

Transportation

Highways and Bridges

Client
Colorado Department of
Transportation

Location
Colorado

I-70 Mountain Corridor Context Sensitive Solutions (CSS), Colorado

Project Highlights

- I-70 Mountain Corridor CSS project will provide a comprehensive set of engineering, aesthetic, mitigation, and construction guidelines for future improvement projects along the 144-mile corridor
- Services include development of CSS Guidance website, design guidelines, and Historic Context Report
- A one-of-a-kind effort, the I-70 Mountain Corridor CSS guidance provides direction for designers, engineers, and contractors on how to design and build the planned improvements over the next 30 years

The I-70 Mountain Corridor is a scenic route with significant environmental and historic resources. This corridor is an important recreational destination, a route for interstate and local commerce, and a unique place to live. However, increasing traffic volumes along the corridor west of Denver have prompted the need to evaluate options for meeting the demands of traffic, while still preserving the look and feel of I-70.

CDOT initiated the I-70 Mountain Corridor CSS process to provide effective guidance, integration and coordination for interrelated CDOT studies such as the I-70 Mountain Corridor Programmatic Environmental Impact Statement, the Collaborative Effort, and the I-70 Coalition Transit Planning Study.



CH2M HILL was selected by CDOT to provide professional services related to much needed improvements along the state's busy I-70 mountain corridor. Those services include planning, stakeholder involvement, and design services to support the preparation of a CSS Guidance Manual, design guidelines, and a Historic Context Report.

The CSS manual will provide a comprehensive set of engineering, aesthetic, mitigation and construction guidelines to be used for programmed improvements throughout the 144-mile corridor, which stretches along I-70 west of Denver, from Golden to Glenwood Springs.

I-70 CSS Guidance

This guidance, delivered as an interactive website, provides a sustainable set of instructions that can be applied to all individual projects along the 144-mile corridor, and ensures consistency of improvements, while allowing individual community and segment requirements to be met. At the heart of CSS is the context of the corridor. Understanding this context and the core values for the I-70 corridor will help direct designers as they engineer I-70 for the future.

The guidance also includes a definitive process to be followed for all future projects, the first of these will be Tier 2 National Environmental Policy Act



(NEPA) documents. This process defines the stakeholders, the types of teams to consider, the public interaction needed, the decision steps to be taken, and the order of these steps.

Design Guidelines

This set of specific guidelines sets the framework for I-70 improvement projects. The design guidelines include both graphical and written statements of design requirements to meet overall design objectives. These direct decisions toward designs that are appropriate in the unique mountain terrain. The design guidelines support CDOT design standards, and provide additional guidance needed for engineering shoulder width, roadway geometry, and stormwater treatment while celebrating the aesthetics (the look of the corridor); for needed mitigation such as rock fall mitigation, wildlife crossings, and wetlands mitigation; and for sustainable construction practices.

The Historic Context Report

This is a document used in all future NEPA documents as part of the Section 106 process, Environmental Assessments and Environmental Impact Statements, and ensures a complete understanding of historical resources along the corridor. It also ensures that the I-70 communities' concerns regarding their historical resources are heard and influence the solutions.

The CSS Process

The I-70 Mountain Corridor CSS process defines the steps every study, design, and construction project will use to develop alternatives, finalize designs, and implement projects. The process ensures that design and construction of transportation solutions reflect and respect the natural surroundings and enhance the futures of the corridor communities by involving all stakeholders in the decisions. In addition, by building strong partnerships between stakeholders, including users, technical experts and private entrepreneurs, the CSS process will identify shared funding opportunities where a multitude of stakeholders can meet their agency or group goals in partnership with others, reducing costs for all.

The CSS process has worked with a broad range of stakeholders to discuss community concerns and goals for the corridor, around which core values and a context statement were developed. The core values capture the essential elements that must be preserved, protected, and duplicated.

The context statement and core values will be used to guide the selection of recommended transportation solutions, as well as the engineering, aesthetic, mitigation and construction guidelines transportation planners and engineers will use for all future projects in the I-70 Mountain Corridor.