



# COLORADO

## Department of Transportation

Statewide Bridge Enterprise  
2829 W. Howard Place  
Denver, CO 80204-2305

### MEMORANDUM

**TO:** BRIDGE ENTERPRISE BOARD OF DIRECTORS  
HIGH PERFORMANCE TRANSPORTATION ENTERPRISE BOARD OF DIRECTORS

**FROM:** JEFF SUDMEIER, CHIEF FINANCIAL OFFICER  
NICK FARBER, HPTE DIRECTOR  
NEIL OGDEN, FLOYD HILL PROJECT MANAGER

**DATE:** NOVEMBER 18th, 2020

**SUBJECT:** HPTE/BE JOINT SESSION: FLOYD HILL WORKSHOP

#### Purpose

Region 1, Bridge Enterprise (BE), and High Performance Transportation Enterprise (HPTE) staff have prepared this joint workshop to provide the BE and HPTE Board of Directors (Boards) an introduction to and status update for the Floyd Hill project and request feedback regarding potential strategies to fund Phase I of the project.

#### Background

##### *Project Overview*

The Floyd Hill to Veterans Memorial Tunnels project is on I-70 West of Denver Metro in Clear Creek and Jefferson Counties. This corridor is a critical for commuters, recreational travelers and commerce and is the primary east-west route in Colorado. The core purpose of the project is to make the following key improvements in this segment of the I-70 corridor including:

- Improve travel time reliability, safety, and mobility
- Address deficient infrastructure
- Improve multi-modal connectivity
- Provide alternate routes for emergencies or severe weather

Two Alternatives with a No Build Alternative are currently being considered in an Environmental Assessment (EA):

- Canyon Viaduct Alternative
- Tunnel Alternative

##### *Project Status*

- Preliminary design complete
- EA anticipated to be complete in early 2021
- Project total cost for either alternative is estimated at \$700M
- Construction Manager/General Contractor Delivery
- Strong stakeholder and public support

##### *Project Schedule*

- EA release anticipated early 2021
- Environmental Decision Document summer/fall 2021
- Final Design 2021 through 2022
- Construction 2022/2023 through 2025/2026

##### *Project Funding*

The total project cost is estimated at \$700M, however the current strategy is to deliver the project in two severable packages using CM/GC project delivery. The current Phase I cost estimate is \$450M and between \$350M and \$450M of potentially available or future funding has been identified, including \$100M of SB267 funding and up to \$350M of potential participation by the Enterprises. The project funding gap is between \$0 and \$100M depending on the participation level of the Enterprises.

#### Details

Staff are in the process of evaluating a range of participation levels and funding strategies for the Enterprises to close the project funding gap and minimize the resulting impacts to each program. The table below provides a high-level summary based on current Floyd Hill Phase I cost estimates.



Floyd Hill - Phase I Funding Need	<b>\$450,000,000</b>			
Funding	Max HPTE/Max BE	Base HPTE/Max BE	Max HPTE/Reduced BE	Base HPTE/Reduced BE
SB 267 Years 3/4	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000
HPTE	\$90,000,000	\$50,000,000	\$90,000,000	\$50,000,000
BE	\$260,000,000	\$260,000,000	\$200,000,000	\$200,000,000
CDOT (Funding Gap)	\$0	\$40,000,000	\$60,000,000	\$100,000,000

CDOT participation may be necessary to fund Phase I of the project unless the Enterprises' participation is maximized. One significant tradeoff to consider is that increased BE participation reduces the future "pay as you go" program capacity but reduces or eliminates the funding gap that CDOT must fill. CDOT funding gap would need to be filled either through currently unidentified future revenue sources and/or financing, which would commit additional base revenue to debt service.

*Board Feedback is Requested on the Following Items:*

1. Would the HPTE Board be comfortable going above what toll revenue could support on the project if there is an option to refinance prior to maturity, so long as there is a TC backstop?
2. Would the BE Board be comfortable with maximizing the BE contribution to Floyd Hill?

