



COLORADO

Department of Transportation

Transportation Commission Memorandum

To: Transportation Commission
From: Keith Stefanik, Chief Engineer
Jessica Myklebust, Region 1 Transportation Director
Jeff Sudmeier, Chief Financial Officer
Kurt Kionka, Floyd Hill Project Director
Date: February 19, 2025

Subject: I-70 Floyd Hill to the Veterans Memorial Tunnels
Project Update and Funding Request

Purpose

To update the Transportation Commission (TC) on the progress of the I-70 Floyd Hill Project and request additional funding to complete the I-70 Floyd Hill Project.

Action

Approval of Proposed Resolution #9 approving the February Budget Supplement and Proposed Resolution #10 approving the commitment and advancement of additional 10-Year Plan Strategic Project funds to the I-70 Floyd Hill Project.

Project Background

The I-70 Floyd Hill Project, from west of Evergreen to eastern Idaho Springs, encompasses an eight-mile section of the I-70 Mountain Corridor that acts as an economic gateway for the state of Colorado and the nation. Home to long-time residents, dozens of large and small businesses and tourism traffic, this section of I-70 is in desperate need of improvements. CDOT spent several years studying the corridor, meeting with residents, stakeholders and community leaders, and drafting potential solutions for this corridor and its aging infrastructure, which is long overdue for replacement.

The conceptual design for the I-70 Floyd Hill Project was completed in 2020 and identified two alternatives for the corridor. The alternatives included a canyon viaduct and a tunnel option. Ultimately the tunnel option was screened out due to the high cost and risk. The Environmental Assessment completed in 2021 included a refined version of the canyon viaduct alternative. The Finding of No Significant Impact was signed in January 2023, allowing construction to move forward.

The project goals for the I-70 Floyd Hill Project are:

- Improve safety, mobility, operations and maintenance
- Replace aging infrastructure, reconfigure non-standard interchanges, meet current design standards, reduce emergency response times and improve resiliency
- Foster stakeholder commitment and partnership through CSS process
- Enhance environmental stewardship
- Minimize construction and economic impacts through innovation
- Optimize scope, schedule and budget

The project scope elements and benefits of the I-70 Floyd Hill Project are:

- Add a third westbound I-70 travel lane in this two-lane bottleneck which will be a full-time tolled Express Lane from west of Homestead Road (Exit 247) to Idaho Springs (Exit 241)
- Rebuild bridges, addressing heavy usage and wear and tear
- Construct a missing two-mile section of the frontage road between US 6 and the Hidden Valley/Central City Parkway interchanges, which will improve resiliency and emergency response
- Build an extended on-ramp from US 6 onto eastbound I-70 to give slow-moving vehicles more room to merge
- Improve traffic flow and access at interchanges and intersections
- Improve sight distance and safety by straightening roadway curves
- Improve the Clear Creek Greenway trail
- Implement environmental mitigation to enhance wildlife connectivity, air and water quality, stream conditions and recreation
- Install two permanent air quality monitors

Project Delivery

CDOT determined that the project scope elements and benefits of the I-70 Floyd Hill Project could be delivered through three early action projects using CDOT's main construction delivery method of Design-Bid-Build (DBB). Below is a summary of the four main projects that deliver the full I-70 Floyd Hill Project:

- I-70 Genesee Wildlife Crossing using DBB (Complete)
- US40 Homestead & CR65 Roundabouts using DBB (Complete)
- El Rancho West Park & Ride using DBB (Substantially Complete)
- I-70 Floyd Hill Project using Construction Manager General Contract (CMGC)
 - Construction Package 1 - East Section (Under Construction)
 - Construction Package 2 - West Section (Under Construction)
 - Construction Package 3 - Access and Grading (Under Construction)
 - Construction Package 4 - Central Section (Design Complete)

As indicated above, the three early action projects are complete and successfully delivered. The I-70 Floyd Hill Project began construction in July 2023 and the accomplishments thus far include:

