impacts and other environmental considerations.</li> </ol>
<b>Agency for Coordination and Consultation</b>	NRCS

### Resource Conservation and Recovery Act

<b>Legislative Reference (38)</b>	Resource Conservation and Recovery Act of 1976 (RCRA), as amended: 42 U.S.C. 6901, ET SEQ. (P.L. 94-580) (P.L. 98-616)
<b>Regulations Reference</b>	40 CFR 260-271
<b>Purpose</b>	Protect human health and the environment. Prohibit open dumping. Manage solid wastes. Regulate treatment, storage, transportation, and disposal of hazardous waste.
<b>Applicability</b>	Any project that takes Right-of-Way containing a hazardous waste.
<b>General Procedures</b>	Coordinate with EPA or State agency on remedial action.
<b>Agency for Coordination and Consultation</b>	EPA or State agency approved by EPA, if any.

### Superfund (CERCLA)

<b>Legislative Reference (39)</b>	Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended: 42 U.S.C. 9601-9657, (P.L. 96-510) Superfund Amendments and Reauthorization Act of 1986: (SARA) (P.L. 99-499)
<b>Regulations Reference</b>	40 CFR 300 43 CFR 11
<b>Purpose</b>	Provide for liability, compensation, clean up, and emergency response for hazardous substances released into the environment and the clean up of inactive hazardous waste disposal sites.
<b>Applicability</b>	Any project that might take Right-of-Way containing a hazardous substance.
<b>General Procedures</b>	<ol style="list-style-type: none"> <li>1. Avoid hazardous waste sites, if possible.</li> <li>2. Check EPA lists of hazardous waste sites.</li> <li>3. Field surveys and reviews of past and present land use.</li> <li>4. Contact appropriate officials if uncertainty exists.</li> <li>5. If hazardous waste is present or suspected, coordinate with appropriate officials.</li> <li>6. If hazardous waste encountered during construction, stop project and develop remedial action.</li> </ol>
<b>Agency for Coordination and Consultation</b>	EPA or State agency approved by EPA, if any.

### Endangered Species Act

<b>Legislative Reference (40)</b>	(P.L. 93-205), (P.L. 94-359), (P.L. 95-632), (P.L. 96-159), (P.L. 97-304)
<b>Regulations Reference</b>	7 CFR 355
	50 CFR 17, 23, 81, 222, 225-227, 402, 424, 450-453
<b>Purpose</b>	Conserve species of fish, wildlife and plants facing extinction.
<b>Applicability</b>	Any action that is likely to jeopardize continued existence of such endangered/threatened species or result in destruction or modification of critical habitat.
<b>General Procedures</b>	Consult with the Secretary of the Interior or Commerce, as appropriate.
<b>Agency for Coordination and Consultation</b>	DOI (FWS)

### Fish and Wildlife Coordination Act

<b>Legislative Reference (41)</b>	Fish and Wildlife Coordination Act: 16 U.S.C. 661-666 (C) (P.L. 85-624), (P.L. 89-72), (P.L. 95-616)
<b>Regulations Reference</b>	
<b>Purpose</b>	Conservation, maintenance, and management of wildlife resources.
<b>Applicability</b>	1. Any project which involves impoundment (surface area of 10 acres or more), diversion, channel deepening, or other modification of a stream or other body of water. 2. Transfer of property by Federal agencies to State agencies for wildlife conservation purposes.
<b>GENERAL PROCEDURES</b>	Coordinate early in project development with FWS and State Fish and Wildlife Agency.
<b>Agency for Coordination and Consultation</b>	DOI (FWS), State Fish and Wildlife Agencies.

### Transportation Enhancements Activities (ISTEA)

<b>Legislative Reference (42)</b>	Intermodal Surface Transportation Efficiency Act of 1991. Transportation Enhancement Activities: Sec. 1007, (P.L. 102-240)
<b>Regulations Reference</b>	
<b>Purpose</b>	To provide funds for Transportation Enhancement activities, such as landscaping and beautification, rehabilitation and operation of historic transportation facilities.
<b>Applicability</b>	Funds are to be used in all areas except roads classified as local or rural minor collectors, unless such roads are on a Federal-Aid highway system.
<b>General Procedures</b>	10% of STP funds annually apportioned to each State are for Transportation Enhancement activities.
<b>Agency for Coordination and Consultation</b>	FHWA

### Scenic Byways Program (ISTEA)

<b>Legislative Reference (44)</b>	Intermodal Surface Transportation Efficiency Act of 1991. Sec 1047. Scenic Byways Program: (P.L. 102-240)
<b>Regulations Reference</b>	
<b>Purpose</b>	To identify and develop those special scenic byways that offer outstanding scenic, historic, natural, cultural, recreational, or archeological values.
<b>Applicability</b>	Any public road or highway which meets the criteria for inclusion as a Scenic Byway or All-American Road.
<b>General Procedures</b>	Nominations may originate from any local government, private group or individual, but must come through the States. Final designations will be made by the Secretary of Transportation.
<b>Agency for Coordination and Consultation</b>	FHWA

## Noise

### Standards 23 USC109

<b>Legislative Reference (45)</b>	Standards: 23 U.S.C. 109 (I) (P.L. 91-605), (P.L. 93-87)
<b>Regulations Reference</b>	23 CFR 772
<b>Purpose</b>	Promulgate noise standards for highway traffic.
<b>Applicability</b>	All Federally funded projects for the construction of a highway on new location, or the physical alteration of an existing highway which significantly changes either the vertical or horizontal alignment or increases the number of through-traffic lanes.
<b>General Procedures</b>	<ol style="list-style-type: none"><li>1. Noise impact analysis.</li><li>2. Analysis of mitigation measures.</li><li>3. Incorporate reasonable and feasible noise abatement measures to reduce or eliminate noise impact.</li></ol>
<b>Agency for Coordination and Consultation</b>	

## Air Quality

### Clean Air Act (Conformity)

<b>Legislative Reference (46)</b>	Clean Air Act (as amended), Transportation Conformity Rule: 23 U.S.C. 109 (J) 42 U.S.C. 7521(a) (P.L. 101-549)
<b>Regulations Reference</b>	23 CFR 771 40 CFR 51 and 93.
<b>Purpose</b>	To insure that transportation plans, programs and projects conform to the State's air quality implementation plans.
<b>Applicability</b>	Non-attainment and maintenance areas.
<b>General Procedures</b>	<ol style="list-style-type: none"><li>1. Transportation plans, programs, and projects must conform to State Implementation Plan (SIPs) that provide for attainment of the national ambient air quality standards.</li></ol>
<b>Agency for Coordination and Consultation</b>	FTA, EPA, MPOs, State Departments of Transportation and State and local Air Quality Control Agencies.