Additional details are outlined in Attachment A: Floyd Hill to Veterans Memorial Tunnels - Bridge Enterprise and High Performance Transportation Enterprise Joint Workshop

**Next Steps**

1. Continue to advance the project toward final design
2. Continue coordination with financial and legal advisors, bond counsel, and FHWA to evaluate various funding scenarios
3. Continue the development of a more detailed project funding plan and return to the Boards/TC with future updates

**Attachment:**

Attachment A: Floyd Hill to Veterans Memorial Tunnels - Bridge Enterprise and High Performance Transportation Enterprise Joint Workshop







**COLORADO**

Department of Transportation

**Floyd Hill to Veterans Memorial Tunnels  
Bridge Enterprise and High Performance  
Transportation Enterprise Joint Workshop  
November 18<sup>th</sup> 2020**









# Project Purpose



Improve travel time reliability, safety, and mobility



Address deficient infrastructure



Improve multimodal connectivity



Alternate route for emergencies or severe weather



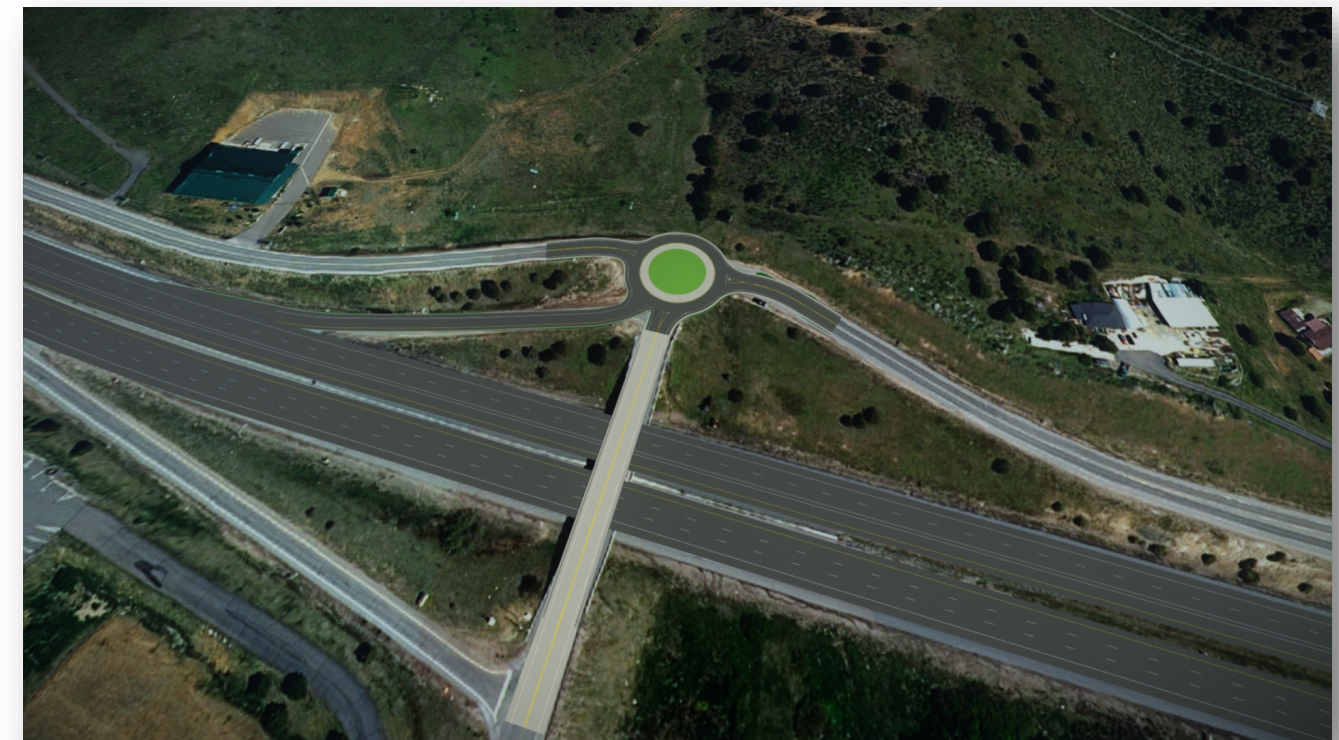




# Project Overview

## Project Major Features

- Westbound I-70 reconstruction with addition of third travel lane
- Replacement of two Bridge Enterprise eligible bridges
- Westbound and eastbound I-70 curve flattening and safety improvements