- Highway widening: Crews completed rock scaling and blasting in the Eastern Section of the Project, removing 97,000 tons of material from the hillside above eastbound I-70. Crews began rock scaling and blasting in the Central and West sections of the Project along I-70 between the US 6 interchange and the Veterans Memorial Tunnels in late-2024, completing 17 blasts and removing over 40,000 tons of material.
- Drainage and retaining wall installation: Crews installed 5,600 linear feet of drainage pipe and built retaining walls reinforced with 73,000 square feet of shotcrete, which helps maintain the corridor aesthetic with a natural-looking finish.
- Wildlife safety: Crews implemented a wildlife mitigation system, which included 2 miles of deer fencing in both directions of I-70 between Soda Creek and Homestead roads, accompanied by seven escape ramps and deer guard on County Road 65. This work complements the recently completed I-70 Floyd Hill Early Project, which built a wildlife underpass at I-70 and Genesee, and is expected to decrease wildlife vehicle collisions by 90%.
- New pavement: Crews used 17,900 tons of asphalt to construct 5.5 lane miles of permanent roadway between Idaho Springs (Exit 241) and CR 65 (Exit 248). Motorists are now driving on permanent pavement on eastbound I-70 between US 6 and CR 65.
- Multimodal support: The Project implemented an on-demand, daily courtesy shuttle from April through September, providing 650 trips to help multimodal users navigate the ongoing one-mile Clear Creek Greenway Trail closure between US 6 and the Hidden Valley interchange.
- Local economy boost: Over 1,000 field employees have contributed to more than 271,000 work hours to the Project. Kraemer North America currently has 158 subcontractors, with 148 being Colorado businesses and 82 certified as disadvantaged business enterprises, which are for-profit businesses that are majority-owned by socially or economically disadvantaged individuals. Nearly 100 suppliers support the Project.

Project Cost

The estimated cost for the I-70 Floyd Hill Project shown in the 10-Year Plan is \$700 million and was based upon the conceptual design and 2020 construction pricing. In 2022 CDOT was awarded a \$100 million INFRA Grant, increasing available project funding to \$800 million. As the design of the project progressed, more detail became known, including changes to design standards and new requirements. The Environmental Assessment established design criteria that included assumed reduced

shoulder widths along I-70 where it navigates narrow sections of the Clear Creek canyon. After consultation with FHWA, the project did not move forward with a design exception for reduced shoulder widths. It was ultimately decided that additional shoulder widths are required on the I-70 bridge structures which result in additional cost to the project.

Regarding project costs, the 2020 cost estimate for the I-70 Floyd Hill Project assumed an escalation rate of 2.5% year over year. CDOT tracks construction cost escalation and inflation across CDOT projects on an ongoing basis. CDOT data for the last four years reports an escalation at 3.84% in 2021, 6.18% in 2022, 7.51% in 2023 and 6.75% in 2024. The higher escalation rates account for \$170 million in additional costs to the I-70 Floyd Hill Project when compared to the 2020 cost estimate.

Upon completion of 90% plans and cost reconciliation for the I-70 Floyd Hill Construction Package 4 - Central Section in December 2024, the estimated budget became more clear, resulting in the need for additional funding.

Project Budget Information

In September 2022, CDOT was awarded a \$100 million grant from the Infrastructure Investment and Jobs Act (IIJA). This is more than CDOT has received through any prior single grant from the U.S. Department of Transportation. The table below provides a summary and comparison of the previously identified funding amounts assumed compared to the current funding need.

Funding Source	Previously Identified Funding Amount	Proposed Funding Amount	Funding Difference Amount
10-Year Plan Strategic Funds*	\$340,000,000	\$380,000,000	\$40,000,000
Bridge and Tunnel Enterprise**	\$260,000,000	\$300,000,000	\$40,000,000
CTIO (TIFIA)***	\$100,000,000	\$80,000,000	-\$20,000,000
USDOT INFRA Grant	\$100,000,000	\$100,000,000	\$0
HSIP	\$0	\$5,000,000	\$5,000,000
FASTER Safety Mitigation	\$5,000,000	\$10,000,000	\$5,000,000
Regional Priority Projects	\$0	\$30,000,000	\$30,000,000
Total	\$805,000,000	\$905,000,000	\$100,000,000

*TC approval request via Proposed Resolutions 9 and 10 at February 2025 meeting

**Eligible funding to be approved by BTE Board in a future action

***CTIO funding subject to final approval from CTIO Board and completion of successful financing

The above table identifies \$100 million in additional funding sources and amounts required to complete the I-70 Floyd Hill Project and are detailed below:

