

C.4. FASTER Safety Mitigation Technical Plan

C.4.1. Introduction

Senate Bill 09-108, also known as the Funding Advancements for Surface Transportation and Economic Recovery Act of 2009 (FASTER), provides funds for addressing safety issues on Colorado roadways. FASTER allows the State of Colorado to improve roadway safety, repair deteriorating bridges, and support, and expand transit. The Transportation Commission directed CDOT to deliver a FASTER program which is divided into the FASTER Bridge, FASTER Transit, and FASTER Safety programs. FASTER Safety is subdivided into FASTER Safety Asset Management (FSAM) and FASTER Safety Mitigation (FSM).

FSM funds may be used for construction, reconstruction, or maintenance projects that enhances the safety of a state highway and may include all aspects of delivering a safety mitigation project, including: planning, financing, study, analysis, designing, engineering, mitigation, acquisition, contracting, installation, and construction activities that result in repair, reconstruction, new construction, maintenance, or operation of a highway to enhance safety.

The FSM program is focused on mitigating documented safety hazards and preventing future crashes with specific goals of reducing the number and severity of highway crashes while working towards zero deaths for all users. FSM funds are eligible for use with all modes of travel during all phases of design and construction of accepted transportation safety projects; however, construction of infrastructure improvements is required.

The Transportation Commission determines funding allocation and criteria by which projects eligible for FASTER funding are selected. The FSM Executive Steering Committee is an advisory committee comprised of members of the CDOT executive management, who review and approve the FSA Program metrics for project selection, reviews program budgets, performance metrics, schedules, and reviews and approves the statewide FSM Project Plan.

The FSM Program Staff is in the Traffic and Safety Engineering Branch. Program staff is responsible for developing metrics, identifying locations for projects, analyzing crash data, evaluating applications, managing program funding, annual reporting, and program monitoring. The CDOT Regions develop project scopes, work with local partners, prepare project funding applications, confirm locally observed safety problems, and implement and deliver projects.

The Division of Accounting and Budget establishes planning estimates for the CDOT Regions. The distribution formula is based on an economic valuation of crashes region-wide. The Transportation Planning Regions and the Metropolitan Planning Organizations provide input on safety priorities and collaborate with the CDOT Regions to develop and identify safety projects.

C.4.2. Regulatory Considerations

C.4.2.1. Regulations/Resolutions

The following provides an overview of relevant federal and state regulations and requirements governing planning, policy, data, performance, funding, and project selection of FSM projects.

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- [Senate Bill 09-108](#)
- [Colorado Revised Statute §43-4-802\(2\)](#)
- [Transportation Commission Resolution TC-17-10-12](#)
- [Policy Directive 704.0](#)
- Procedural Directive 1504.1

The Funding Advancements for Surface Transportation and Economic Recovery Act of 2009 provides funding for safety needs on Colorado’s highways through assessments and surcharges on vehicle registrations. FASTER requires that funding be used to improve highway safety. Policy Directive 704.0 allocated FASTER funding and sets forth the criteria that must be followed to select eligible projects to effectively and efficiently use FASTER revenue. This directive created the FASTER Safety Mitigation Program.

C.4.2.2. Guidelines

Procedural Directive 1504.1 establishes responsibilities and requirements for FSM pursuant to the direction provided in PD 704.0. Among the requirements established, the directive establishes the Programs planning process, as summarized in **Figure C-3**.

