



From [Colorado DOT, I-70 Images, 2016, I-70 PPSL EB Image

I-70 Mountain Express Lanes

Colorado Department of Transportation

Denver region, Colorado

New peak period shoulder lane in the existing road shoulder (open weekends and holidays only) with dynamic pricing.

NOTABLE PRACTICES

☑ Tiered Environmental Reviews

- A Tier 1 Environmental Impact Statement analyzed a 144-mile section of I-70, laying out a vision for multimodal improvements. The two Mountain express lanes projects were subsequently cleared within the corridor via a Categorical Exclusion.

☑ Meaningful Public Involvement

- Engaged stakeholders in developing design
- Virtual public involvement brought in people who might not otherwise have participated

regularly travel to the ski resorts. High traffic volume during peak periods has slowed down traffic, often causing complete gridlock and compromising safety.

Since 2000, congestion has been increasing because of population and employment growth. This section of I-70 is somewhat unique in that it sees particularly high congestion on weekends and holidays as recreational travelers drive to outdoor activities. Drivers on the eastern part of the corridor typically experienced an extra hour of driving time compared to free flow conditions during weekend peak hours.

Colorado Department of Transportation (CDOT) projects an increase in congestion throughout the corridor, which would further limit mobility and access for commuters and recreational travelers. Overcrowding on I-70 has a negative impact on prompt emergency response time, on trucks getting to their destinations for on-time deliveries, and on tourism, as some prospective visitors choose to avoid the area.

INTRO & BACKGROUND



I-70 is the only east-west interstate in Colorado and the busiest recreation highway in the State. It is a vital transportation route for people who live and work in the mountain communities, commute to the Denver metropolitan area, or

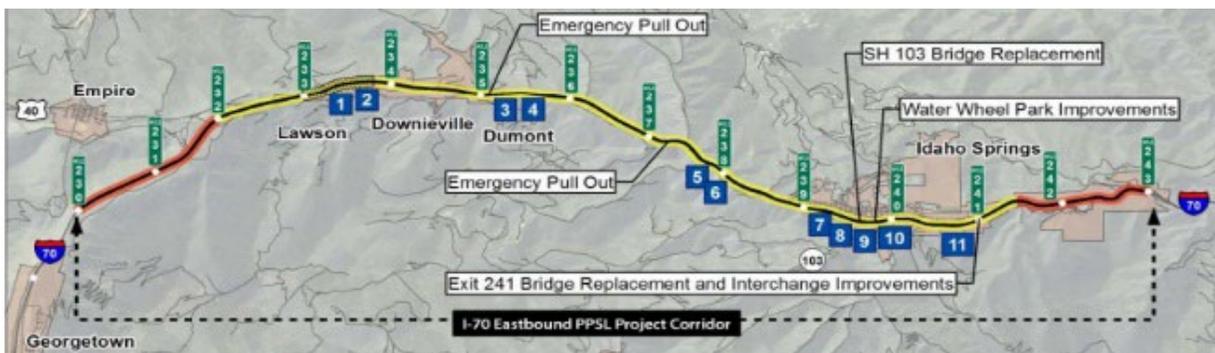


Figure 1. I-70 Eastbound Project Corridor. From [Colorado DOT, Categorical Exclusion I-70 Peak Period Shoulder Lane, 2014, Figure 2-1. Roadway Improvements. p. 2-2.]

To address the congestion due to recreational travel, CDOT developed the I-70 Mountain Express Lane projects. The eastbound express lane project involved converting 13-miles of the eastbound shoulder to operate as a third travel lane from Empire (mile point 230) to Idaho Springs (mile point 243) (Figure 1). CDOT completed the eastbound project in December 2015. The lane is open for up to 100 days per year, on holidays and weekends, when the highway experiences the most traffic congestion.

The success of the eastbound project led to the development of the westbound express lane project on the opposite shoulder. The westbound project is a 12-mile tolled lane between the Veterans Memorial Tunnels (mile point 243) and the US Highway 40 and I-70 interchange (exit 232). CDOT opened the westbound express lane for testing on July 30, 2021 and anticipates lanes to fully open to traffic in spring 2022.

Both express lanes use a dynamic pricing model, monitoring the traffic conditions and changing the toll rate based on highway congestion. Tolls typically fall between \$4 and \$6 with an *Express Toll* pass, but the approved range is from \$3 to \$30.



TIERED ENVIRONMENTAL REVIEW

CDOT's Tier 1 Programmatic Environmental Impact Statement (EIS) explored a broad 144-mile section of I-70 between Glenwood Springs on the west and the Denver metropolitan area on the east. The Tier 1 Programmatic EIS analyzed 22 alternatives (the No Action Alternative and 21 Action Alternatives) including transit alternatives, highway alternatives (e.g., reversible high occupancy vehicle or high occupancy toll lanes), and "minimal action" alternatives (e.g., transportation demand management, interchange modifications, auxiliary lane improvements).

The Tier 1 Programmatic EIS explored whether the alternatives would (1) meet the objectives of the purpose and need statement: to increase capacity, to improve mobility and access, and to decrease congestion; (2) provide for and accommodate environmental sensitivity, community values, and transportation safety; and (3) be feasible to implement. The Tier 1 Programmatic EIS incorporated data gathered over a ten-year period related to mode, capacity,

and general location, as well as public involvement.

