



MEMORANDUM

DEPARTMENT OF TRANSPORTATION

Region 1 -- I-70 Mountain Corridor Management Team
18500 East Colfax Avenue
Aurora, CO 80011
303-365-7010
303-365-7350 Fax

DATE: November 2, 2012
TO: CDOT Transportation Commission
FROM: Anthony R. DeVito, Region 1 Transportation Director
SUBJECT: November 14, 2012 TC Workshop
I-70 Twin Tunnel Update and Budget Request

Purpose:

To provide the Transportation Commission an update of the I-70 Twin Tunnel Project, an overview of the Project budget, and request the Commission approve a Budget Action to fully fund the Twin Tunnel project now that its full cost is known.

Proposed Budget Actions:

- Region 1 has identified \$20 million of regional funds for the Project:
 - \$17.5 million FASTER Safety Funds (FY14)
 - \$1.5 million RPP funds (FY13)
 - \$1 million Resurfacing funds (FY13)
- In addition, to fully fund this project of statewide significance, Region 1 respectfully requests the Transportation Commission to allocate an additional \$20 million from its contingency funds.
- The request for these budget approvals is contained in the budget supplement.

Background:

In February 2011, Region 1 hosted a week-long “Tunnel Vision” workshop to investigate options for mobility improvements in the Twin Tunnels area, a consistent major I-70 bottleneck. The workshop was attended by local stakeholders as well as local, national and international tunnel design and construction experts. The recommended concept that emerged from the group included widening the eastbound bore of the tunnel and adding a third lane from the east Idaho Springs Interchange to the base of Floyd Hill and flattening curves to address safety. These proposals have become known as the Twin Tunnels Project. Initial estimates from the workshop estimated design and construction of the project at \$60 million with a timeframe of 4 to 5 years to complete.

Status:

The department has set an ambitious accelerated timeframe for the project with a target opening date of October 31, 2013 and the Project Team is well on the way toward meeting this target. This summer, work began on the detour route for the project and the Twin Tunnel Environmental Assessment was completed in record speed (13 months) due to the cooperation of many entities including, FHWA, Clear Creek County and Idaho Springs. This accelerated timeline has required the use of a number of consultants as well as the use of an innovative project delivery method, Construction Manager/General Contractor (CMGC). While the Project Team has sought to minimize costs and stay within the original estimate of \$60 million, the latest cost estimates indicate an additional \$39.6 million is needed to fully fund the project.

This shortfall is attributable to the following elements:

- Tunnel Construction Costs
 - Original Estimate: \$25 million
 - Current Estimate (30% design): \$43.5 million
 - Existing geotechnical data was sparse and the “visioning session” made optimistic assumptions that subsequent extensive geotechnical investigation revised to a substantially higher cost.

Safety People Respect Integrity Customer Service Excellence

- To meet the accelerated project schedule, tunneling will occur from both ends of the tunnel simultaneously, requiring the mobilization of two sets of tunneling equipment (additional \$4.1 million). This halving of the tunnel construction duration will have significant benefits as inconvenience to the travelling public during construction will be minimized.
- Environmental Clearance
 - Original Estimate: minimal (assumed a Categorical Exclusion)
 - Actual Cost (Environmental Assessment): \$7.2 million (includes \$3.5 million indirects)
- Design/Right-of-Way costs:
 - Original Estimate: \$6 million (indirect costs not included)
 - Actual Cost: \$17.3 Million (includes \$8.2 indirects)
- Frontage Road Project (Twin Tunnel Detour)
 - Original Estimate: \$3 million
 - Actual Cost: \$6.3 million
 - The Project that is being implemented has additional improvements not considered in the “visioning” session resulting in a wider footprint (50 vs. 30 foot width) to allow for a bike and pedestrian trail which was critical to local stakeholders.