

THE I-70 mountain corridor

SUMMER 2012



CONSTRUCTION

CDOT has several construction projects scheduled on and near the I-70 Mountain Corridor this season.

BIG BUMP

One of the largest projects that'll impact traffic is the landslide mitigation project, about a mile west of the Eisenhower/Johnson Tunnels (EJMT). CDOT Maintenance has been paving over this segment for several years after continuous roadway heaving at this location. This project will finally provide long-term repairs, thanks to funding from FASTER – Funding Advancements for Surface Transportation and Economic Recovery. Monies collected from vehicle registration fees are used for critical construction, reconstruction, or maintenance safety projects the Transportation Commission, or a county or municipality determine are needed to enhance the safety of a state highway, county road, or city street. The construction involves placing several caissons (a watertight chamber used as a foundation) under the road surface 20 feet to lighten the surface weight on the slide area and to fill underground voids that have developed over the years. Over the last couple of weeks, concrete barrier has been installed at the site, allowing the lanes to be realigned around the work zone. Be aware that traffic is reduced from three to two lanes in each direction and will stay that way 24 hours a day, seven days a week, through November. Some traffic slowing can be expected for the duration of the project, primarily after the week of July 4th, and

continuing through Labor Day. CDOT will open up the third lane of eastbound I-70 for the entire week of July 4th to minimize impacts for holiday travelers.

ROCKFALL

Another project in the area, about three miles east of Silverthorne, is a rockfall zone where CDOT will be taking steps to minimize possible hazards. Crews will be installing fencing and barrier, along the north slope area above westbound I-70. Lane closures and possible traffic stops should be anticipated. CDOT will be distributing additional information prior to this project, currently anticipated to begin in August.

Other I-70 West projects:

- **EJMT:** Some of the wall panels in the eastbound bore will be reinforced this summer. New grout will be placed behind the panels, increasing their adhesiveness to the tunnel walls and maintaining long-term durability on the inside of the eastbound bore. The work requires overnight single lane closures eastbound through the tunnel. CDOT anticipates the work to begin later this summer; a start date remains unknown until a contractor is selected. The panels in the westbound bore were reinforced in the mid-90s.
- **BRIDGE REHABILITATION:** Expansion joints, which allow bridges to remain flexible, will be replaced on the westbound I-70 bridge over Clear Creek at the bottom of Floyd Hill. Beginning shortly after July 4th, single lane closures can be expected from 9 p.m. to 6 a.m., Sunday through Thursday.

CONSTRUCTION

Other I-70 West projects (cont.):

- **WILDLIFE FENCING:** In an effort to reduce accidents between motor vehicles and wildlife, a new project gets underway in early July along I-70, between Genesee and Evergreen Parkway. This “high” wildlife crossing zone will be upgraded to include new fencing, lighting and signing, providing wildlife crossing warnings to motorists on I-70, as well as improve visibility at night. Traffic impacts are expected to be minor, with daytime, single right lane closures on weekdays. Work is expected to be completed in September.
- **ROAD MAINTENANCE:** Work is expected to be underway later this summer on a crack sealing project, designed to improve the road surface lifespan I-70 between Vail and Chief Hosa. The work will take place during nighttime hours, Sunday through Thursday, and require single lane closures. A contract hasn’t yet been awarded but once the project begins, it’ll continue through October.

Other Highway Projects near I-70

- U.S. 6 through Clear Creek Canyon between Golden & SH 119 **now is open on weekdays.** Fiber optics were installed and CDOT maintenance operations, including new tunnel lighting and rock mitigation work, took place. The fiber optics will eventually provide cell phone coverage through the canyon, enhancing upgrades could include:
 - Electronic message signs – providing real-time information on highway conditions, including trip travel times, giving drivers estimates on how long their trip will take
 - Closed circuit cameras – allowing for real-time traffic conditions to be relayed to travelers via www.cotrip.org and other websites and locations for traveler information
 - Digital radio system – providing two-way radio services for emergency response
 - Road and Weather Information Gathering System – Supplying CDOT Maintenance with road surface information, allowing for improved road treatment during inclement weather
- Cell phone coverage through Clear Creek Canyon is expected to be available in late July or early August.
- Due to safety concerns for pedestrians crossing U.S. 6 in Keystone, intersection improvements are underway at U.S. 6 and Rasor Drive. CDOT is adding additional signs and warning flashers at and near the intersection. Traffic impacts are minor, with most of the work taking place off-road during the day, Monday through Friday, until August.
 - CDOT has completed paving the upper six miles of Fremont Pass between Copper Mountain and Climax. Remaining work, including new guardrail, rumble strip installation, signing and striping, is taking place Monday through Thursday, from 7 a.m. to 8 p.m., (until 1 p.m. on Fridays). Delays up to 10 minutes are still possible. In addition to paving, the shoulders were widened to accommodate the large number of bicyclists who travel State Highway 91, especially in summertime. The project began last summer, resumed in early June, and continues through August.