- Interchange and intersection improvements throughout project
- Greenway improvements
- Frontage road addition between Central City Parkway and US 6 Interchanges
- Wildlife safety mitigation improvements including potential wildlife crossings
- Eastbound I-70 Floyd Hill climbing lane for heavy commercial or slow moving vehicles







# Project Overview and Status

➤ Two Alternatives with a No Build Alternative currently being considered in an Environmental Assessment (EA)

- Canyon Viaduct Alternative
- Tunnel Alternative

➤ Project Status

- Preliminary design complete
- EA anticipated to be complete in early 2021
- Project total cost for either alternative is estimated at \$700M
- Construction Manager/General Contractor Delivery
- Strong stakeholder and public support

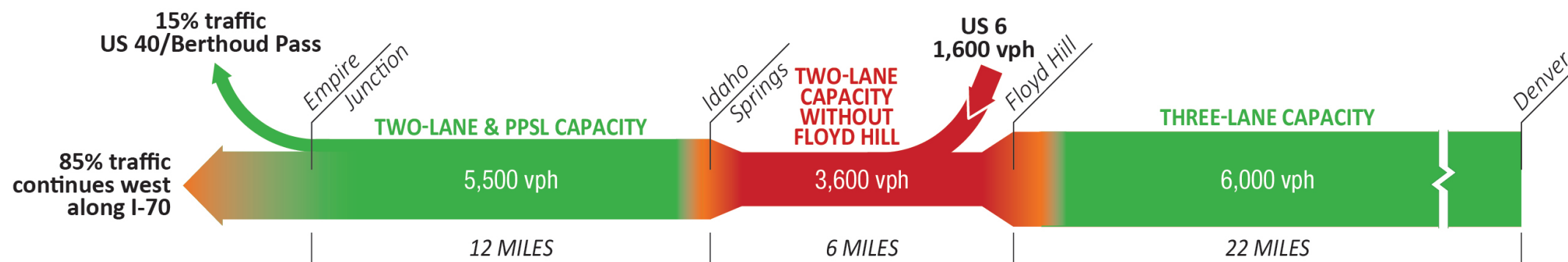






# Project Benefits

- Improves safety
- Eliminates historic westbound I-70 bottleneck at top of Floyd Hill
- Reduces congestion on adjacent local transportation system
- Replaces two bridges eliminating long standing maintenance issues and impacts to travelling public required to maintain these bridges
- Ties to the westbound Mountain express lane to provide continuous capacity from Denver to Empire Junction (US 40)
- Reduces animal vehicle collisions
- Reduces travel time by over an hour through project area during peak period travel times







