

## Resource Issue Tracking (as of October 3, 2013)

Resources	Initial Data Collection Results	Issues of Potential Concern
Safety	<ul style="list-style-type: none"> <li>▪ There were 780 crashes reported within the study segment between January 1, 2008 and December 31, 2012. The most predominant crash types were fixed object type crashes (concrete barrier, guard rail, embankment and walls), rear end type crashes, and sideswipe same direction type crashes. These crash types comprise approximately 82 percent of the crashes along the corridor. In general, there are several factors that contribute to the cause of crashes along the study corridor. Some of the primary factors include; the horizontal curvature of I-70, travel speed, traffic congestion due to weekend traffic, direction of travel and inclement weather / road conditions. For many of the crashes, more than one of these factors contributed. The fixed object crashes typically occurred on a winter weekday when higher travel speeds and / or poor road conditions were common factors. These barrier type crashes occurred more frequently in the westbound direction.</li> <li>▪ Rear end type and sideswipe same direction type crashes typically occurred on winter weekends when traffic congestion is more likely. These rear end and sideswipe type crashes occurred more frequently in the eastbound direction because this direction experiences higher traffic congestion. In fact, almost 50 percent of the eastbound rear end crashes occur on Sundays. At some locations, the horizontal curvature of the roadway make rear end accidents more frequent due to the inability for vehicles to see stopped traffic ahead.</li> </ul>	
Floodplains	<ul style="list-style-type: none"> <li>• The Colorado Water Conservation Board is restudying the Clear Creek floodplain that will eliminate the Zone A (approximate) delineation encumbering I-70. However, this new mapping will not be effective until 2015.</li> <li>• The area upstream and downstream from Hwy 103 at Idaho Springs will be the greatest area of concern for floodplains. The regulatory floodplain is detailed in this area with flood elevations and shows portions of the trail close to being in the floodplain. Lowering the trail would cause it to be in the 100-year floodplain in some areas and in the 50-year floodplain in others. The trail will still be well above the 10-year water surface elevation.</li> <li>• Upstream of Hwy 103, high flows are already pulling fill material from behind the steel retaining wall and the road embankment is collapsing. Expansion of I-70 into the floodplain may require some stream restoration to mitigate impacts.</li> <li>• Proposed walls in the remainder of the corridor appear to be out of the floodplain.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The only area that looks to be a concern from a floodplain perspective is the SH 103 area. Likely no need for a Conditional Letter of Map Revision.</li> <li>▪ Currently mapping the 2 year level event to use to determine the ordinary high water mark, which will then inform the wetlands/WUS impact analysis.</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>▪ The Sediment Control Action Plan includes 30,000 lineal feet of curb &amp; gutter, 32 inlet basins and 5 sediment traps to capture runoff and traction sand and direct it to water quality ponds. Only portions of the SCAP can be implemented for these “temporary” roadway improvements.</li> <li>▪ Most of the eastbound lanes drain by direct runoff to Clear Creek today. The SCAP recommendations require curb to direct runoff to water quality facilities. However, due to the reduced shoulder width, the curb cannot cause water to inundate the driving lanes in a 2- or 5-year storm event. For safety reasons, it may not be possible to construct curb.</li> <li>▪ Water quality ponds may be implemented at the emergency pull out areas. Emergency pull out areas near mileposts 236.1, 235.1, and 233.1 may accommodate water quality ponds. Other clear areas will be examined for potential water quality pond sites</li> <li>▪ Coordination is occurring with SWEEP committee.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Working to identify location for SCAP improvements. As discussed with the Tech Team, this project will not construct 100% of the SCAP recommendation, but those that are feasible.</li> <li>▪ Geotechnical work has indicated little concern for highly mineralized material. SH 103 is likely the only location of major excavation.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>▪ The project may or may not be determined to be a Type 1 noise analysis project. CDOT and FHWA are still making this determination</li> </ul>	

