

# Multnomah County Willamette River Bridges Capital Improvement Plan



## Project Summary Information: 2016 Burnside Rehabilitation Project

Bridge Names(s):	Burnside	Project ID#:	BUN-BU-06	Project Status:	In Progress		
Project Rank:	4	Primary Category of Work	Structural	Performance Attribute Total Score	46	Importance Score	TI-1 41.73
Logical Grouping Project ID #'s:	BU-MECH-02, BU-ELEC-03, BU-STRUCT-02, BU-STRUCT-03, BU-STRUCT-04, BU-STRUCT-14, BU-STRUCT-15, BU-STRUCT-16						
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

Portions of the Burnside Bridge west trunnion towers, warning gates, deck, railings, on-bridge illumination, and superstructure and substructure structural elements are exhibiting signs of damage or deterioration. In some instances, the deficiencies are significant enough to affect the safe load carrying capacity of bridge elements such that structural strengthening or replacement of specific components is recommended. Cracking, concrete spalling, reinforcing steel corrosion including section loss, and other signs of damage and deterioration, were observed throughout the bridge. Portions of the West and East Approach Bridges have been netted to prevent deteriorated concrete from falling on the facilities below.

### Description of Proposed Solution

The proposed solution includes the rehabilitation of the west trunnion tower bases, warning gates, sign bridges, bridge deck, sidewalks, barrier rail, on-bridge illumination system, and concrete and steel bridge structural components. Improvements to enhance bascule trunnion access will also be included. A variety of replacement and rehabilitation methods will be considered based on a more precise level of analysis during the project's development phase. This project is budget constrained and may not fully alleviate all of the identified deficiencies. This project assumes that the bridge will either be replaced or that further improvements to many of the noted deficiencies will be required before 2034. This is due to this project's limited funding level.

### Project Justification

The benefits of completing this project are increased safety and reliability of the Burnside Bridge west trunnion tower bases, warning gates, concrete members, bridge deck, barrier rails, and sidewalk structures through 2034. Structural repairs and targeted replacement of key components of the bridge will improve the overall safety of the travelling public, arrest ongoing degradation of structural components that affect the safe load carrying capacity of the bridges and extend its service life.



Right-of-Way:	\$121,807
Utility Reimbursement:	\$0
Construction:	\$21,203,312
Preliminary Engineering:	\$4,760,699
Construction Engineering:	\$4,760,699
<b>Total Cost at Target Construction Time:</b>	<b>\$30,846,519</b>
<b>Target Construction Time:</b>	<b>2015-2019</b>

Notes:

This project includes improvements for bicycle or pedestrian users.