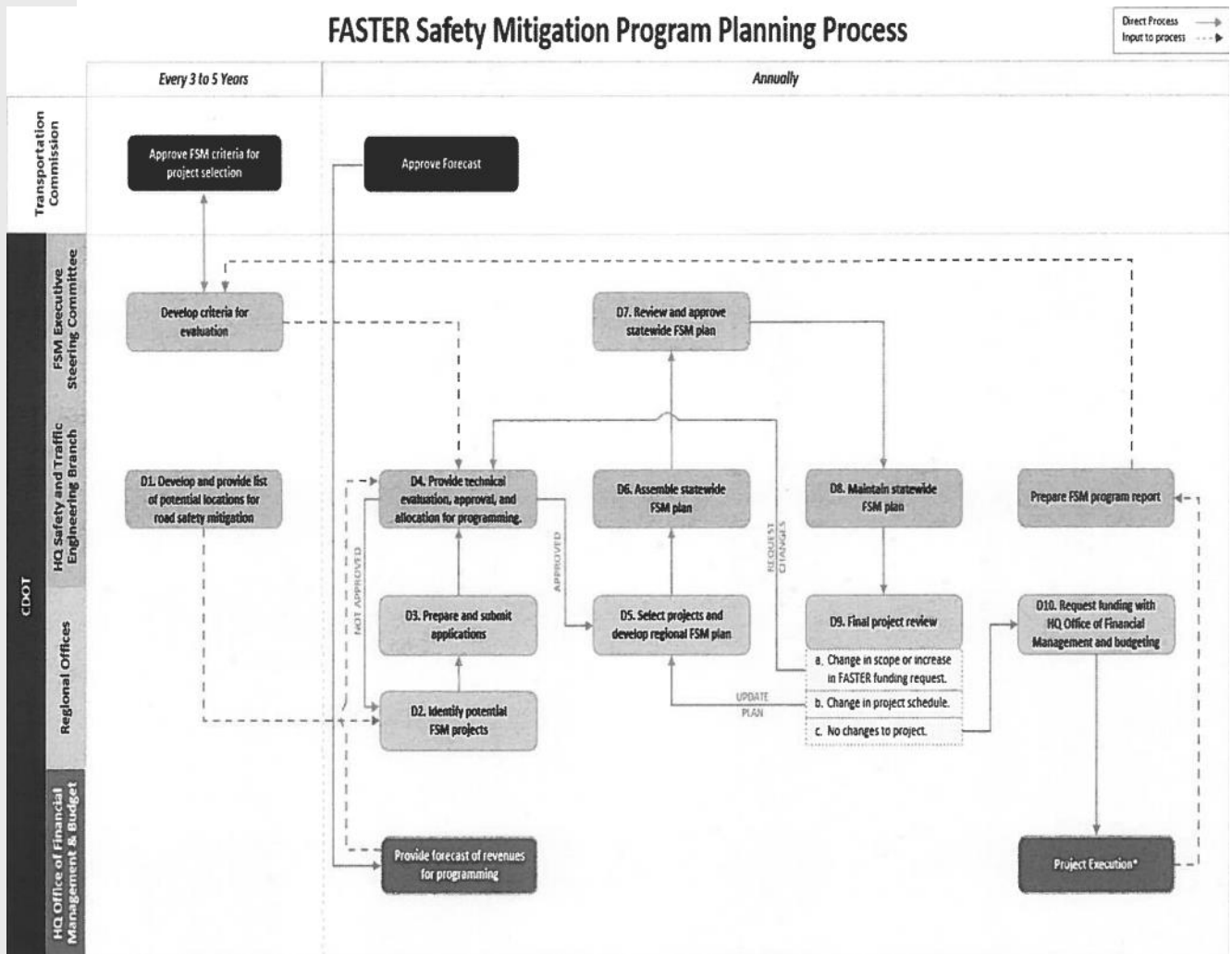


Figure C-3. FSM Program Planning Process

Source: Procedural Directive 1501.1

C.4.3. Asset Inventory & Condition

FSM is a funding source for safety projects and does not have assets. Asset owners receiving FSM funds to construct or rebuild assets are responsible for updating inventory and condition data.

C.4.4. Performance

CDOT has identified two specific lead performance measures to track program delivery:

- **Expenditure Lead Measure.** Tracked on a cumulative basis, the FASTER Safety Mitigation Program’s Fiscal Year expenditure target is 100% of its fiscal year allocation.
- **Project Selection Lead Measure.** Increase the percentage of projects that go to advertisement each month that address Level of Service of Safety (LOSS) 3 and 4 locations to at least 90 percent.



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Other performance measures are:

- **Benefit Cost Ratio Lead Measure.** Achieve an average benefit/cost ratio of at least 2.0.
- **Before and After Analysis.** Two projects from each CDOT Region are analyzed by looking at the before and after accident rates, broken down by crash severity, and the percentage of change.

C.4.5. Funding

The FASTER Act does not sunset or expire. While FASTER fees are subject to a loss of purchasing power over time, the program nevertheless ensures that the state's transportation network has a reliable source of funding for years to come. CDOT receives roughly 60% of the FASTER fines, fees, and surcharges that are maintained in the Highway User Tax Fund.

C.4.5.1. Funding Mechanisms

The FASTER Safety Mitigation Program is funded by revenues generated from FASTER legislation surcharges and fees.

C.4.5.2. Region Pool Distributions

FSM planning estimates are established for each CDOT region using a formula based on an economic valuation of regional crash experience. Region pool distributions are summarized in **Table C-15** below.

Table C-15. Region Pool Distributions (percent)

Regions	FY 2020	FY 2021 and Future
Region 1	33.00	37.29
Region 2	21.34	19.80
Region 3	17.09	11.37
Region 4	23.57	23.86
Region 5	8.00	7.68

The Executive Steering Committee reviews staff recommendations to move the allocation of FSM revenue to Regional pools in order to address issues with tracking the funding and equity among the Regions.

C.4.6. Investment Strategies

The FSM program is focused on mitigating documented safety hazards and preventing future crashes. CDOT achieves program goals by selecting projects that meet the benefit cost threshold and:

- Reduce existing crashes,
- Reduce severity of crashes,
- Address system weaknesses,
- Enhance highway features and/or functions,
- Provide a proven safety measure for a systematic or preventative location,
- Improve pedestrian and bicycle safety,
- Leverage funding opportunities with an existing project,
- Encourages cooperative efforts with local agencies.

C.4.7. Lifecycle Management & Project Selection

C.4.7.1. Lifecycle Management

Lifecycle management is undertaken by the asset owner whose project is funded by FSM.

