Multnomah County Willamette River Bridges
Capital Improvement Plan

Project Summary Information: Seismic Resiliency (Major Bridge Rehabilitation / Bridge Replacement) - Final Design and Construction							
Bridge Names(s):	Burnside			Project ID#:	BUN-BU-07	Project Status:	In Progress
Project Rank:	29	Primary Category of Work	Seismic	Performance Attribute Total Score	63	Importance Score	TI-3 89.15
Logical Grouping Project ID #'s:	BU-STRUCT-08, BU STRUCT-09, BU-STRUCT-10						
Bridge Num and Names(s):	00511A Burnside St West Approach over Hwy 1 [Burnside] ; 00511 Willamette River, Burnside St (Burnside) [Burnside] ; 00511 Willamette River, Burnside St (Burnside) [Burnside]; 00511B Burnside St (East Approach) over Hwy 1 & Conns [Burnside]						

Definition of Problem

The existing Burnside Bridge is functionally obsolete, and the cost to maintain, rehabilitate, and seismically retrofit the structure to withstand a M9.0 Cascadia Subduction Zone (CSZ) event exceeds its value. A programmatic bridge replacement cost for the Final Design and Construction phase has been developed as part of the Multnomah County Willamette River Bridges Capital Improvement Plan.

Description of Proposed Solution

The programmatic bridge replacement concept used the same number and type of lanes as the existing facilities, updated for modern widths, to determine an approximate footprint for the new structure. It also assumed that the existing connectivity to adjacent infrastructure is maintained. For the development of its programmatic cost, a steel plate girder bridge type was assumed for the West Approach; a haunched steel plate girder bridge type was assumed for the Fixed River spans; a double leaf bascule bridge type was assumed for the Movable span; and a precast concrete girder bridge type was assumed for the East Approach. It also assumed that traffic would be temporarily detoured to the adjacent bridges during construction in lieu of constructing a temporary bridge at the site.

Project Justification

This project captures the relative cost for performing the Final Design and Construction for the replacement of the Burnside Bridge West Approach, Main River Spans, Movable Span, and East Approach. The benefits of completing the bridge replacement would be to eliminate functionally obsolete and structurally deficient components of the bridge. Additionally, the new structure would be designed to modern standards for vehicle traffic, pedestrian, bicycle and transit use - improving capacity and traffic operations on the bridge. The bridge would also be designed to modern seismic standards in order to remain serviceable after a M9.0 Cascadia Subduction Zone (CSZ) earthquake.

Right-of-Way:	$2,211,502
Utility Reimbusement:	$0
Construction:	$398,273,437
Preliminary Engineering:	$47,792,812
Construction Engineering:	$47,792,812
Total Cost at Target Construction Time:	$496,070,564
Target Construction Time:	2025-2029

Notes:

Final Design and Construction only. See also BUN-BU-12 (Feasibility Study) and BUN-BU-13 (Environmental Impact Study) projects. This project includes improvements for bicycle or pedestrian users.