### Congestion Mitigation and Air Quality Improvement (CMAQ)

<b>Legislative Reference</b>	Intermodal Surface Transportation Efficiency Act of 1991. Congestion Mitigation and air Quality Improvement Program (CMAQ): Sec 1008, 23 U.S.C. 149
<b>Regulations Reference</b>	
<b>Purpose</b>	To assist non-attainment and maintenance areas reduce transportation-related emissions.
<b>Applicability</b>	Transportation programs or projects in non-attainment areas and areas redesignated to maintenance that are likely to contribute to the attainment or maintenance of the NAAQS.
<b>General Procedures</b>	<ol style="list-style-type: none"><li>1. Project sponsor (transit operator, municipal office, etc.) develops formal proposal to improve air quality.</li><li>2. Submit to the MPO, State for evaluation, and approval.</li><li>3. Included in the TIP and approved as eligible by FTA and FHWA in consultation with EPA.</li></ol>
<b>Agency for Coordination and Consultation</b>	FTA, EPA, MPOs, State Departments of Transportation, and State and local Air Quality Control Agencies.

# Appendix C

## Transportation Commission Districts

### Commission Districts:

#### Transportation Commissioners

**District 1**  
Mr. Joseph Blake  
1445 Market St.  
Denver, CO 80202-1729

**District 2**  
Mr. Joseph Jehn Vice Chair  
5855 Wadsworth Bypass  
Arvada, CO 80003

**District 3**  
Mr. Gregory B. McKnight  
5434 S. Geneva Way  
Englewood, CO 80111

**District 4**  
Ms. JoAnn Groff  
8121 Meade  
Westminster, CO 80031

**District 5**  
Mr. Charles Archibeque  
325 6<sup>th</sup> Street  
Greeley, CO 80631

**District 6**  
Mr. William R. "Bill" Haight  
P.O. Box 770308  
Steamboat Springs, CO 80477

**District 7**  
Mr. Doug Aden  
c/o US Bank  
P.O. Box 608  
Grand Junction, CO 81502

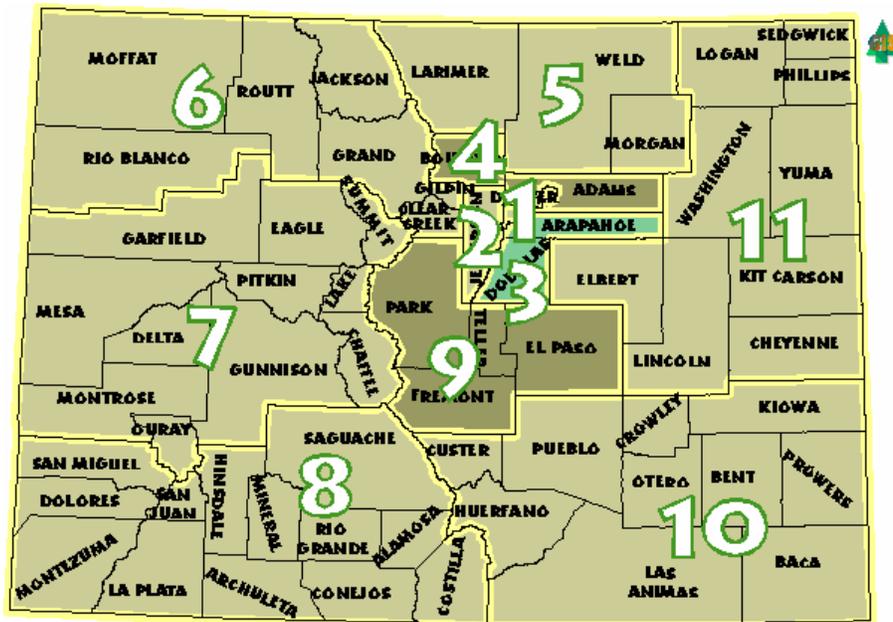
**District 8**  
Mr. Steve Parker  
P.O. Box N  
Durango, CO 81302

