



## MEMORANDUM

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**TO: THE BRIDGE AND TUNNEL ENTERPRISE BOARD OF DIRECTORS**  
**FROM: JEFF SUDMEIER, CHIEF FINANCIAL OFFICER**  
**DATE: NOVEMBER 18, 2021**  
**SUBJECT: FOURTH SUPPLEMENT TO THE FISCAL YEAR 2021-22 BRIDGE AND TUNNEL ENTERPRISE BUDGET**

### Purpose

This month the Bridge Tunnel Enterprise (BTE) Board of Directors (Board) is being asked to approve a budget supplement to establish the construction phase for the replacement of E-17-GW and E-17-GV, I-76 over York Street.

### Action

Staff is requesting Board approval of Proposed Resolution #BTE-21-11-02, the fourth budget supplement to the Fiscal Year 2021-22 BTE budget.

### Background

Region 1:

Establish the construction phase for the replacement of E-17-GW and E-17-GV, I-76 over York Street. The existing structures are 4-span, parabolic concrete t-beam girder bridges with asphalt wearing surfaces constructed in 1967. Both bridges are top tier structures in the July 2021 BTE Bridge Prioritization Plan. The following is a list of the primary factors for replacing the structures:

- In February of 2020, a large hole formed in the deck of the westbound structure after an existing full-depth patch repair fell onto York St. below (photos provided in Attachment A). The National Bridge Inventory (NBI) deck rating for both structures was subsequently downgraded to “poor” condition with a rating of “4”.
- The NBI deck geometry rating for both structures is a “2”. This means the deck geometry is “basically intolerable, requiring a high priority of replacement” due to inadequate curb-to-curb clearance and other geometric deficiencies.
- Inspection reports recorded that the deck has significant areas of concrete map cracking, efflorescence, exposed and rusted reinforcement, and rust stains, indicating that there is a significant risk of delaminating or spalling concrete with the potential to fall into traffic.
- Inspection reports recorded the girders as having spalls with exposed reinforcing. These findings also indicate an increased risk of spalling or delaminating concrete with the potential to fall into traffic.
- Planned and unplanned emergency repairs to the structure have created and will continue to create service disruptions on a critical corridor of the state’s transportation network.
- The structures have had numerous repairs and retrofits during the last decade. The repairs have temporarily provided enhanced safety for the traveling public but do not address the underlying structural condition issues as evidenced by the falling concrete.

**I-76 Northbound & Southbound over York Street in Adams County**  
 (Old E-17-GW and Old E-17-GV) (New E-17-GX) (SAP Project # 23681/1000...)  
*Budget Components by Phase, Funding Program, Fiscal Year*

Phase of Work	Funding Program	Current Budget	BE Supplement Action				Revised Budget	Expended To-Date
			Year of Budget			Total Request		
			FY 2022	FY 2023	FY 2024			
Design	<i>FASTER Bridge Funds</i>	\$ 649,700	\$ -	\$ -	\$ -	\$ -	\$ 649,700	\$ 333,442
	Total Design	\$ 649,700	\$ -	\$ -	\$ -	\$ -	\$ 649,700	\$ 333,442
Construction	<i>FASTER Bridge Funds</i>	\$ -	\$ 13,311,000	\$ -	\$ -	\$ 13,311,000	\$ 13,311,000	
	Total Construction	\$ -	\$ 13,311,000	\$ -	\$ -	\$ 13,311,000	\$ 13,311,000	\$ -
<b>Total Project Budget &amp; Expenditure</b>		<b>\$ 649,700</b>	<b>\$ 13,311,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 13,311,000</b>	<b>\$ 13,960,700</b>	<b>\$ 333,442</b>
			Year of Expenditure			Total Request		
			FY 2022	FY 2023	FY 2024			
			\$ 2,217,000	\$ 6,656,400	\$ 4,437,600	\$ 13,311,000		

**Next Steps**

Approval of this budget supplement and Resolution #BTE 21-11-02 will provide the budget necessary for E-17-GW and E-17-GV to proceed to advertisement.

**Attachments**

- Attachment A: Photos of E-17-GV Existing Conditions
- Attachment B: Proposed Resolution #BTE-21-11-02.



**COLORADO**  
Department of Transportation  
Statewide Bridge and Tunnel Enterprise

**BE04S22 - ATTACHMENT A: PHOTOS OF E-17-GV EXISTING CONDITIONS**

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E-16-GV Bridge Deck Punch Through  
(Viewed from the Underside)



E-16-GV Bridge Deck Repairs  
(Looking West)