# Project Packaging and Delivery Strategy

## ➤ Strategic Packaging

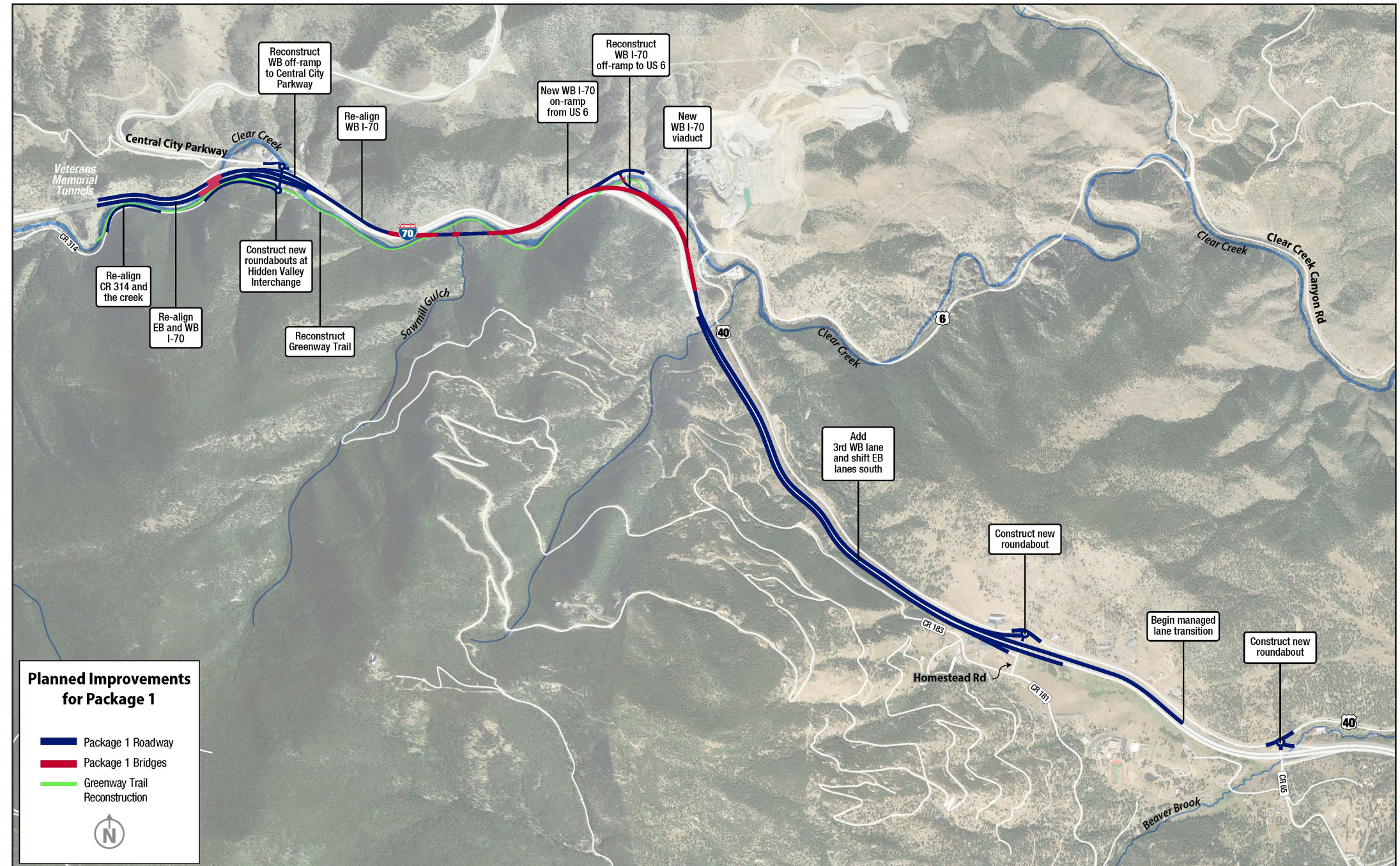
- Package 1 - \$450M
- Package 2 - \$250M

## ➤ Package 1 Scope

- Westbound I-70 additional capacity and safety Improvements
- Replacement of the two BE Eligible Bridges
- Interchange/intersection Improvements
- Greenway improvements
- Wildlife Mitigation/Crossings