**District 9**  
Mr. Dan Stuart  
14 North Sierra Madre  
Colorado Springs, CO 80903

**District 10**  
Mr. George H. Tempel  
P.O. Box 246  
101 Main Street  
Wiley, CO 81092

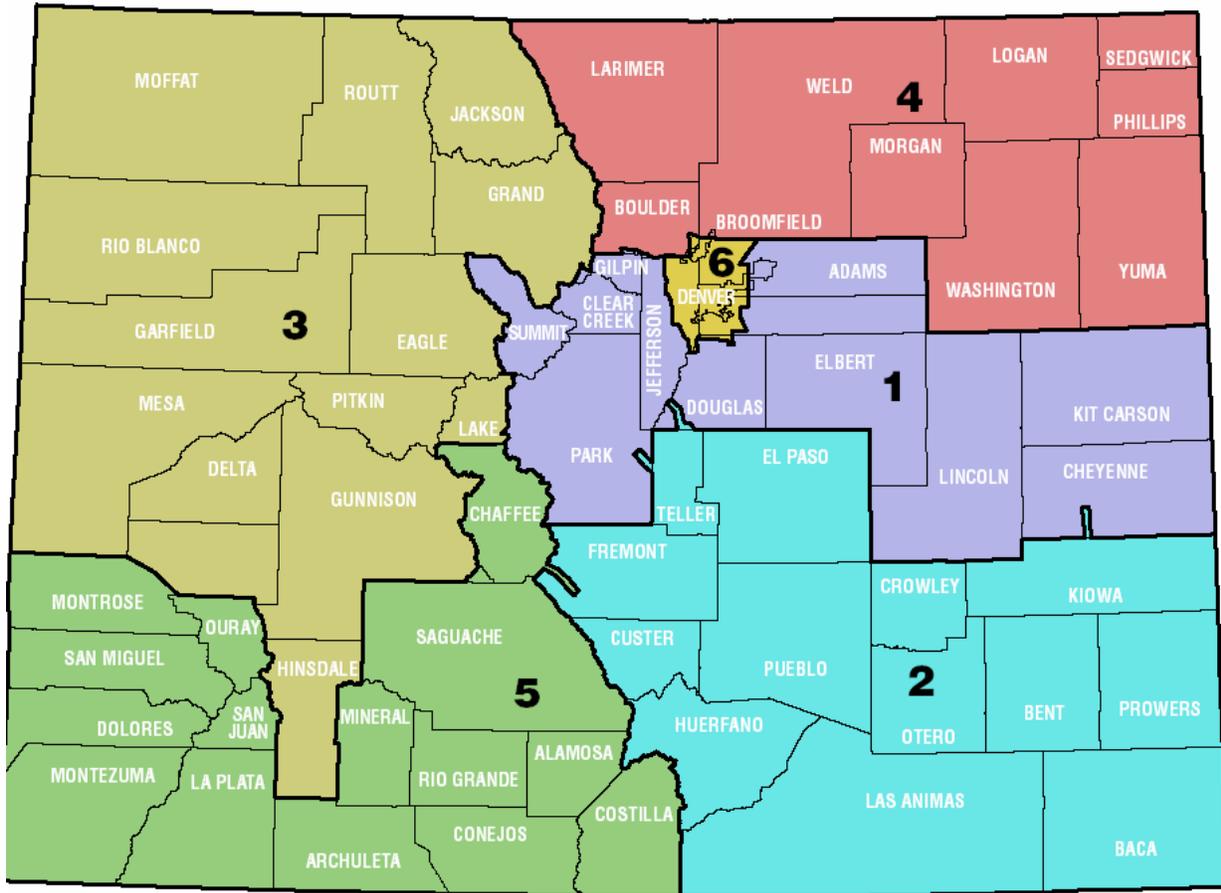
**District 11**  
Mr. Donald G. Morrison, Chair  
P.O. Box 1000  
Limon, CO 80828

**Secretary to the Commission**  
Ms. Jennifer Webster  
4201 E. Arkansas Ave., Room 270  
Denver, CO 80222-3400



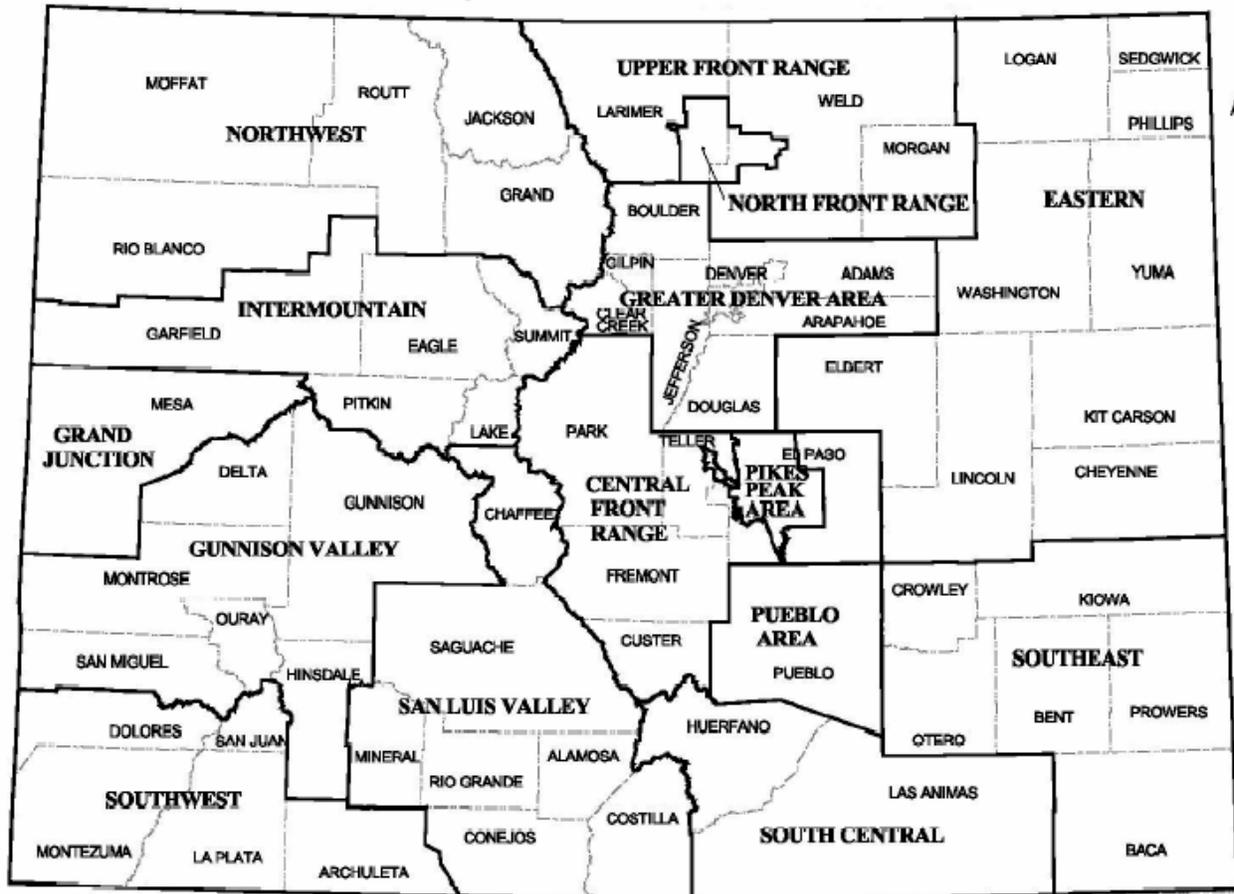
# Appendix D

## CDOT Regions



# Appendix E

## Transportation Planning Regions



# Appendix F

---

## **CDOT Environmental Forms**

# Form 128

<b>COLORADO DEPARTMENT OF TRANSPORTATION CATEGORICAL EXCLUSION DETERMINATION</b>	Date:	Revision date:	Project code#
	Project #		