C.4.7.2. Treatment Lists

All FSM projects must have a direct link to reducing crashes. Types of projects include pavement, culvert repair, rockfall mitigation, operations, wildlife fencing, intersection and interchange improvements, shoulders and safety-related widening, and others. To be eligible for FSM funds, however, construction of infrastructure improvements is required.

C.4.7.3. Project Selection Process

Projects are prioritized for selection primarily based on a scoring criterion which considers the following factors. These scores are used by Traffic and Safety Engineering Branch staff for formulating recommendations. FSM Executive Steering Committee concurrence may be necessary in some situations, as determined by the decision authority matrix depicted in **Figure C-4**.

- Reduce existing crashes
- Reduce the severity of existing crashes
- Address system weaknesses
- Enhance other features and/or functions
- Provide proven safety measures for systematic preventative location
- Improve pedestrian/bicycle safety
- Leveraging funding opportunities with an existing project
- Encourage cooperative efforts with local agencies

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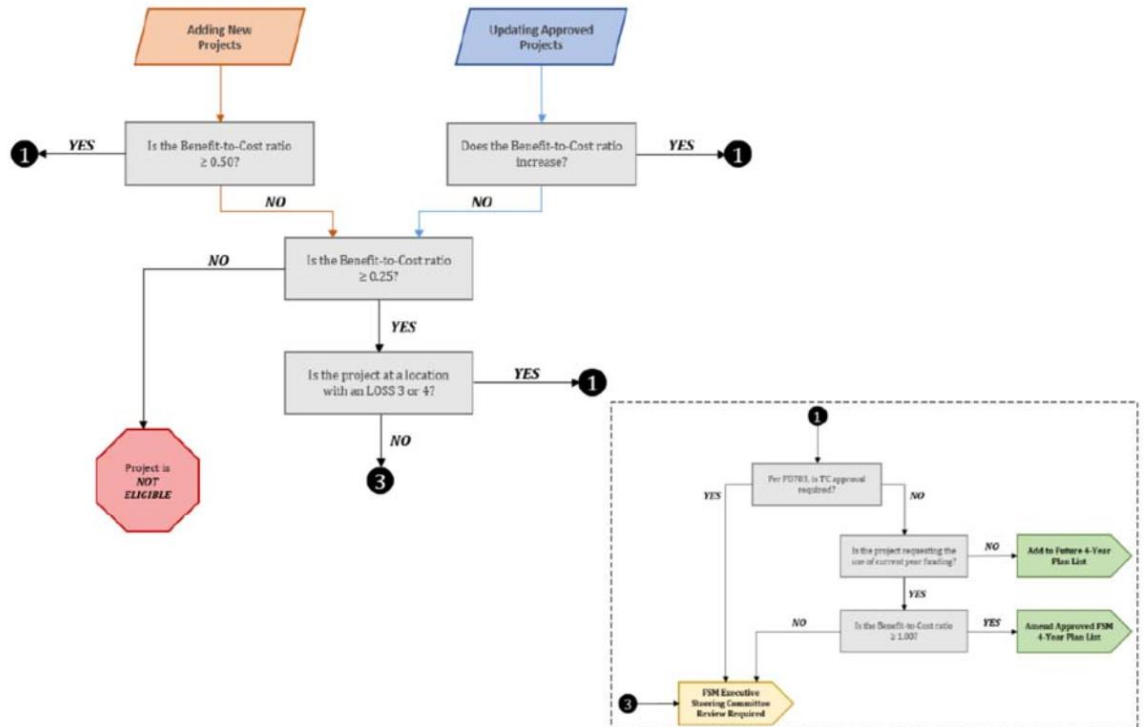


Figure C-4. Executive Steering Committee Review Flow Chart

C.4.7.4. Regions

Regions submit FSM funding requests through applications to CDOT Headquarters for evaluation of program eligibility and technical compatibility with program goals. Local agencies may also partner with CDOT for use of FSM funds by submitting an application to the appropriate CDOT Regional contact. CDOT Regional planners and engineering staff work with local partners to analyze available data and determine effective safety projects for each Region.

C.4.8. Reporting, Management, Documentation

C.4.8.1. Reporting to Internal and External Stakeholders

On an annual basis, CDOT produces a technical evaluation of the FSM status.

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C.4.8.2. Management / Advisory Committees

Key management and advisory committee roles are summarized in **Table C-16**.

Table C-16. Key Roles

Position Responsible	Description of Responsibility
CDOT Traffic and Safety Engineering Branch	The CDOT Traffic and Safety Engineering Branch tracks program performance, provides program transparency, and produces an Annual Report.
Executive Steering Committee	The ESC makes policy decision and strategic program changes to help achieve objective to reduce the number and severity of highway crashes. The committee reviews and approves the FSM Program metrics for project selection, reviews program budgets, performance metrics, schedules, and reviews and approves the statewide FSM Project Plan.
Faster Safety Mitigation Program Working Group	The FSM working group is comprised of ESC members, regions and headquarters staff and they hold regular meetings to discuss the FSM planning process, support CDOT regions with funding applications and evaluations and other program support as needed.

C.4.8.3. Documentation

