

Transportation Committee

For the Metropolitan Council meeting of May 24, 2017

Subject: 2017-2020 TIP Amendment: MnDOT-MN Highway 149 Bridge (High Bridge) over Mississippi River

Proposed Action

That the Metropolitan Council concur with the Transportation Advisory Board (TAB) action to amend the 2017-2020 Transportation Improvement Program (TIP) to update the description, mileage, and project funding for the Minnesota Department of Transportation's (MnDOT) Minnesota Highway 149 Bridge ("St. Paul High Bridge") over the Mississippi River (SP# 6223-20).

Summary of Committee Discussion/Questions

Metropolitan Transportation Services Manager Highway Planning & TAB/TAC Process Steve Peterson presented this item. Peterson and Nick Thompson answered questions from Commers concerning the reason for the increased cost. Thompson explained that the original bridge construction estimate was done 5 years +/- ahead of construction schedule and was most likely estimated per square foot of construction. Once additional engineering was performed, additional deterioration was found in the bridge and the repair proved more complicated. Also, the type of bridge made it a complex project to estimate.

Motion by Munt, seconded by Elkins, and passed.

Transportation Committee

Meeting date: May 22, 2017

For the Metropolitan Council meeting of May 24, 2017

Subject: 2017-2020 TIP Amendment: MNDOT-MN Highway 149 Bridge (High Bridge) over Mississippi River

District(s), Member(s): 13 – Kramer, 14 – Commers

Policy/Legal Reference: TAB Action

Staff Prepared/Presented: Amy Vennewitz, Deputy Director, Finance & Planning (651-602-1508)
Steve Peterson, Manager of Highway Planning and TAB/TAC Process (651-602-1819)
Joe Barbeau, Senior Planner (651-602-1705)

Division/Department: Transportation / Metropolitan Transportation Services (MTS)

Proposed Action

That the Metropolitan Council concur with the Transportation Advisory Board (TAB) action to amend the 2017-2020 Transportation Improvement Program (TIP) to update the description, mileage, and project funding for the Minnesota Department of Transportation’s (MnDOT) Minnesota Highway 149 Bridge (“St. Paul High Bridge”) over the Mississippi River (SP# 6223-20).

Background

This amendment is requested to update the description, mileage, and project funding for the Minnesota Highway 149 High Bridge project in St. Paul. This project to redeck the High Bridge will begin in state fiscal year 2018, and is Metro District’s first project using the “Construction Manager/General Contractor” (CMGC) delivery method. The description will better-reflect the project’s end points of construction and include a small amount of pavement work to happen on the south end of the bridge, including drainage work, and to un-tie this project from a larger pavement project on MN Highway 149.

The funding for this project has changed in amount and type. Additional bridge deterioration has caused the cost to increase. In the current TIP, this project is funded with state bonds. In the 2018-2021 TIP, this project will show funding from FHWA, a smaller amount of bond funds and some local funds from the City of St. Paul. The federal funds are being made available by shifts in the program and cost savings from other projects.

Rationale

The Transportation Advisory Board approves formal amendments to the TIP and the Metropolitan Council concurs with the action of the TAB. The project is consistent with the Transportation Policy Plan (TPP) and meets fiscal constraint because the federal and state funds are sufficient to fully fund the project. The Minnesota Interagency Air Quality and Transportation Planning Committee determined that the project is exempt from air quality conformity analysis. This TIP amendment is using the streamlined process adopted by TAB on April 19, 2014.

Thrive Lens Analysis

This action promotes *stewardship* by providing for needed rehabilitation of existing assets.

Funding

The project is fully funded with federal, local, and state funds.

Known Support / Opposition

No known opposition.