Project name: \_\_\_\_\_

Project description: \_\_\_\_\_

**A. Categorical Exclusion Project Determination**

1. This project fits Categorical Exclusion or Programmatic CE number \_\_\_\_\_
2. All required Clearance Actions indicated in Part B below have been completed. All Permits and Additional Requirements indicated in Part C below will be obtained before project ad.
3. No significant environmental impacts will result from this project. The Region Planning and Environmental Manager (RPEM) will ensure implementation of required mitigation commitments.
4. CDOT Form #463 dated \_\_\_\_\_ (Revised \_\_\_\_\_) is attached

**B. Clearance Actions**

REQUIRED	DATE COMPLETED	REQUIRED	DATE COMPLETED
Yes No		Yes No	
<input type="checkbox"/> <input type="checkbox"/> Air Quality (hot spot analysis)	_____	<input type="checkbox"/> <input type="checkbox"/> Archaeology (effects determination)	_____
<input type="checkbox"/> <input type="checkbox"/> Noise	_____	<input type="checkbox"/> <input type="checkbox"/> Paleontology (effects determination)	_____
<input type="checkbox"/> <input type="checkbox"/> Hazardous Waste (ISA/M-ESA)	_____	<input type="checkbox"/> <input type="checkbox"/> History	_____
<input type="checkbox"/> <input type="checkbox"/> Farmland Protection	_____	<input type="checkbox"/> <input type="checkbox"/> Historic Bridge	_____
<input type="checkbox"/> <input type="checkbox"/> Threatened or Endangered Species	_____	<input type="checkbox"/> <input type="checkbox"/> 4(f), 6(f)	_____
<input type="checkbox"/> <input type="checkbox"/> Wetland Determination (survey)	_____	<input type="checkbox"/> <input type="checkbox"/> Other	_____

All clearance requirements have been completed for the work indicated in the CDOT Form #463 referenced above.

RPEM Signature \_\_\_\_\_ Date \_\_\_\_\_ Region# \_\_\_\_\_

I concur in the above category designation and the scope of environmental clearances/permits indicated

HWA Division Administrator signature (when required) \_\_\_\_\_ (Please return form to RPEM) \_\_\_\_\_ Date \_\_\_\_\_

**C. Permits and Additional Requirements**

REQUIRED	DATE COMPLETED	REQUIRED	DATE COMPLETED
Yes No		Yes No	
<input type="checkbox"/> <input type="checkbox"/> 404 Permit	_____	<input type="checkbox"/> <input type="checkbox"/> 401 Permit	_____
<input type="checkbox"/> <input type="checkbox"/> 402 Permits	_____	<input type="checkbox"/> <input type="checkbox"/> Division of Wildlife SB 40	_____
<input type="checkbox"/> <input type="checkbox"/> - Stormwater Permit (NPDES)	_____	<input type="checkbox"/> <input type="checkbox"/> Wetland Finding	_____
<input type="checkbox"/> <input type="checkbox"/> - Municipal Permit	_____	<input type="checkbox"/> <input type="checkbox"/> Hazardous Waste (PSI/SI)	_____
<input type="checkbox"/> <input type="checkbox"/> - Dewatering Permit	_____	<input type="checkbox"/> <input type="checkbox"/> Other	_____

**D. Comments**

**E. Environmental Project Certification**

All clearance and permit requirements for this project have been completed and mitigation included in the \_\_\_\_\_ set of plans and specifications dated \_\_\_\_\_. The appropriate documentation is on file in the Region office.

PEM Signature \_\_\_\_\_ Date \_\_\_\_\_

**Note to Project Manager:** Any changes to the plans and specifications after the date of the RPEM signature in Part B that affect environmental impacts or mitigation must be approved by the RPEM

Distribution: RPEM (original); copies to: Project Manager, Region Right of Way (if ROW required), Central Files CDOT Form #128 9/98

# Instructions for CDOT Form #128, Categorical Exclusion Determination

1. A CDOT Form #128 is required for all categorically excluded projects. Parts A and B must be completed for right of way authorization and obligation of federal funds. Parts A, B, C, and E must be completed prior to project advertisement.
2. FHWA signature is required for all federally funded Categorical Exclusions (CE) unless programmatic approval has been granted. Following signature, the FHWA will retain a copy of the 128 and return the original to the RPEM. The RPEM will be responsible for distributing copies within CDOT and maintaining the original in the Region.
3. FHWA approval may be requested for federally funded projects that are programmatically granted CE status if a 404 permit is required. The purpose for the request shall be stated in Part D, Comments.
4. If FHWA signature is not required, the RPEM will enter "N/A" on the FHWA concurrence line of Part B.
5. The project actions which qualify a project for CE designation must be entered in Part A, #1 of the 128. The designation must be taken from 23 CFR 771.117 (a) - (d) or from the current list of additional programmatic CEs approved by the FHWA. Paragraph (a) CEs require a transmittal letter of explanation to FHWA.
6. If it is necessary for the Office of Environmental Services (OES) to prepare a 128 for Statewide projects, the OES manager will be responsible for clearances, certification, and appropriate distribution.
7. If project revisions change the clearance/permit requirements, revised CDOT Forms #128 and #463 are required.
8. In Part E the RPEM must indicate the set of plans and specifications (Final Office Review, advertisement, award, etc.) which were reviewed prior to certification. The date of these plans must be provided.

Permit/Requirement	Required	Date	Status	Comments	Date	Signature
404 Permit	<input type="checkbox"/>					
405 Permit	<input type="checkbox"/>					
Statewide Permit (WPES)	<input type="checkbox"/>					
Municipal Permit	<input type="checkbox"/>					
Discharge Permit	<input type="checkbox"/>					
Other	<input type="checkbox"/>					

Note to Project Manager: Any change to the plans and specifications after the date of the RPEM signature in Part B will affect environmental impacts or mitigation must be approved by the RPEM. The appropriate documentation is in the Region office.