## ➤ Package 2 Scope

- Eastbound I-70 curve flattening
- Frontage Road Connection

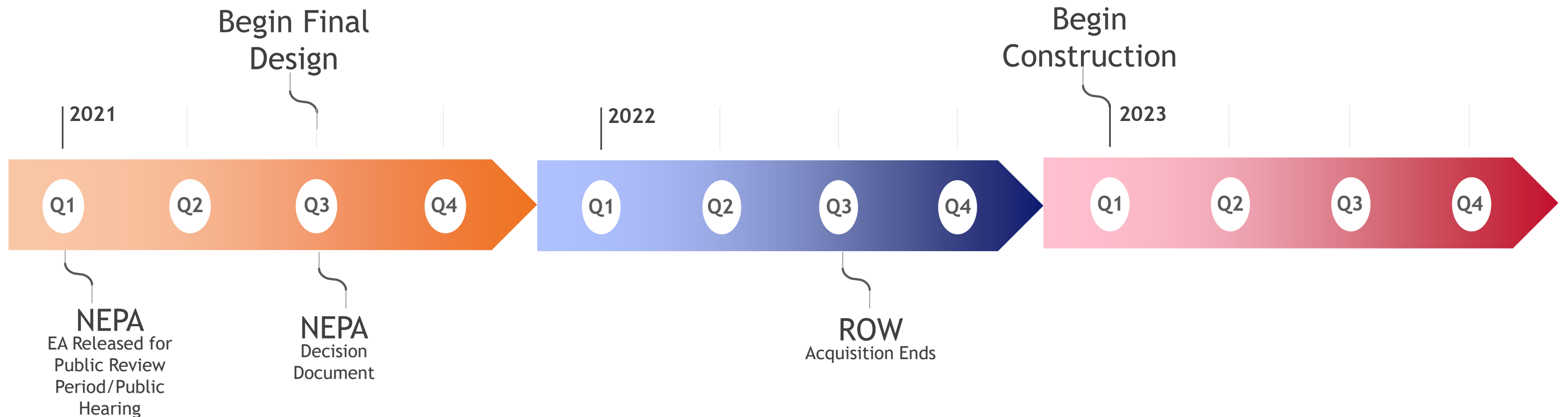






# Potential Package 1 Schedule

- EA release anticipated early 2021
- Environmental Decision Document summer/fall 2021
- Final Design 2021 through 2022
- Construction 2022/2023 through 2025/2026







# Costs and Funding

- Total project cost estimated at \$700M
- Floyd Hill Funding Gap Study underway to evaluate funding and financing options
- Package 1 funding gap between \$0-\$100M
- Package 2 future funding need (4-5 years out)
- Current potential available/future funding:
  - \$100M SB 267 (Years 3 and 4)
  - \$200M to \$260M BE
  - \$50M to \$90M HPTE
  - Total Available Funding Range: \$350M to \$450M



Package 1 Funding Shortfall





# Floyd Hill - HPTE Project Commitment

## What HPTE is doing now

- HPTE is currently leading the Floyd Hill Revenue Gap Funding Study.
  - The study is focused on identifying funding options for the Floyd Hill Project
  - Build consensus within the stakeholders on preferred funding scenario(s)
  - Sketch level analysis will be done near Christmas
  - A more in-depth analysis will be complete by summer 2021
- Currently, HPTE is conservatively committed to providing the project \$50M financing from anticipated toll revenue
- The \$50M could go up or down based on the Funding Study Results