Please amend the 2017-2020 Transportation Improvement Program (TIP) to modify the following project in program year 2018. This project is being submitted with the following information:

PROJECT IDENTIFICATION:

SEQ #	STATE FISCAL YEAR	A T P	D I S T	ROUTE SYSTEM	PROJECT NUMBER (S.P. #) (Fed # if available)	AGENCY	DESCRIPTION include location, description of all work, & city (if applicable)	MILE S
1570	2018	M	M	MN 149	6223-20	MNDOT	<p>**CHAP 152**MN149, OVER MISSISSIPPI RIVER IN ST PAUL - REHABILITATION AND APPROACH WORK ON BRIDGE #62090 INCLUDING ADA RAMPS (TIED TO 1917-45)</p> <p>**CHAP 152**CMGC** WK PAK #2 MN149, OVER MISSISSIPPI RIVER FROM MN 5 (W 7TH ST) TO GEORGE ST IN ST PAUL - REHAB BRIDGE #62090, ADA RAMPS, MILL AND OVERLAY</p>	0.5 0.7

PROG	TYPE OF WORK	PROP FUNDS	TOTAL \$	FHWA \$	AC \$	FTA \$	TH \$	BOND	OTHER \$
BI	REDECK	BF	14,110,000	\$28,400,000	-	-	-	14,110,000	-
			\$36,560,000					\$7,100,000	1,060,000

PROJECT BACKGROUND:

- Briefly describe why amendment is needed (e.g., project in previous TIP but not completed; illustrative project and funds now available; discretionary funds received; inadvertently not included in TIP).

This amendment is needed to update the description, mileage, and project funding for the High Bridge project in St. Paul. This project to redeck the High Bridge will begin in state fiscal year 2018, and is Metro District’s first project using the “Construction Manager/General Contractor” (CMGC) delivery method.

The new description better reflects the end points of construction, and includes a small amount of pavement and drainage work on the south end of the bridge. The description change also un-ties this project from a pavement project further on MN 149 (SP 1917-45). The length of the project is extended due to the pavement work on the south end of the bridge that was originally in the MN 149 pavement project (SP 1917-45).

The revised description also identifies SP 6223-20 to be “Work Package #2”. With the CMGC delivery method, an early work package has been identified for this project, the installation of a SAFESpan system, which is a scaffolding system that will be attached to the bridge prior to the start of the larger construction project in order to create safe and efficient access for construction crews. That early work is funded entirely with state funds, and does not need a TIP amendment.

The funding for this project has increased and funding type has changed. The costs for the project have increased because there is additional deterioration of the bridge, including under the deck, which requires a more costly fix and increased costs for construction on a bridge of this elevation and type (inverted arch and two half-arches for the main span; eight plate girder spans on the north side). Initial scoping efforts did not accurately reflect the costs associated with the elevated bridge above a major river corridor, including access to an Xcel power plant. In addition, the CMGC delivery method has upfront costs associated with risk that typically are a cost savings due to less cost overruns and supplemental agreements during construction.

In the 2017-2020 TIP, this project is funded with state bonds. In the draft 2018-2021 TIP, this project will show funding from FHWA, a smaller amount of bonds and some local funds from the City of St. Paul. In the 2018-2021 TIP, this project’s funding will change to include federal funds, a reduction of bond funds, and some local funds. The federal funds are being made available by shifts in the program and cost savings from other projects. This amendment updates the total project costs before the adoption of the new TIP because the project will be let before the new TIP is approved. CMGC delivery method also requires the project to be authorized before advertised, as opposed to the traditional Design Bid Build delivery method.

2. How is Fiscal Constraint Maintained as required by 23 CFR 450.216 (check all that apply)?

• New Money	X
• Anticipated Advance Construction	
• ATP or MPO or MnDOT Adjustment by deferral of other projects	X
• Earmark or HPP not affecting fiscal constraint	
• Other	

This amendment reflects how this project is fiscally constrained in the draft 2018-2021 TIP. Funding for the High Bridge will change to include federal funds, reduce bond funds, and include additional local funds. The federal funds are being made available by shifts in the program and cost savings from other projects. This amendment updates the total project costs before the adoption of the new TIP because the project will be let before the new TIP is approved. The project is fully funded, therefore fiscal constraint is maintained.