# Form 463

## DESIGN DATA

Metric    English

Page 1

Status:  preliminary    final    revised

Prepared by: \_\_\_\_\_   Revised by: \_\_\_\_\_

Date: \_\_\_\_\_   Date: \_\_\_\_\_

Submitted by Proj. Mgr. \_\_\_\_\_   Approved by Preconstruction Engineer: \_\_\_\_\_

Date: \_\_\_\_\_

Geographic location:

Terrain type:  Level    Plains    Rolling    Urban    Mountainous

Description of proposed construction/improvement (attach map showing site location)

Revise Date: \_\_\_\_\_

Revision #: \_\_\_\_\_

Region: \_\_\_\_\_

Project number: \_\_\_\_\_

PE Project Code: \_\_\_\_\_   PE Project Number: \_\_\_\_\_

Project description:

County1: \_\_\_\_\_   County2: \_\_\_\_\_   County3: \_\_\_\_\_

Municipality: \_\_\_\_\_

System code:  IM    NHS    STP    OTHER

Oversight:  CDOT    FHWA    OTHER

Planned length: \_\_\_\_\_

**1 Traffic** (Note: use columns A, B, and/or C to identify facility described below)

Current year: \_\_\_\_\_   Future year: \_\_\_\_\_

Facility	ADT	DHV	DHV % trucks	Facility location					
				ADT	DHV	Industrial	Commercial	Residential	Other
A						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2 RdwyClass**

RdwyClass	Route	Refpt	Endrefpt	Functional classification	Facility type	Rural code
1.						
2.						
3.						

**3 Design Standards** (Identify substandard items with a checkmark in 1st column and clarify in remarks)

	A =				B =				C =			
	Standard	Existing	Proposed	Ultimate	Standard	Existing	Proposed	Ultimate	Standard	Existing	Proposed	Ultimate
<input type="checkbox"/> Surface type												
<input type="checkbox"/> Typical section type												
<input type="checkbox"/> # of travel lanes												
<input type="checkbox"/> Width of travel lanes												
<input type="checkbox"/> Shoulder wd. lt./median												
<input type="checkbox"/> Shoulder wd rt./outside												
<input type="checkbox"/> Side slope dist. ("z")												
<input type="checkbox"/> Median width												
<input type="checkbox"/> Posted speed												
<input type="checkbox"/> Design speed												
<input type="checkbox"/> Max. superelevation												
<input type="checkbox"/> Min. radius												
<input type="checkbox"/> Min. horizontal ssd												
<input type="checkbox"/> Min. vertical ssd												
<input type="checkbox"/> Max. grade												

Project under  1R    3R    4R    Other: \_\_\_\_\_ criteria

Variance in minimum design standards required  Yes    No

Justification attached    Request to be submitted

Bridge (see item 4)    See remarks

Safety project

Not all standards addressed

Stage construction

Resurfacing projects

Recommendations concerning safety aspects attached

Existing guardrail meets current standards:  Yes    No

Comments:

CDOT Form #463   7/2001

CDOT Environmental Stewardship Guide v2.

68

May, 2005

**4 Major Structures** S=to stay, R=to be removed, P=proposed new structure

Structure ID#	Length	Ref. Point	Feature Intersected	Standard Width	Structure Rdwy	Load	Horizontal Clearance	Vertical Clearance	Year Built

Proposed treatment of bridges to remain in place (address bridge rail, capacity, and allowable surface thickness)

---

**5 Project Characteristics (proposed)**

Medlan type:  depressed  painted  raised  none

Lighting  Handicap ramps  Traffic control signals  Striping

Curb and gutter  Curb only  Left-turn slots  continuous width =

Sidewalk width =  Bikeway width =  Right-turn slots  continuous width =

Parking lane width =  Detours  Signing:  construction  permanent

Landscape requirements: (description) Other: (description)

---

**6 Right of Way** Yes No Est. No.

ROW and/or perm. easement required:   \_\_\_\_\_

Relocation required:   \_\_\_\_\_

Temporary easement required:   \_\_\_\_\_

Changes in access:   \_\_\_\_\_

Changes to connecting roads:   \_\_\_\_\_

**7 Utilities** (list names of known utility companies)

---

**8 Railroad crossings** # of crossings: \_\_\_\_\_

Recommendations:

---

**9 Environmental**

Type: \_\_\_\_\_ Approved on: \_\_\_\_\_ under Project Code: \_\_\_\_\_ Project Number: \_\_\_\_\_

Comments:

---

**10 Coordination**

Withdrawn lands (power sites, reservoirs, etc.) cleared through BLM forest service office Irrigation ditch name: \_\_\_\_\_

New traffic ordinance required  Modify schedule of existing ordinance Municipality: \_\_\_\_\_

Other: \_\_\_\_\_

---

**11 Construction method** noAdReason:  Design  Local F/A

Advertised by:  State  P.O.  RR F/A Entity/Agency contact name: \_\_\_\_\_

Local  Study  Utility F/A Phone number: \_\_\_\_\_

None  CDOT F/A  Miscellaneous

---

**12 Remarks** (Include additional pages if needed)

Original to: Central files      Copies to: Region Files, Region Env. Manager, Staff Design Branch (QA), PMO, ROW, Staff Bridge or where appropriate

# Appendix G

---

## Categorical Exclusion Determinations

The Federal Highway Administration and Federal Transit Administration have designated categorical exclusions in 23 CFR Part 771.117. These regulations contain two lists of categorical exclusions – Part C which do not normally require any further NEPA approvals from the FHWA or FTA, and Part D which are a representative list of actions that require FHWA and FTA approval and must meet the criteria for a categorical exclusion in the CEQ Regulations (40 CFR Part 1508.4) and the criteria specified in Part A of these regulations.