# Floyd Hill - HPTE Project Commitment

## Where are we going?

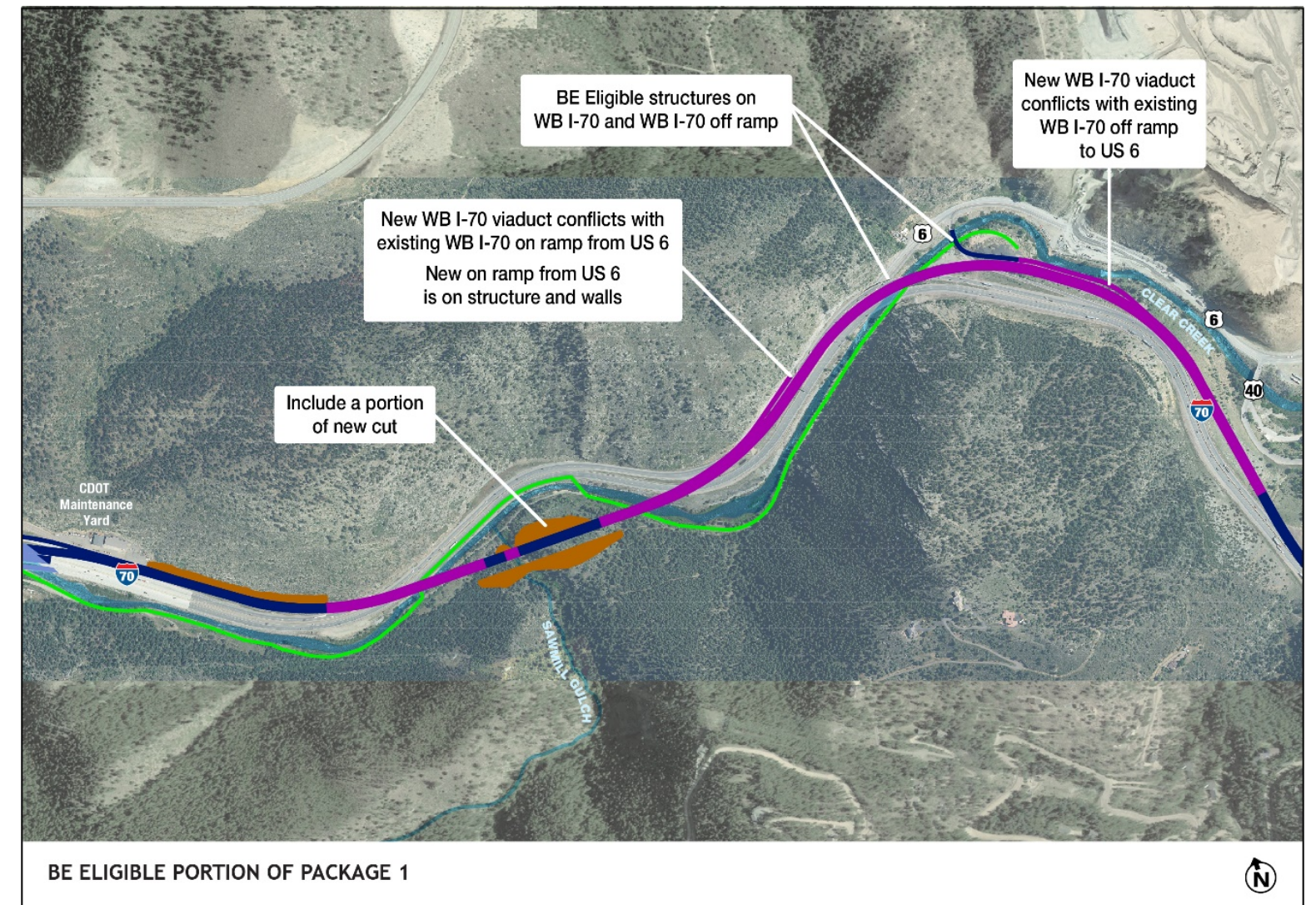
- HPTE is looking at different funding options for the project:
  - TIFIA or rural TIFIA
  - Toll backed revenue bonds
  - Bank loan
  - A master trust indenture funding structure (like I-25N) to see if EB/WB MEXL revenue could be combined to leverage additional funding
  - Private equity