The Preferred Alternative in the Tier 1 Programmatic EIS lays out a long-term 2050 vision of a multimodal transportation solution as well as an incremental and adaptive approach to implementing improvements, such as:

- non-infrastructure components, including increased enforcement, use of technology, travel demand management, and "expanded use of existing transportation infrastructure in and adjacent to" the corridor;
- an Advanced Guideway System, or elevated, high-speed, fixed guideway transit system to improve local access throughout the region; and
- highway improvements, with a defined Minimum Program of Improvements (which may not meet long-term transportation needs) and a Maximum Program of Improvements (which require certain "triggers" to be met prior to taking action to add capacity).

CDOT issued the Record of Decision (ROD) in June 2011. The Tier 1 Programmatic EIS ROD documented the decisions for future improvements along the I-70 mountain corridor between Golden and Glenwood Springs Colorado. CDOT documented broad decisions, such as location, capacity, and mode; and intended to analyze project-specific details during future project development.

The Peak Period Shoulder Lane projects (now called the Mountain Express Lanes) fit within the minimum highway improvements portion of the preferred alternative. CDOT analyzed and documented the proposed improvements for the eastbound lane as a Categorical Exclusion (CE) in 2014. Building on the same I-70 Mountain Corridor Tier 1 Programmatic EIS, the westbound project also resulted in a CE, completed in 2018.



MEANINGFUL PUBLIC INVOLVEMENT

As part of the outreach for the I-70 Mountain Express Lanes CEs, CDOT included considerable public involvement activities, including collecting information through both in-person and online public meetings. The Tier 1 Programmatic EIS required extensive public

outreach for any projects that fit within the minimum highway improvements portion of the preferred alternative. For the eastbound express lane project, the online public meeting site generated over 650 new visitors and 150 returning visitors as of April 2014. CDOT sent nearly 2,000 mailings, and all interested parties could check the project website for updates and future meeting information (www.i70ppsl.com). CDOT received over 1,100 comments from more than 550 agencies, organizations, and individuals.

CDOT noted that the online public meeting approach was particularly successful since it enabled more participation than typical public meetings and more meaningful input. The approach also enabled participation by users of the facility who do not live in the immediate vicinity of the project.

Community members expressed concerns about the cost of the widening, detours, and temporary changes in existing access to homes and businesses because of construction activities, pollution, and the toll fare for locals.

Through the public involvement process, CDOT was able to address many community concerns and transparently communicate the project's anticipated benefits: decreased travel times, more consistent speeds, and reduced congestion. CDOT conveyed that the anticipated reduced congestion in the general purpose lanes would improve travel times for all users, as well as travelers who choose not to use the managed lane, as there remained two non-tolled lanes available.

For the westbound express lane project, CDOT conducted in-person and online public meetings. The online public meeting site generated over 450 visitors and a total of 385 full meeting sessions. Most community members were quite

receptive to the project and looked forward to reduced congestion and improved travel times. Because of the familiarity and popularity of the eastbound project, the community was more receptive to tolling when giving feedback on the westbound project. Additionally, based on public input for the westbound express lane project, the proposed width of the express lane is wider than the I-70 eastbound express lane by two feet. This allows one extra foot in the inside general purpose lane, and one extra foot between the express lane and the median.



COMMUNITY BENEFITS

Since opening in December 2015, the eastbound express lane has relieved traffic congestion, reduced crashes, and increased reliability. Travel times have declined by 21 minutes and crash clean-up times by four minutes during periods when the lane is operating. It also relieves congestion on the local roads, improving access for residents, businesses, and emergency service providers. Overall, community feedback has been positive and responses to online polls since project opening have indicated satisfaction with the project.

CDOT expects the reduction in congestion to improve economic conditions for tourism. CE documentation for both the eastbound and westbound projects stated that congestion levels during peak travel times (i.e., weekends and holidays) noticeably affects local travel and suppresses the number of skier and other recreational visits, which in turn negatively affects local businesses that rely on the tourism economy.



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RESOURCES

I-70 Mountain Corridor Final Programmatic
Environmental Impact Statement

<https://www.codot.gov/projects/i-70-old-mountaincorridor/final-peis/final-peis-file-download.html>

I-70 Mountain Corridor Record of Decision

https://www.codot.gov/projects/i-70-old-mountaincorridor/documents/Final_I70_ROD_Combined_061611maintext.pdf

I-70 Peak Period Shoulder Lane (Eastbound)
Categorical Exclusion

<https://www.codot.gov/projects/archived-project-sites/I70mntnpps/i-70-pps-i-categorical-exclusion>

I-70 Peak Period Shoulder Lane Categorical
Exclusion (Westbound)

<https://drive.google.com/file/d/1O1yxXdC3l-pqgIUQGboH8DYjcrqsbWBZ/view>

I-70 Mountain Express Lane Project Site

<https://www.codot.gov/projects/archived-project-sites/I70mntnpps>



PHOTO CREDITS

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