Colorado has been granted specific “Programmatic Categorical Exclusions” for all of the categorical exclusions contained in Part C of Part 771 regulations and the following expanded list of 22 categorical exclusions if they meet the accompanying Evaluation Criteria:

1. Adding or lengthening turning lanes (including continuous turning lanes), intersection improvements, channelization of traffic, or dualizing lanes at intersection and interchanges.
2. Flattening slopes; improving vertical and horizontal alignments.
3. Installation of ramp metering control devices, freeway traffic surveillance and control systems, motorist aid systems, highway information systems, computerized traffic signalization systems or roadway lighting.
4. Restoring, replacing, or rehabilitating culverts, inlets, drainage pipes and drainage systems, including safety treatments to improve these features.
5. Preventive maintenance activities such as joint repair, pavement patching, crack sealing, skid hazard treatments, striping and should repair.
6. Restoration, rehabilitation or resurfacing of existing pavement or the removal and replacement of old pavement structure.
7. Upgrading, removal or addition of guardrail, median barrier or impact attenuators.
8. Railroad crossing elimination by closure, and railroad overpass removal within existing right-of-way.
9. Clear zone safety improvements, such as fixed object removal or relocation.
10. Screening unsightly areas.
11. Restoration and rehabilitation of existing bridge structures, including painting, crack sealing, joint repair, scour repair, scour counter measures, bridge rail or bearing pad placement, seismic retrofit, deck rehabilitation or replacement, or upgrade of bridge end approaches and guardrail transitions.
12. Widening of substandard bridge structures to provide shoulders.
13. Acquisition of scenic easements and scenic or historic sites.
14. Preservation of abandoned railway corridors (including the conversion and use thereof of pedestrian or bicycle trails.)
15. Historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including railroad facilities and canals).
16. Control and removal of outdoor advertising.
17. Landscaping and other scenic beautification.

18. Mitigation of water pollution due to highway runoff.

(d)(6) Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.

(d)(7) Approvals for changes in access control (Non-Interstate).

(d)(9) Rehabilitation or reconstruction of existing rail and bus transit buildings and ancillary buildings where only minor amounts of additional land are required, and there is not a substantial increase in the number of users.

(d)(10) Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks, and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.

**Note:** *Additional actions may be designated as Categorical Exclusions if they meet the following criteria and are approved by FHWA or FTA upon individual review.*

**Evaluation Criteria** for Categorical Exclusions listed above:

- The project improvements will not result in the addition of through lanes.
- The projects cause no adverse impacts to local traffic patterns, property access, community cohesiveness, or planned community growth or land use patterns.
- Air, noise and water quality impacts are negligible or nonexistent.
- Wetland areas are not taken, or if wetlands are involved, they qualify for the FHWA/CDOT programmatic agreement on Wetland Findings dated December 2, 1991.
- An individual 404 Permit is not required\*.
- Threatened and endangered species and their critical habitat will remain unaffected.
- No significant amount of right-of-way may be acquired and no significant amount of relocations are involved.
- Properties protected under Section 106 of the Historic Preservation Act are not affected or will have no adverse effect as determined in consultation with the State Historic Preservation Officer.
- No significant hazardous waste contamination is involved.

\* There may be an instance where a project could qualify for a categorical exclusion and the Corp of Engineers may need to prepare some NEPA documentation to issue an individual 404 permit.

# Appendix H

## Detailed Process Steps for Cat Ex Projects

---

1. Pre-TIP submittal Project Description meeting - Prior to submitting the project for inclusion in the TIP, the Project Manager (PM) provides a detailed project description to the Regional Planning & Environmental Manager (RPEM) for the purpose of determining the major environmental issues that are likely to need analysis on the project. The PM then can assess the level and timing of funding to address the appropriate level of environmental documentation and clearances needed on the project.
2. Once a project is programmed to be funded in the 3 year STIP/TIP, the Region Project Manager (PM) initiates a preliminary 463 form and Phase I of Form 1048 (See Appendix of Forms) and circulates to Region staff for review. The Region Planning and Environmental Manager (RPEM) assigns a Project Environmental Coordinator (PEC).\*
3. **Internal Scoping Meeting:** The PM coordinates with all design and specialty disciplines, including Environmental, ROW, Utilities, Hydraulics, Traffic, Bridge Materials and Maintenance to get consensus on the scope of the project. Environmental impact avoidance and minimization alternatives are discussed. The PEC makes preliminary determinations regarding the class of the environmental document required (Cat Ex, EA, or EIS), the anticipated environmental clearances and permits required, and associated responsibilities for each. The PEC schedules and coordinates with Environmental Branch (EB) as necessary to initiate environmental clearance processes required on Part B of form 128. Form 1048-Phase II should be further refined and completed as work progresses.
4. PM drafts preliminary detailed project schedule and circulates for comments.
5. The PEC discusses project specifics, as necessary, with senior managers, EB specialists, and, if it is a federal project, FHWA to confirm the anticipated class of the environmental document. Cat Ex projects continue in this process while EA and EIS projects will require the development of a distinct schedule and process. The likelihood of specific clearances and permits is also researched. Project schedule is adopted and shared with the multi-disciplinary project development team.
6. **Field Inspection Review (FIR):** Further avoidance and minimization opportunities are discussed. Form 463 should be finalized. The PEC communicates information requirements and anticipated timelines for necessary clearances and permits to the PM. Results of FIR meeting are communicated back to EP. Complete Form 1048-Phase III.
7. Coordination with permitting agencies may be initiated. All available and applicable environmental information is communicated to the PM for inclusion in Final Office Review plans and specs.
8. The PM will route the final Form 463 six (6) weeks prior to beginning of quarter if possible, (two weeks prior to Regions Office of Financial Management and Budget (OFMB) Request Submission Date) to OFMB along with an executed Form 128, Part B signed by the RPEM. If the project is a federal project and does not meet one of the programmatic Cat Exs, the FHWA is sent the Form 128 for review and signature.
9. FHWA signs and returns the original Form 128 to RPEM for the project file. **Note:** *The project can then be obligated for final design and ROW negotiations can then proceed.*
10. **Final Office Review (FOR):** Environmental impacts are definitively quantified for environmental permit applications and to ensure adequate representation in the plans and specs.
11. The PEC satisfies requirements identified in Part C of the 128. Permit mitigation measures are communicated to the PM for inclusion in the final Plans and Specifications.
12. **Final Check Set plans and specs** containing all mitigation measures are provided to the PEC a minimum of three (3) weeks prior to when final clearance is required. **Changes made to the plans** subsequent to the FOR are explained/ summarized. The PEC reviews, compiles

clearances and permits, and submits to RPEM for completion of the Environmental Project Certification in Part E of the Form 128.