# BE Eligibility Overview

Item	Cost
Preliminary Engineering	
ROW / Utilities	\$2,800,000
Design	\$12,700,000
<b>Preliminary Engineering Subtotal</b>	<b>\$15,500,000</b>
Construction	
WB I-70 (F-15-BL)	\$160,000,000
WB I-70 Off Ramp to US 6 (F-15-BM)	\$21,500,000
Off Structure Tie in Impacts	\$35,000,000
Construction Management	28,000,000
<b>Construction Subtotal</b>	<b>\$244,500,000</b>
<b>Program Cost - 2020 Dollars No Escalation</b>	<b>\$260,000,000</b>



- Participation level is variable since there is no legislative mandate for BE to address every “poor” rated structure and there are multiple eligible components
- Maximum BE contribution based on eligibility criteria is \$260M



## 1. FASTER Revenues

- The BE project budget is fully programmed through the period FY2021-FY2024 STIP and is fiscally constrained
- Use of BE revenues for Floyd Hill would have **significant impacts** on existing program commitments due to timing

## 2. “New Money” Revenue Bond Proceeds

- As discussed in a July 2019 Workshop - BE currently has capacity for a revenue bond issuance \$100M - \$500M+
- Impacts to existing program commitments could be minimized but debt service payments would reduce future “pay as you go” program capacity





# Potential BE Bonding Scenarios

## 1. Reduced BE Participation in Floyd Hill - \$200M

- Fund a reduced number of FH project components - Minimum impact to “pay as you go”

## 2. Maximized BE Participation in Floyd Hill - \$260M

- Fund all eligible FH project components

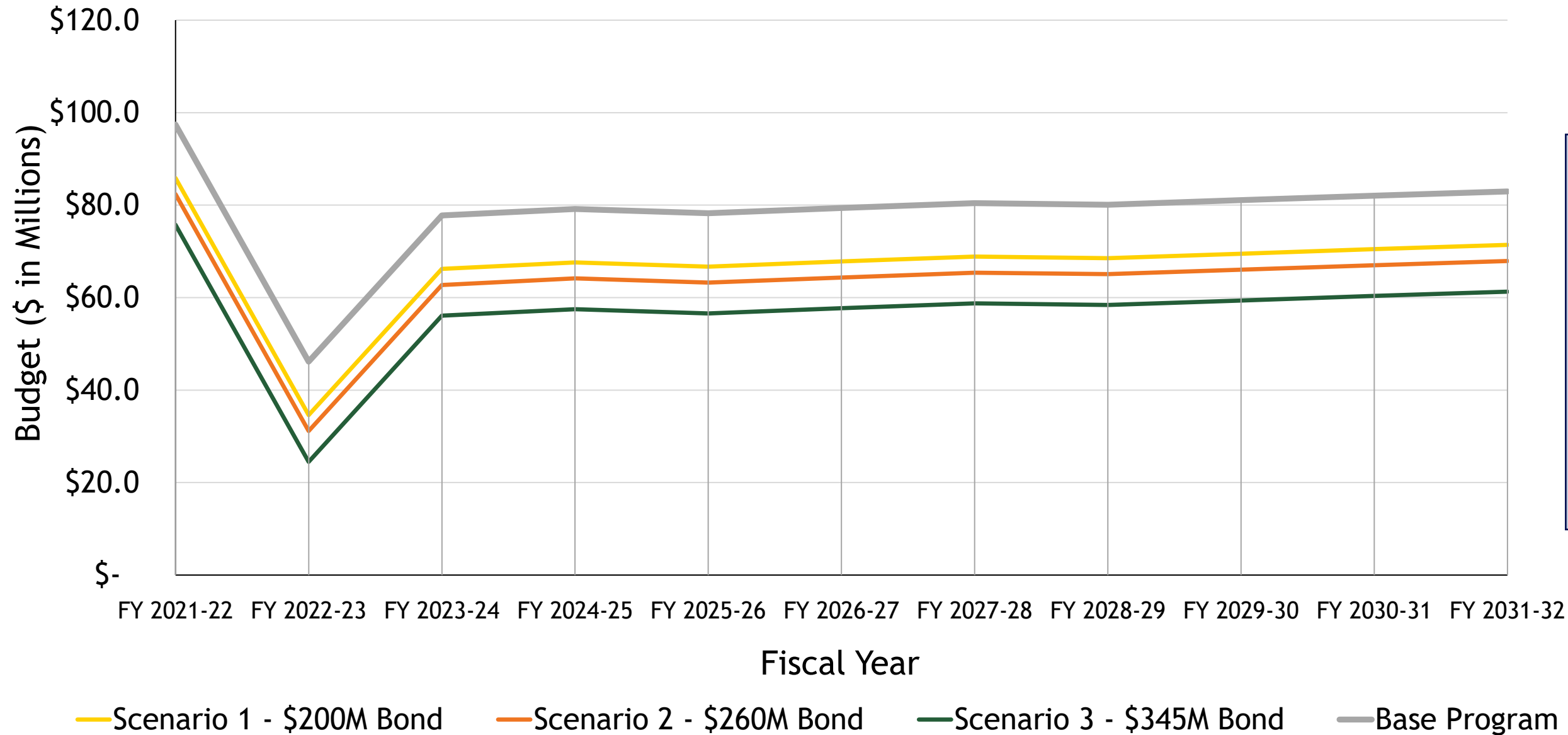
## 3. Maximized BE Participation in all SB267 projects - \$375M