- An additional \$40 million of strategic funds are needed to meet the estimated project cost as indicated in the first line of the above table. To accomplish this, Region 1 is proposing to reallocate \$10 million from the I-25 Interchange Reconstruction at Speer Boulevard and 23rd Avenue Project (FY19-FY26 10-Yr Plan period) to the I-70 West: Floyd Hill Project. Region 1 also proposes to advance \$30 million from the FY27+ 10-YR Plan period to the FY19-FY26 period by reallocating \$15 million from the FY27+ period from the I-70 and Kipling Street Interchange and \$15 million from the FY 27+ period from the I-70 Climbing Lane from Bakerville to the Eisenhower Tunnel project to the I-70 West: Floyd Hill project in the FY19-FY26 10-YR Plan period.
- The Bridge and Tunnel Enterprise (BTE) eligible costs have also increased by approximately \$40 million through the development of the design for the project, thus the increase in BTE contribution to this Project.
- Further information regarding the financing potential for the project resulted in a revised estimated value from TIFIA of \$80 million, which is \$20 million less than originally anticipated. The reduction in the assumed TIFIA amount was primarily related to the conflict between the the current 2035 operational end date of the Mountain Express Lanes and the thirty year term of the loan CTIO has been pursuing.
- Region 1 has identified \$30 million of Regional Priority Projects (RPP) pool funding that was unprogrammed.
- Region 1 has identified \$5 million HSIP funding and \$5 million FASTER Safety Mitigation funding which are unprogrammed funds that were recently returned to the pool from savings on previously completed projects.

Next Steps

CDOT requests the Transportation Commission's approval to reallocate \$10 million in strategic funding from the FY 19-26 Period (via Proposed Resolution #9 - February 2025 Budget Supplement) and advance \$30 million in strategic funding from Planned Fiscal Years 27+ Period to the FY19-26 Period for the Floyd Hill Project (via Proposed Resolution #10 - Reallocating and Advancing 10-Year Plan Strategic Funding).

This reallocation/advancement of 10 Year Plan Funds combined with \$40 million of available Region 1 pool funds will allow the final construction package for the Floyd Hill Project to be negotiated in March 2025 and remain on schedule to begin in summer 2025.

Attachments

Attachment A: Floyd Hill Presentation



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Department of Transportation

I-70 Floyd Hill Project Update

February 19, 2025



I-70 Floyd Hill Project Status

Why are we here today?

- Give an update on Project progress
- To secure funding to deliver final package of I-70 Floyd Hill Project

Project Update

- Under construction since July 2023, approximately 18 months
- Three construction packages are underway
- I-70 will be in final alignment based on current design in late 2028
 - Eastbound I-70 = End of 2027
 - Westbound I-70 = End of 2028
 - Project fully complete = 2029