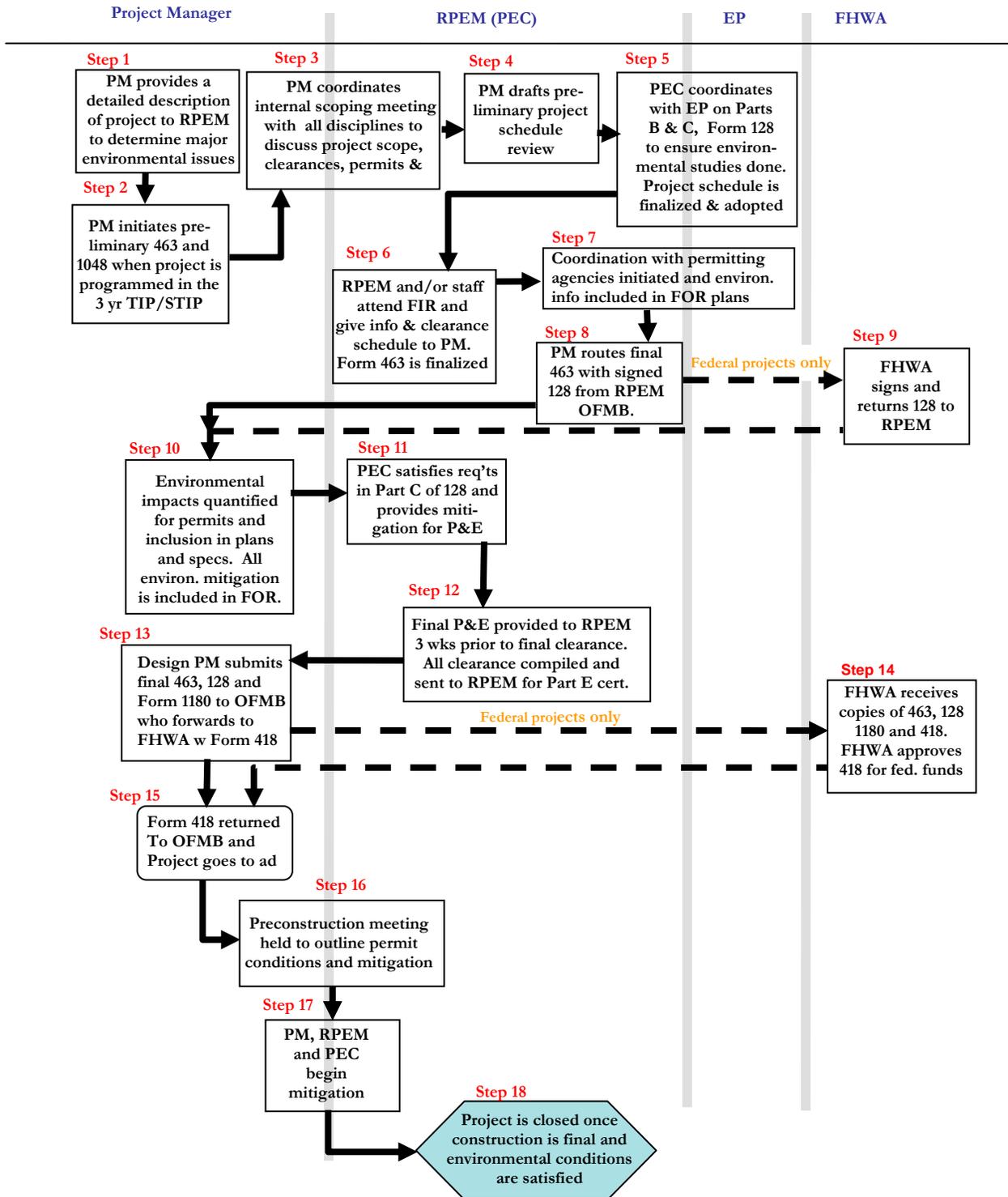
13. The Resident Engineer signs and (in some cases the Project Manager) submits the Final 463, and as applicable, the completed and signed Form 128, and the signed Form 1180- PS&E by the CDOT Region Business Manager, to FHWA and OFMB. If changes to the project design data have been made, a Revised Form 463 would be submitted instead along with the coinciding Form 128. OFMB then initiates the Form 418 to FHWA whenever federal aid or oversight is involved for approval.
14. FHWA receives copies of 463, 128 1180 and 418. FHWA approves 418 for fed. funds
15. FHWA approves the Form 418; funds are obligated and authorized for the construction phase. Project is sent to Advertisement.
16. A pre-construction meeting is held with all specialty disciplines to outline permit conditions and mitigation commitments, etc.
17. The Construction Project Engineer, RPEM, and PEC begin mitigation monitoring during construction to ensure compliance with permit requirements and mitigation commitments.  
**Note:** *Long term monitoring of mitigation may be required to successfully complete mitigation obligations and permit requirements.*
18. The project is closed once construction is final and accepted and conditions of environmental permits have been satisfied. PEC should be involved in this review.

**Note:** *Project scope changes at any point in the process will require the Project Manager to modify the 463 and send it to the Project Environmental Coordinator for review of potential environmental impacts. Changes may affect project clearances, permits, and schedules.*

---

\*The RPEMs are the ultimate authority for all environmental processes and decisions, but in general such daily responsibilities are delegated in some Regions to regional Project Environmental Coordinators (PECs).