- Conservative scenario for illustrative purposes - Maximum impact to “pay as you go”
- Includes all eligible FH project components
- Assumes a second tranche of bonds for future potential SB267 projects
  - \$85M - I-270 Widening
  - \$30M - New Pueblo Freeway



# BE Programmatic Impacts

## Forecast Annual Budget Available for Statewide Projects



**Key Consideration:**  
Balancing impacts to existing program commitments and future program capacity

- Notes: 1) Budget available for projects = FASTER revenue proj., FHWA reimbursement, and BABs subsidy less debt service and oper. costs  
 2) SB267 projects and Central 70 not shown  
 3) All scenarios assume a bond issuance in FY2021-2022 with a “level” debt service structure over a 30-year term for illustrative purposes





# BE Programmatic Impacts Summarized

Bonding Scenario	Avg. FY22-FY32 Annual Project Budget (\$ in Millions)	Avg. FY22-FY32 Central 70 Payments (\$ in Millions)	Estimated New Annual Debt Service (\$ in Millions)	Forecast Avg. FY22-FY32 Annual Budget Available for Statewide Projects (\$ in Millions)	*Min. % Revenues Available for Statewide Projects (FY22-FY32)
No Bond	\$112.8	(\$34.2)	\$ -	\$78.6	70%
\$200M	\$112.8	(\$34.2)	(\$11.6)	\$67.0	59%
\$260M	\$112.8	(\$34.2)	(\$15.0)	\$63.6	56%
\$345M	\$112.8	(\$34.2)	(\$21.7)	\$56.9	50%



# Potential CDOT Participation

Floyd Hill - Phase I Funding Need	<b>\$450,000,000</b>			
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- CDOT participation may be necessary to fund Phase I of the project unless the Enterprises' participation is maximized
- Potential Options
  - New federal funding (potential grants and stimulus opportunities)
  - Grant Anticipation Revenue Vehicles (GARVEE)
  - New state funding sources





# HPTE/BE Project Commitment

## Board Feedback:

- Would the HPTE Board be comfortable going above what toll revenue could support on the project if there is an option to refinance prior to maturity, so long as there is a TC backstop?
- Would the BE Board be comfortable with maximizing the BE contribution to Floyd Hill?
  - Increased BE participation reduces the future “pay as you go” program but eliminates or reduces the funding gap that CDOT must fill.
  - CDOT funding gap would need to be filled either through currently unidentified future revenue sources and/or financing, which would commit additional base revenue to debt service.



## Next Steps

1. Continue to advance the project toward final design
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# Questions and Comments?