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Wetlands	<ul style="list-style-type: none"> <li>▪ Potential wetlands occur in the gore at Empire Junction.</li> <li>▪ Most other wetlands are restricted to the riparian corridor of Clear Creek.</li> <li>▪ A particularly tight area will be at the Spring Gulch area</li> </ul>	<ul style="list-style-type: none"> <li>▪ The only likely wetland impact is a small wetland at SH 103, likely less than 500 square feet.</li> <li>▪ The first SWEEP meeting has occurred. The second meeting will occur in late November or early December.</li> </ul>
Vegetation	<ul style="list-style-type: none"> <li>▪ Riparian habitat located throughout the corridor.</li> <li>▪ Planning to use noxious weed mapping from CCC.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conifers, if intermingled with riparian species will not be classified riparian. If intermingled with riparian species they will be classified as riparian. Vegetation loss in the median or tree loos immediately adjacent to right shoulder are the primary vegetation concerns.</li> </ul>
Wildlife and Aquatic Species	<ul style="list-style-type: none"> <li>▪ Bighorn sheep are active throughout the study area.</li> <li>▪ Wildlife may be crossing in the concrete box culvert carrying Clear Creek beneath I-70 and should be investigated further.</li> <li>▪ Raven and raptor nests in the riparian corridor and rocky outcropping adjacent to the corridor are likely. A survey should be completed.</li> <li>▪ There may be nests on bridges—will need to survey</li> </ul>	<ul style="list-style-type: none"> <li>▪ The first ALIVE meeting has occurred. The second meeting will occur in late November or early December.</li> <li>▪ Animal-Vehicle Collision hotspot map has been created and will inform a meeting between engineers and environmental staff to determine potential mitigations.</li> <li>▪ Fish and biomass data have been requested from Paul Winkle with CPW (as of 9-23-2013) but no response yet.</li> <li>▪ A field trip with the ALIVE committee to be scheduled to look at areas of potential mitigation for wildlife enhancement purposes</li> </ul>
T&E	<ul style="list-style-type: none"> <li>▪ Downstream species will need to be discussed.</li> <li>▪ Twin Tunnels EA identified peregrine falcons on the cliffs south of Empire, but Jeff Peterson from CDOT is unaware of active nests. Will check CPW data.</li> <li>▪ Collared lynx data indicate that lynx move between Guanella Pass and Berthoud Pass, sometimes crossing in the Empire Junction area. Need to determine level of analysis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A meeting with CDOT and USFWS is scheduled for the 3<sup>rd</sup> week of October. This meeting will help determine the analysis approach (memo, Tech Memo, BA). Lynx is likely the only T&amp;E concern.</li> </ul>
Cultural Resources	<ul style="list-style-type: none"> <li>▪ Cultural resource surveys are in progress, for the APE identified at the Section 106 Issues Task Force meeting on August 29, 2013. Anticipated date for initial eligibility determinations is early to mid November, with effect determinations following that. The next Section 106 ITF meeting is Oct 8, 2013.</li> </ul>	Likely only indirect effects (noise, visual, setting) to historic properties.
Recreational Resources	<ul style="list-style-type: none"> <li>▪ There are many public parks, trails and open space areas identified for recreational purposes in this study area, as well as private recreational opportunities such as rafting and the zip line. The Creek is heavily used by anglers, kayakers and rafters and the Greenway trail is becoming more of an attraction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data collection and field reconnaissance are complete.</li> <li>▪ Impacts will include views from the creek (recreationists such as anglers and rafters), construction disturbances, and possible effects to access to the Creek during construction. Improvements to peak hour mobility anticipated to enhance the recreational experience and attraction of the area overall to recreationists.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>▪ No concerns about changes to existing land use. Any improvements would be consistent with future land use and zoning.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data collection and field reconnaissance are complete.</li> <li>▪ Impacts anticipated to be limited.</li> </ul>
Environmental Justice	<ul style="list-style-type: none"> <li>▪ There are both low income and minority populations in the corridor that exceed the county average, so are protected by the Executive Order for Environmental Justice. Targeted outreach to EJ populations is planned.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data collection and field reconnaissance are complete.</li> <li>▪ EJ impacts anticipated to be limited, including some minor visual impacts from increased signage and retaining walls in some locations. Benefits would occur to EJ populations due to improvements in the peak periods in mobility both on I-70 and on the Frontage Road. Also improvements to emergency services..</li> </ul>

