



MEMORANDUM

TO: THE BRIDGE AND TUNNEL ENTERPRISE BOARD OF DIRECTORS
FROM: JEFF SUDMEIER, CHIEF FINANCIAL OFFICER
DATE: MARCH 17, 2022
SUBJECT: SEVENTH 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 request for two projects in Region 1:

- 1) An increase to the design phase budget for F-15-BL (I-70 ML WBND over US6 and Clear Creek) and F-15-BM (Ramp to US 6 ML over Clear Creek), the BTE eligible portion of the Floyd Hill to Veterans Memorial Tunnels project in Clear Creek County.
- 2) The establishment of the design phase for the replacement of six BTE eligible structures on I-270 in Adams County as part of a larger project to address critical bridges and other safety issues on the I-270 corridor.

Action

Staff is requesting Board approval of Proposed Resolution #BTE2: Bridge & Tunnel Enterprise 7th Budget Supplement for FY'22.

Background

Region 1: I-70 Floyd Hill to Veterans Memorial Tunnels Improvement Project

Request to increase the design phase budget to continue design activities for the BTE eligible portions of the I-70 Floyd Hill to Veterans Memorial Tunnels Improvement Project. Funding for this CDOT 10-Year Plan project is being requested at this time due to recent advancements in project readiness after the Transportation Commission approval of Construction Manager/General Contractor project delivery and the subsequent selection of the project's construction manager and design consultant by CDOT.

Structure F-15-BL is a 5-span riveted girder bridge carrying the westbound lanes of I-70 and is a second tier structure in the January 2022 BTE Prioritization Plan. The structure was formerly a top tier structure in the BTE Prioritization Plan but a recent bridge deck rehabilitation has temporarily improved the condition of the bridge. However, it is anticipated that the structure will continue to deteriorate based on underlying issues with the existing bridge geometry, detailing, and materials. Structure F-15-BM is a concrete composite bridge that serves as the off-ramp for I-70 westbound to US 6 near mile post 244 and is a top tier structure in the January 2022 BTE prioritization plan. Inspection reports indicate that F-15-BM has deck and substructure deterioration including significant areas of concrete delamination and spalling with exposed broken and corroded rebar. The structures have been tabulated below.



<u>Structure ID</u>	<u>Description</u>	<u>Deck Area (sq. ft.)</u>	<u>Year Built</u>
F-15-BL	I 70 ML Westbound over US 6, Clear Creek	18,428	1959
F-15-BM	Ramp to US 6 ML over Clear Creek	5,488	1959
	Total	23,916	

This budget request was developed based on an estimated BTE eligible proportional share of project design costs based on the current preferred design alternative. The need for additional incremental design phase funding requests will be re-evaluated as design progresses and the BTE eligible project scope is further refined.

I-70 West Bound over Clear Creek in Clear Creek County
(F-15-BL, F-15-BM) (No New structure assigned) (SAP Project # 22716/1000...)
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>	\$ 1,455,100	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000	\$ 11,455,100	\$ 1,406,888
	Total Design	\$ 1,455,100	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000	\$ 11,455,100	\$ 1,406,888
Environmental	<i>FASTER Bridge Funds</i>	\$ 667,900	\$ -	\$ -	\$ -	\$ -	\$ 667,900	\$ 648,603
	Total Construction	\$ 667,900	\$ -	\$ -	\$ -	\$ -	\$ 667,900	\$ -
Total Project Budget & Expenditure		\$ 2,123,000	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000	\$ 12,123,000	\$ 1,406,888
			Year of Expenditure			Total Request		
			FY 2022	FY 2023	FY 2024, FY 2025			
			\$ 125,000	\$ 4,043,750	\$ 5,831,250	\$ 10,000,000		

Region 1: I-270 Critical Bridges Project

Request to establish the design phase for the replacement of the E-17-ID, E-17-IE, E-17-IF, E-17-IH, E-17-IG and E-17-IJ bridges on I-270 in Adams County to fund the project through preliminary design. All six bridges are top tier structures in the January 2022 Prioritization Plan and have been tabulated below. In addition, two other non-BTE eligible bridges will also be replaced as part of the project using other funding sources. The I-270 Critical Bridges project is intended to accelerate the replacement of these eight bridges in advance of the separate I-270 Safety and Mobility Project (I-270) due to the severity of their condition. The I-270 project is also a CDOT 10-Year Plan project.

The structures are a high priority due to the increasing frequency and severity of planned and unplanned bridge deck repairs, which have created maintenance and safety concerns. The repairs also create disruptions to the traveling public resulting from the lane closures needed to perform the repairs.

<u>Structure ID</u>	<u>Description</u>	<u>Deck Area (sq. ft.)</u>	<u>Year Built</u>
E-17-ID	I 270 ML WBND over S. Platte River	12,518	1969
E-17-IE	I 270 ML EBND over S. Platte River	12,518	1969
E-17-IF	I 270 ML WBND over Burlington Canal	8,869	1969
E-17-IG	I 270 ML EBND over Burlington Canal	8,869	1969
E-17-IH	I 270 ML WBND over SH 265 ML & RR	14,951	1969
E-17-IJ	I 270 ML WBND over Service Rd. & RR	13,692	1970
	Total:	71,417	



I-270 ML over South Platte; Ditch Rd. Burlington Canal; SH 265, UPRR, BNSF RR: Service Rd. BNSF RR in Adams County
 (Old E-17-ID, E-17-IE; E-17-IF, E-17-IG; E-17-IH; E-17-IJ) (New Not Assign Yet) (SAP Project # 24947/1000...)

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	FASTER Bridge Funds	\$ -	\$ 466,400	\$ -	\$ -	\$ 466,400	\$ 466,400	\$ -
	Total Design	\$ -	\$ 466,400	\$ -	\$ -	\$ 466,400	\$ 466,400	\$ -
Total Project Budget & Expenditure		\$ -	\$ 466,400	\$ -	\$ -	\$ 466,400	\$ 466,400	\$ -
			Year of Expenditure			Total Request		
			FY 2022	FY 2023	FY 2024			
			\$ -	\$ 466,400	\$ -	\$ 466,400		

Next Steps

- 1) Approval of the budget supplement and Proposed Resolution #BTE2: Bridge & Tunnel Enterprise 7th Budget Supplement for FY'22 will allow the design of F-15-BL and F-15-BM to advance. If necessary, additional budget supplement requests may be brought to the Board as design progresses and the BTE eligible project scope is further refined.
- 2) Approval of this budget supplement and Proposed Resolution #BTE2: Bridge & Tunnel Enterprise 7th Budget Supplement for FY'22 will allow E-17-ID, E-17-IE, E17-IF, E-17-IH, E-17-IG and E-17-IJ to advance to preliminary design. BTE expects to bring an additional budget supplement request to fund the project through final design at a later time.

Attachments

Attachment A: Proposed Resolution #BTE2: Bridge & Tunnel Enterprise 7th Budget Supplement for FY'22.