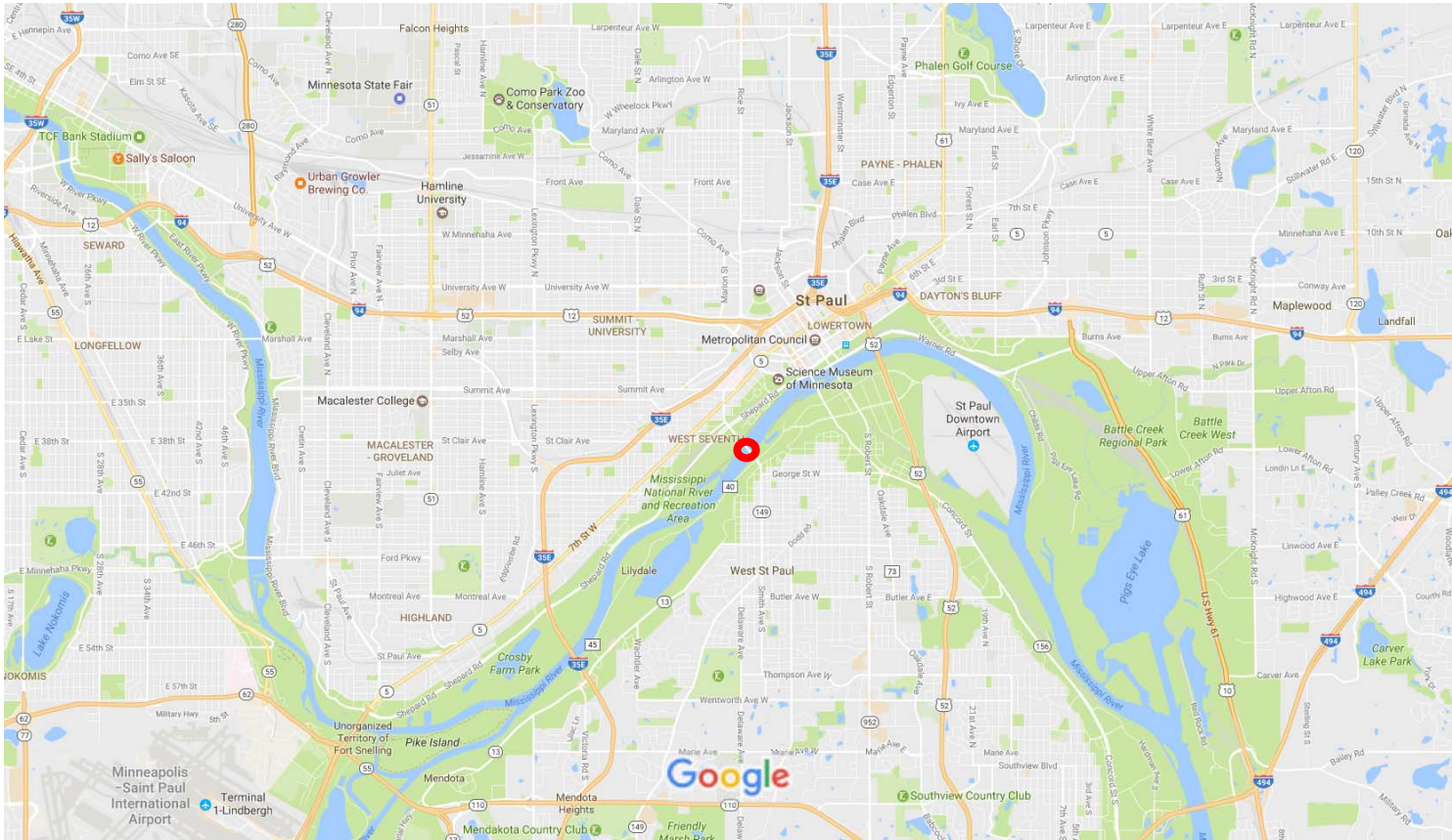
CONSISTENCY WITH MPO LONG RANGE PLAN:

This amendment is consistent with the Metropolitan Council Transportation Policy Plan, adopted by the Metropolitan Council on January 14, 2015, with FHWA/FTA conformity determination established on March 13, 2015.

AIR QUALITY CONFORMITY:

• Subject to conformity determination	
• Exempt from regional level analysis	X*
• N/A (not in a nonattainment or maintenance area	

*Exempt Project Category S-10. Pavement resurfacing and/or rehabilitation.



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