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Socioeconomics	<ul style="list-style-type: none"> <li>▪ Short-term impacts to residents and businesses during construction; long-term benefits due to improved mobility, safety and reliability—including for emergency access.</li> <li>▪ Concerns regarding maintaining access to businesses and residents during construction. For example, at SH 103 during reconstruction/replacement.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data collection and field reconnaissance are complete.</li> <li>▪ Impacts anticipated to be limited.</li> </ul>
Cumulative Impacts	<ul style="list-style-type: none"> <li>▪ Air Quality                             <ul style="list-style-type: none"> <li>→ The project would likely improve air quality by easing traffic congestion versus the No Action. Since improvements will be in operation such a short time out of the week, it is unlikely that increases in VMT will result. Cumulative impacts could include greater increases in VMT as other improvements are made to the I-70 corridor.</li> </ul> </li> <li>▪ Recreational Resources                             <ul style="list-style-type: none"> <li>→ Cumulative impacts could include increased numbers of visitors to the recreational areas adjacent to the corridor as population and employment increases and transportation improvements occur. This was anticipated in the PEIS documentation.</li> </ul> </li> <li>▪ Visual                             <ul style="list-style-type: none"> <li>→ Changes to visual character due to slight increase in pavement width, signage, retaining walls, and noise walls. Cumulative impacts could occur due to other I-70 corridor improvements including AGS.</li> </ul> </li> <li>▪ Water Resources                             <ul style="list-style-type: none"> <li>→ Improved cadmium levels due to cadmium mitigation project</li> <li>→ Increased impervious surface area (very minor).</li> <li>→ Increased sedimentation to Clear Creek during construction.</li> <li>→ Water use for construction activities that could result in depletions to the Platte River System, this would be addressed through existing agreements such as SPWRAP.</li> <li>→ Permanent water quality features could improve water quality, including installing features from the Clear Creek SCAP where possible.</li> </ul> </li> <li>▪ Wildlife                             <ul style="list-style-type: none"> <li>→ If widening requires a larger and/or taller barrier this could affect roadway permeability for wildlife. Cumulative impacts would occur as more I-70 improvements are made and population and employment growth occurs.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Data collection for past, present and reasonably foreseeable future projects is in progress. Reasonably foreseeable future projects include Fishing is Fun access improvements, the cadmium removal project, Colorado Blvd, ROD improvements, Greenway Plan, bus service on I-70, Auxiliary lane project and various others. Still collecting this information</li> </ul>
Visual	<ul style="list-style-type: none"> <li>▪ View of the Water Wheel resource from I-70 is important, so if signage could be placed to not affect that view, that would be a good mitigation</li> <li>▪ Travelers may notice additional signage at various locations yet to be determined. Placing signage on existing bridge structures as much as possible is recommended.</li> <li>▪ Potential visual impacts in locations where pathways are close to roadway. i.e. Clear Creek Ranger Station and Greenway path adjacent to water wheel.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Good quality photos for photo simulations will be used</li> <li>▪ Overall visual impacts are expected to be minor</li> <li>▪ Retaining walls are planned to match the existing treatment being used for Twin Tunnels.</li> </ul>

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Section 4(f)	<ul style="list-style-type: none"> <li>▪ Identification of historic properties eligible to the National Register of Historic Places will determine where or not historic Section 4(f) properties are in the area and if Section 4(f) evaluation is needed.</li> <li>▪ There are several on street bike routes designated, including several segments of the Colorado Bikeway in the project area. Many of these routes cross into CDOT ROW. These routes in CDOT ROW or designated along existing roads are not considered Section 4(f) properties because the ROW is reserved for transportation use.</li> <li>▪ There are existing several off street non motorized trails that cross through CDOT ROW, public property, and private property. Segments in CDOT ROW are not Section 4(f) properties. Hukskill Gulch ,Big Five Segment of Colorado Bikeway, Scott Lancaster Trail cross in/out of CDOT ROW and there could be temporary construction impacts to these trails</li> <li>▪ There are several proposed segments of the Greenway Trail. Some of these segments cross CDOT ROW. All these future segments can be accommodated.</li> <li>▪ The Philadelphia Mill Site is an open space/recreation area owned by CCC. Still looking for a management plan specific to this site. The access to the property is on CDOT ROW. There is a possibility of temporary impacts to this access but no permanent transportation use of the property is expected.</li> <li>▪ The Water Wheel Park is owned by CDOT so not anticipated to be protected by 4(f)</li> <li>▪ Several fishing, rafting, and boating access points within CDOT ROW would not be protected by 4(f).</li> <li>▪ No 6(f) properties are likely to be affected.</li> </ul>	<p>Since the physical impacts of the project are so small and no additional right of way is anticipated to be needed, Section 4(f) use, which is typically conversion of a public recreational facility to transportation right-of-way is unlikely. Will be confirming impacts to trails. Will be examining temporary construction impacts to all Section 4(f) properties to determine if any would be considered a “use” under Section 4(f). Will also look at the potential for constructive use (noise, visual, access impacts) of any Section 4(f) properties.</p>
Hazardous Materials	<ul style="list-style-type: none"> <li>▪ Hazardous materials evaluation, and mitigation protocols, will generally mirror the procedures used for Twin Tunnels.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Numerous mines and mills occur in the project vicinity, and there is concern that exposing this material will require special handling during construction.</li> <li>▪ CDOT is coordinating soil disposal options with CDPHE and EPA.</li> <li>▪ Completing drilling observations and soil sampling during Yeh's drilling activities.</li> <li>▪ Soil sampling conducted at the 103 bridge has not revealed mine waste.</li> <li>▪ A groundwater sample was collected on 9/26/13 at the 103 bridge to evaluate impacts from mining and nearby gas stations.</li> <li>▪ Completing Modified Environmental Site Assessment for corridor, which will include historic review of area, and present results of soil and groundwater sampling.</li> </ul>