Construction Map & Timeline

East Section

Starts: July 2023

Ends: Summer 2026

Central Section

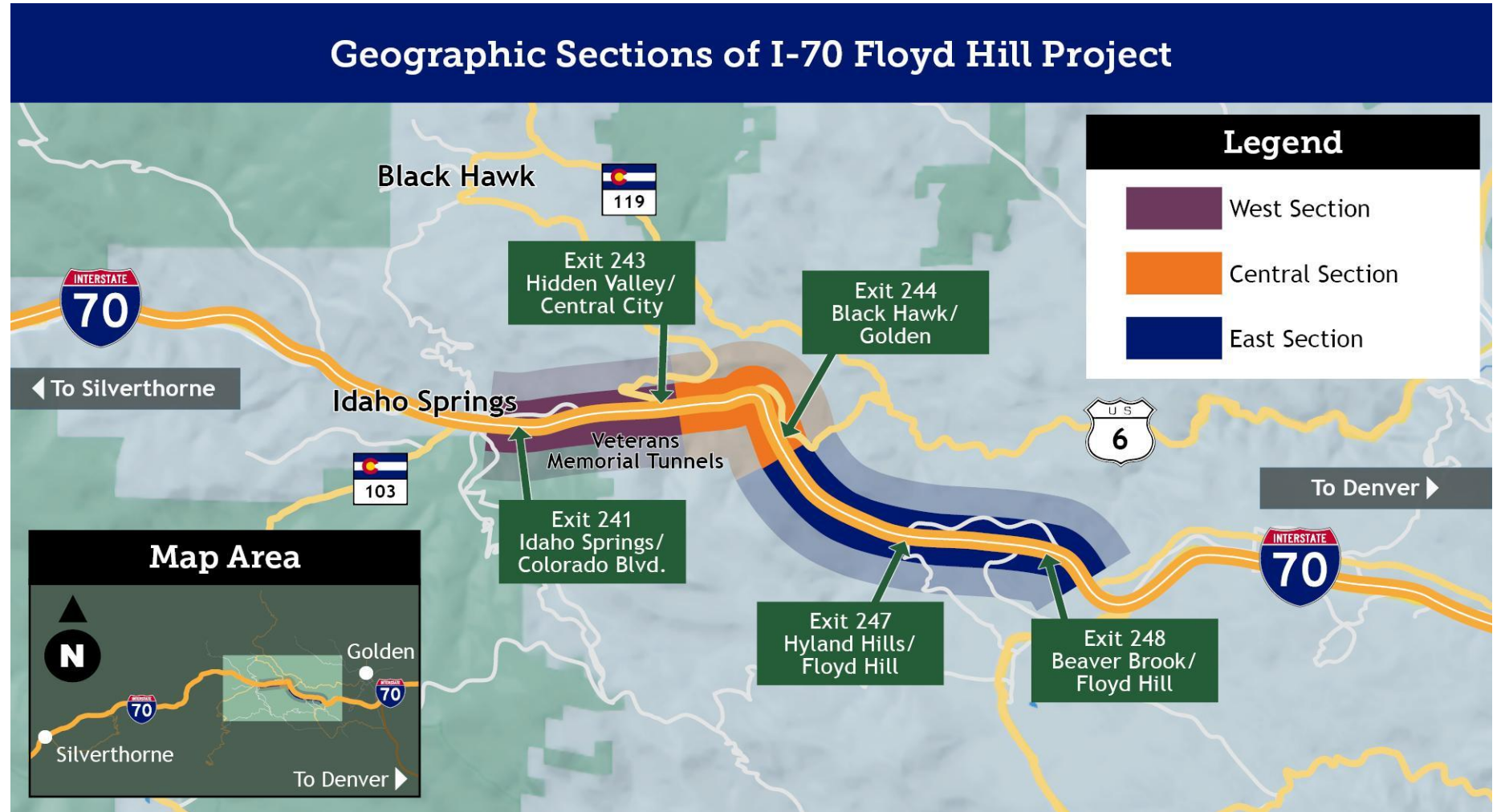
Starts: March 2024

Ends: Mid 2029

West Section

Starts: Fall 2023

Ends: Fall 2027





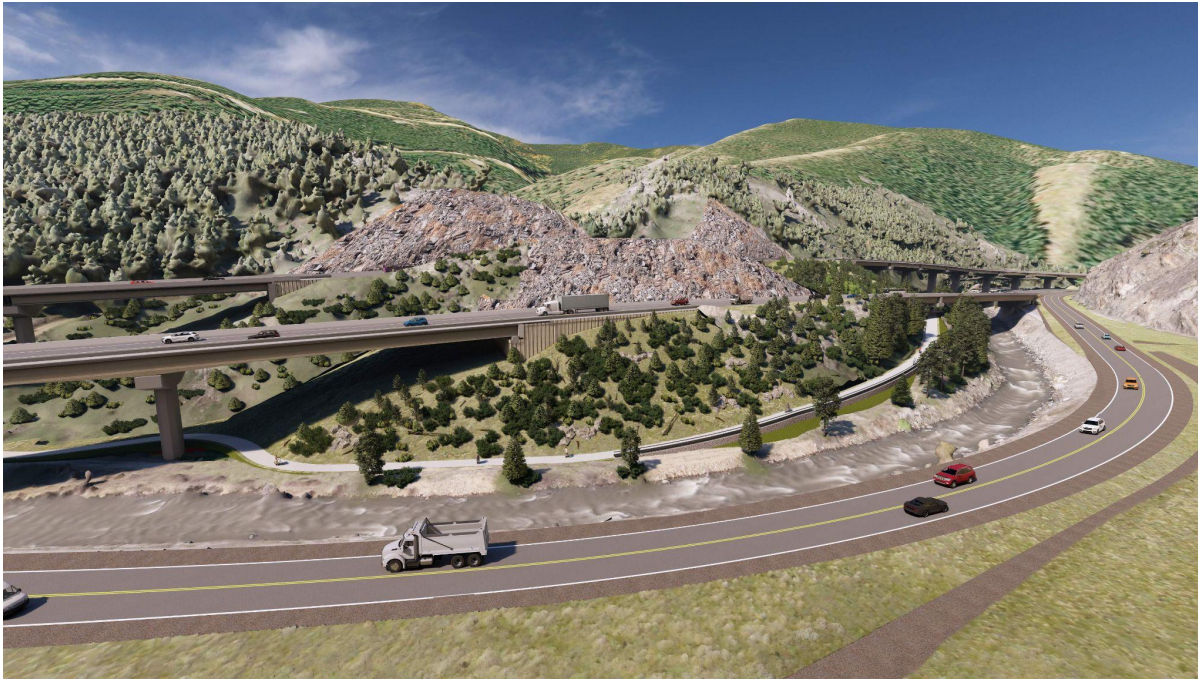
Project Benefits

- Project Improvement benefit include:
 - Travel time reliability by adding a third westbound I-70 travel lane, which will be a full-time, tolled Express Lane between Homestead Rd. (Exit 247) and Idaho Springs (Exit 241)
 - Emergency response and resiliency by constructing a missing two-mile section of frontage road between US 6 and Hidden Valley/Central City Parkway
 - Merge conditions and traffic flow by extending the on-ramp from US 6 onto eastbound I-70
 - Traffic flow and access at interchanges and intersections
 - Safety by addressing sight distance and straightening roadway curves
 - Clear Creek Greenway trail to benefit multi-modal transportation and recreation