FRONTAGE ROAD

& TWIN TUNNELS

CDOT and the Federal Highway Administration (FHWA) currently are conducting an Environmental Assessment (EA) for the widening of eastbound I-70, from east Idaho Springs, through the Twin Tunnels, to the bottom of Floyd Hill. Approval of the EA, expected in the fall of 2012, will allow construction of a third eastbound lane for 2 ½ miles, to the bottom of Floyd Hill, where a third

lane currently exists east to the Denver area. The schedule calls for this segment of I-70 to open to traffic by October 31, 2013. In the meantime, you can expect lane closures and occasional full closures at the Twin Tunnels for rock fall mitigation, surveying and inspection work:

- **Through July 31st,** single lane closures will be in place overnight on weeknights for geotechnical work in the eastbound and westbound bores.

FRONTAGE ROAD & TWIN TUNNELS

- **Week of July 9th**, a 72 hour, round the clock one-lane closure (EB only) to conduct borings in the tunnels. A 12-foot lane restriction will be in place 24 hours a day.
- **During the week of July 23rd**, you can expect 20 minute stops on eastbound and westbound I-70, up to three times a day, for rock survey and scaling operations above the Twin Tunnels. During these stops, geologists will need to rappel from the top of the hill to inspect, document and film areas for possible mitigation.
- **Project preparations continue on the I-70 Frontage Road at the east end of Idaho Springs.** Some initial work is taking place before reconstruction begins, including surveying, sediment control, and the clearing of brush and undergrowth. When the reconstruction work begins, retaining walls will be built to accommodate two lanes of traffic and a bike/pedestrian trail.
- The road will be closed to all motor vehicles (except emergency vehicles) but bicyclist and pedestrian still will be able to get through the

work zone, either by cycling through the area or by using the shuttle vehicle that will be used later during construction. Fishing will not be allowed since it's an active construction zone.

The frontage road reconstruction is expected to be completed in November. Then, in March 2013, the road will be used as the detour route for eastbound I-70 while the Twin Tunnels widening project is taking place. More information at:

www.coloradodot.info/projects/i70frontageroad-idahosprings



Rendition of proposed eastbound Twin Tunnel

More information is available at:

www.coloradodot.info/projects/i70twintunnels

WHAT ELSE IS OCCURRING ON THE CORRIDOR?

CDOT is analyzing a Peak Period Shoulder Lane (PPSL), which might be a possible short-term alternative for relieving congestion on eastbound I-70. The right shoulder would be converted into the right travel lane and the current left lane would become the PPSL when travel is at its highest, such as on Sunday afternoons in the summer and winter. Its use would be priced based on congestion levels. A key segment under consideration for the PPSL is eastbound I-70, from Empire Junction to the east end of Idaho Springs. Implementing the PPSL remains a possibility upon completion of the Twin Tunnels Widening Project.

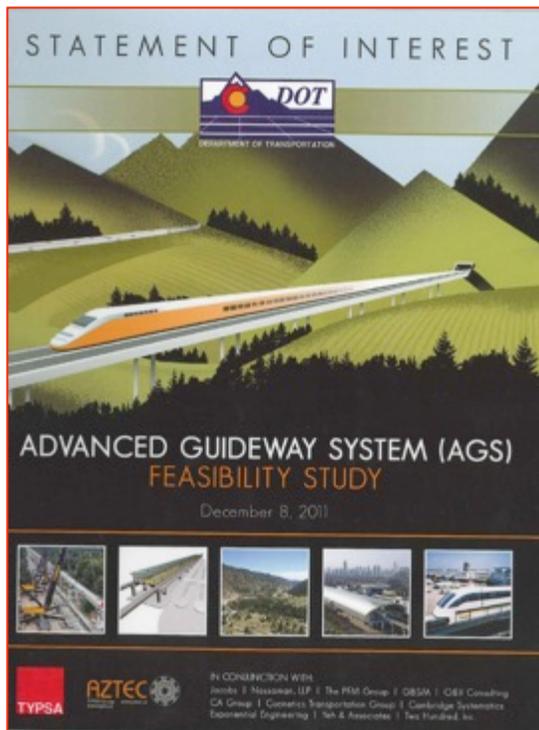
CDOT recently installed an electronic message sign across all lanes of eastbound I-70, just east of the EJMT. Known as a Dynamic Message Sign (DMS), it'll provide a greater quality picture from a distance, enhancing readability during dry and adverse weather conditions, and full color capability for construction, speed limit and other types of highway messages. CDOT currently is connecting the sign to a power source and will test it through July. It's expected to be put into service by late July or early August.