# Detailed CatEx Process Steps Flow Diagram



# Endnotes

- 
- <sup>1</sup> A similar document, called an *Action Plan*, was first prepared by CDOT in 1974 and was revised in 1979. It was originally developed to guide implementation of the National Environmental Policy Act of 1969 (NEPA) in accordance with Federal Highway Administration (FHWA) regulations. This Guide replaces the Action Plan, which is no longer required by the FHWA.
- <sup>2</sup> CDOT Policy Directive 14
- <sup>3</sup> CDOT Policy Directive 13
- <sup>4</sup> See Appendix B for summary of major environmental statutes.
- <sup>5</sup> 42 USC §4321 et seq.
- <sup>6</sup> CEQ Regulations, 40 CFR §§1500 et seq.
- <sup>7</sup> Sections 43-1-103 and 24-1-128.7, C.R.S.
- <sup>8</sup> §43-1-101 et seq, C.R.S
- <sup>9</sup> Although this section discusses FHWA matters, the Federal Transit Administration has similar rules and operates under the same U.S. Department of Transportation environmental regulations.
- <sup>10</sup> The current version of the Stewardship Agreement is under development.
- <sup>11</sup> In addition to FHWA approval, FTA approval may also be required.
- <sup>12</sup> §43-1-106 8 (a) and (i) Colorado Revised Statutes (C.R.S.) (1991).
- <sup>13</sup> Title 23 United States Code (U.S.C.) 134 and 135 (1991)
- <sup>14</sup> Title 23 Code of Federal Regulations (CFR) Part 450.
- <sup>15</sup> §43-1-1101 C.R.S.
- <sup>16</sup> Under Colorado law (§43-1-1103 CRS) , the Regional Transportation Plan must include at a minimum “the transportation system facility and service requirements of the TPR over a twenty-year planning period to meet expected demand, and the anticipated capital and operating cost for these facilities and services (preferred plan) and the fiscally constrained twenty-year intermodal transportation plan based on revenues reasonably expected to be available over the twenty-year period.” (2 CCR 604-2, VI(C)(1).)
- <sup>17</sup> Major improvements to an existing interchange includes but is not limited to changing ramp alignment, changing cross street alignment, adding lanes to the mainline and/or cross street.
- <sup>18</sup> Policy Directive 1601.0 dated 12/15/04
- <sup>19</sup> See the CDOT Procedural Directive for 1601 Process
- <sup>20</sup> §43-2-147 C.R.S.
- <sup>21</sup> The Unified Planning Work Program is a consolidated work program assembled by CDOT for federal funding in each year.
- <sup>22</sup> FHWA guidance on preparing and processing environmental documents is provided in FHWA Technical Advisory T 6640.8A.
- <sup>23</sup> DOT Order 5610.1c refers to Section 1508.26 of the Council on Environmental Quality Regulations (See Federal Register, Nov. 29, 1978; Part I p. 56005 for further direction in determining whether the impacts of a project are "significant").
- <sup>24</sup> See 23 CFR §771.117 for full list of FHWA categorical exclusions.
- <sup>25</sup> Id.
- <sup>26</sup> 40 CFR §1508.4
- <sup>27</sup> 23 CFR §771.117
- <sup>28</sup> Section 4(f) refers to Section 4(f) of the U.S. Department of Transportation Act of 1966 (§303 of the current Act) which states that “Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if - (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.” Similar provision contained in Federal Aid Highway Act of 1968, 23 U.S.C. §138.
- <sup>29</sup> This Notice of Intent is a federal requirement an EIS for federal projects. 40 CFR §1508.2 .EAs and Colorado projects without federal approvals do not require this publication.
- <sup>30</sup> CDOT Procedures for Public Involvement and Participation in The Project Development and Environmental Analysis Process
- <sup>31</sup> Federal regulations (40 CFR §1502.13) mandate that study sponsors define the underlying purpose and need which the agency is responding to by proposing alternatives, including the proposed action.

---

<sup>32</sup> For further explanation and examples see FHWA Guidance on Purpose and Need Statements; Also see Oregon DOT Purpose and Need Statement Instructions for ODOT Projects for a concise explanation of Purpose and Need statements.

<sup>33</sup> “No-Action” alternative is defined by CEQ and distinguishes between two interpretations that must be considered, depending on the nature of the proposal being evaluated. The first situation addresses ongoing programs initiated under existing legislation and regulations. In this case “no action” is “no change” from current management direction or level of management intensity. Therefore, the “no-action” may be thought of in terms of continuing with the present course of action until that action is changed. Consequently, project impacts of alternative management schemes would be compared in the EIS to those impacts projected for the existing plan.

The second interpretation of “no-action” is illustrated in instances involving federal decisions on proposals for projects. “No-action” in such cases would mean the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.

Where a choice of “no-action” by the agency would result in predictable actions by others, this consequence of the “no-action” should be included in the analysis. For example, if denial of permission to build a railroad to a facility would lead to construction of a road and increased truck traffic, the EIS should analyze this consequence of the “no-action” alternative.

The CEQ regulations require the analysis of the no action alternative even if the agency is under a court order or legislative command to act. This analysis provides a benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the action alternatives.

<sup>34</sup> Section 1508.26 of the CEQ Regulations

<sup>35</sup> While NEPA allows mitigation in lieu of avoidance, the National Mitigation MOA between the Corps and EPA does not allow bypassing avoidance if wetland impacts are involved. Under this MOA, the process of “sequencing” must be followed that requires avoidance or minimization of impacts before mitigation is considered.

<sup>36</sup> 40 CFR §1508.20

<sup>37</sup> See FHWA regulations at 23 CFR §771.129(a)

<sup>38</sup> The NEPA format is described in FHWA Technical Advisory T 6640.8A

<sup>39</sup> 40 CFR §1506.9.

<sup>40</sup> 23 CFR §771.129, 52 FR 32660, Aug. 28, 1987; 53 FR 11066, Apr. 5, 1988

<sup>41</sup> 23 CFR §771.130.

<sup>42</sup> 23 CFR §771.111(f); See also FHWA Paper 3/30/93 “The Development of Logical Project Termini”.

<sup>43</sup> See Memorandum of Understanding with Bureau of Land Management and U.S. Forest Service.

<sup>44</sup> The specific requirements for this action are found at 23 CFR §635.309.

<sup>45</sup> See the FHWA regulations regarding Uniform Relocation and Assistance Act, 49 CFR Part 24.

<sup>46</sup> Id at 31.

<sup>47</sup> For example, if the project has a 404 permit, changes to project design and mitigation measures for impacts to waters of the U.S. must be coordinated with the Corps of Engineers.

<sup>48</sup> The NEPA statute at §102(2)(D) and federal regulations 23 CFR §771.109(c) allow for delegation of some environmental tasks so long as the federal agency provides guidance, participates in the preparation of documents, and independently evaluates the NEPA document before it is adopted.