- Other Project Benefits:
 - Enhance wildlife connectivity, air and water quality, stream conditions and recreation
 - Install two permanent air quality monitors





Design Renderings of Final Project





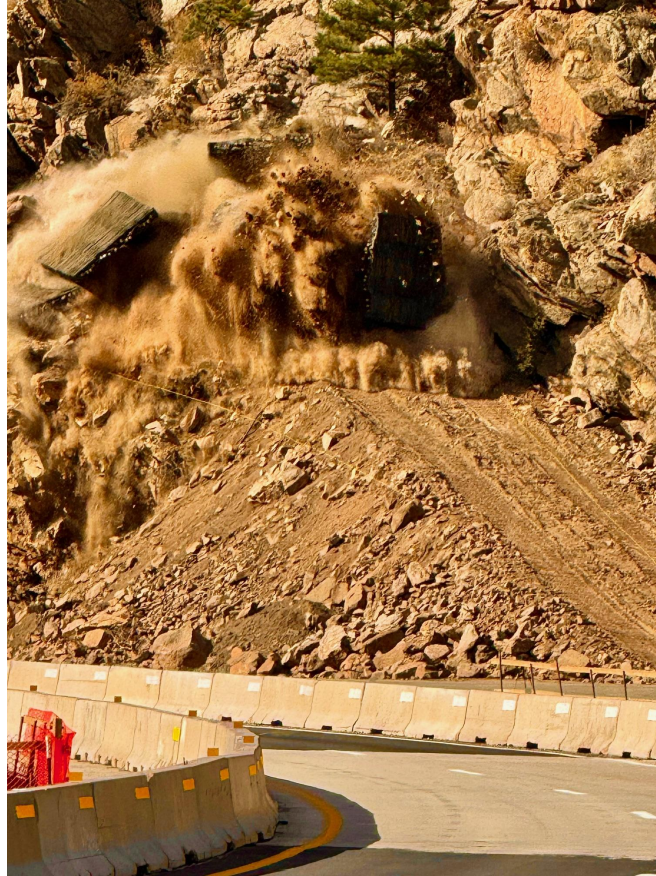
Project Achievements

- Completed rock scaling and blasting in the East Section of the Project
- Began rock scaling and blasting in the Central and West sections of the Project, completing 17 blasts
- Installed 5,600 linear feet of drainage pipe
- Built retaining walls reinforced with 73,000 square feet of shotcrete
- Installed two miles of deer fencing in both directions, seven wildlife escape ramps and a deer guard on County Road 65
- Constructed 5.5 lane miles of permanent roadway between Idaho Springs (Exit 241) and CR 65 (Exit 248)
- Implemented an on-demand, daily courtesy shuttle from April through September, providing 650 trips to help multimodal users navigate the ongoing one-mile Clear Creek Greenway Trail closure