During July and August, CDOT will be conducting a truck survey to determine which large trucking firms are using the corridor during peak hours, such as Sunday afternoons. The companies which are observed to be in the corridor most often during peak travel periods will be contacted and consulted to see if their operations could be realigned outside the peak period if possible.

New this summer! When heavy travel is anticipated during key weekends, CDOT personnel will be identified and ready to assist in clearing incidents not involving injuries to help highway performance recovery.



Peak Period Shoulder Lane along left side of highway



ADVANCED GUIDEWAY SYSTEM

The Advanced Guideway System (AGS) Feasibility Study was initiated in April 2012, and will evaluate the feasibility of AGS in the I-70 Mountain Corridor from Jefferson County to Eagle County Regional Airport, a distance of 118 miles. Over 18 months the study will focus on identifying alignment, technology and financing/funding. It will use prior work like the I-70 Mountain Corridor Record of Decision and the Rocky Mountain Rail Authority High Speed Rail Feasibility Study as a starting point. Ridership, cost estimates, funding/financing strategies, revenue estimation, and outreach to industry will be included. Ridership forecasting will be conducted as part of a parallel study, the Interregional Connectivity Study due to the interrelationship of travel between the Front Range population centers and the mountain communities. The AGS Feasibility Study is following the Context Sensitive Solutions process developed for the I-70 Corridor and is expected to be complete by September 2013.



CO-DEVELOPMENT

Four engineering firms have qualified to submit a co-development proposal to assist CDOT in providing a long-term solution to the congestion and mobility issues on the I-70 Mountain Corridor through a program of highway, transit and other improvements. This also includes helping

CDOT secure a Public-Private Partnership for financing, designing, building and operating these improvements through a long-term concession agreement. The four shortlisted firms are: Parsons, CH2MHill/Atkins, HNTB and HDR.

In July of 2011, the High Performance Transportation Enterprise (HPTE), a division of CDOT, received an unsolicited proposal from Parsons for a program of phased transportation improvements on Interstate 70 between C-470 and Silverthorne initially and extending to Eagle in the future. The proposal included managed lanes to I-70 that are priced according to the level of congestions, as well as a transit system for the long term. Existing lanes of I-70 would remain

free to all vehicles. As part of the process to seek comparable proposals to the unsolicited, CDOT released a Request for Statements of Interest in March 2012 and anticipates release of the Request for Proposal to the four shortlisted firms by mid-July.

The successful applicant will be tasked with project development efforts designed to examine and validate the project concept and will include the following elements:

- Detailed Traffic and Revenue Study—confirms study assumptions and revenue forecasts
- Technical Plan- the engineering details of the project being proposed
- Financial Plan- to establish a financial structure, balancing risks and rewards, that will be attractive to private investors
- Federal Environmental Clearances

Throughout this process, CDOT and the selected co-developer will have “off-ramps” (the option to not proceed to a final agreement involving construction) should the project not be deemed financially feasible.

I-70 West App

CDOT, through a public-private partnership with the Colorado-based, The Hub Companies, dba urHub, is working on the development of a new, free Smartphone mobile application for travelers called **CDOT Mobile– The Official App**. The mobile application is designed specifically to improve the travel experience on Colorado roadways by making critical information such as highway conditions and traffic information more accessible, dynamic and interactive. CDOT Mobile will enable users to make better decisions about travel mode and route, resulting in a more productive, safe and efficient transportation system.

There is no cost to the taxpayer – or to CDOT -- in the development of CDOT Mobile and costs to fund development as well as administration and maintenance will be realized through the sale of advertising and sponsorship on the App as well as CDOT's Cotrip.org website and our 5-1-1 IVR (interactive voice response) system.

To start, the App will focus on the I-70 corridor between Denver and Vail. Then urHub will focus on I-25 to better assist commuters with their transportation needs and finally the rest of the state. A specific launch date has not yet been determined but is anticipated later this summer.

HEAVY TOW & COURTESY PATROL

It was another successful 2011/2012 season for CDOT's Winter Programs on the I-70 West Corridor. Final statistics for the Heavy Tow program included 55 days of operation from Thanksgiving to late April, 166 commercial vehicles relocated, 210 lanes cleared and an average clearance time of 20 minutes – down from 22 minutes the previous season. The estimated reduction in lost revenue with the use of Heavy Tow was \$22,399,977.



The Courtesy Patrol provided services to vehicles 1,553 times between November 2011 and March 2012. Services rendered included tire changes, providing fuel, rides to nearest town due to a disabled vehicle, and minor mechanical services

CDOT will continue both these programs during the Twin Tunnels geotechnical work and the Big Bump project to better manage incidents within the work zone.

To receive project updates for the I-70 west corridor via e-mail, visit www.coloradodot.info and click on the cell-phone icon in the upper right-hand corner. The link takes you to a list of items you can subscribe to, including *I-70 West, Denver to Glenwood Springs*. You can also get traffic information by visiting the cotrip.org website or by calling 511.



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