2024 Construction Activities





Early Projects

I-70 & Genesee Wildlife Underpass

Completed: June 2024

Cost: \$14 million



US 40 & Floyd Hill Roundabouts

Completed: August 2024

Cost: \$14 million



I-70 El Rancho Pegasus Shuttle Stop

Completion: February 2025

Cost: \$4 million





Project Cost Update

- In 2020, estimated project cost was \$700 million based on 20% conceptual design
 - Project received an additional \$100 million in 2022 from a successful USDOT INFRA Grant
- As design progressed from conceptual to final the project details become known
- Since 2020, industry faced cost pressures resulting in rising construction and material costs which directly impacted the I-70 Floyd Hill Project
- Additionally, Project team continuously finding cost savings wherever possible
 - Identified over \$140 million in savings from 30% design
- 2025 cost to deliver as scoped is now \$905 million
- The discussion today is to find a way to fully fund the Project and keep construction moving forward



I-70 Floyd Hill Project Cost Pressure Examples

Material	*2020 Material Cost	**2023 Material Cost	Percent Increase
Steel	\$1.22 / Lb.	\$2.16 / Lb.	77%
Structural Concrete	\$806 / Yard	\$970 / Yard	20%
Asphalt	\$93 / Ton	\$126 / Ton	35%

* Based on Environmental Assessment, more intense industry cost pressures than expected.

** Disturbance in supply chain, labor cost increase above 5% annually to the midpoint of actual expected construction vs. 2.5% expected before 2020.



CTIO Project Financing

Operations of the Eastbound and Westbound I-70 Peak Period Shoulder Lanes (or MEXL Lanes) is governed by a 3-Party Memorandum of Understanding (MOU) between FHWA, CDOT and CTIO.

- The MOU outlines operations limits of the lanes, including a days/hours cap on when the shoulder can be open as a lanes
- The MOU states that the lanes will cease operation by 2035 unless modified by a different project
- CTIO's financing capacity assumes that both Eastbound and Westbound MEXL revenue plus the future revenue generated from the Floyd Hill lane are available to secure a 30 year federal loan infrastructure loan
- The current 2035 end date creates a conflict with the 30 year term of the loan CTIO is pursuing for the project
- CTIO is assessing impacts to the financing schedule
- CTIO is updating its traffic and revenue modeling to refine its estimated project contribution
- Currently assuming \$80 million in financing





Funding Status

Funding Source	Previously Identified Funding Amount	Proposed Funding Amount	Funding Difference Amount
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Recommended Solution for 10 Year Plan Funding

Region 1 10-YR Plan Project	Current Fiscal Year (FY) FY19 to FY26 Period	Reallocation / Advancement of Funds to FY19 to FY26 Period	Revised FY19 to FY26 Period	Current FY27+ Period	Reallocation Of Funds to FY27+ Period	Revised FY27+ Period
I-70 West: Floyd Hill	\$ 340,000,000	\$ 40,000,000	\$ 380,000,000	\$0	No Change	\$0
I-25 Interchange Reconstruction at Speer Boulevard and 23 rd Avenue	\$ 15,000,000	\$ (10,000,000)	\$ 5,000,000	\$0	\$ 10,000,000	\$ 10,000,000
I-70 and Kipling Street Interchange	\$ 2,500,000	No Change	\$ 2,500,000	\$ 27,500,000	\$ (15,000,000)	\$ 12,500,000
I-70 Climbing Lane from Bakerville to the Eisenhower Tunnel	\$ 2,500,000	No Change	\$ 2,500,000	\$ 25,000,000	\$ (15,000,000)	\$ 10,000,000