

Seattle City Council

Transportation & Utilities Committee

West Seattle High-Rise Bridge Safety Project

Sam Zimbabwe and Heather Marx, SDOT

March 17, 2021



City of Seattle

Agenda

- Welcome, agenda overview, and introductions
- Bridge updates
- Low bridge access policy update
- Reconnect West Seattle Implementation Plan
- West Marginal Way SW outreach update
- Next Steps



Presentation Overview

- Background and what has changed since November 9 Full Council briefing
- Key Issues
 - Maintaining aggressive schedule on phase 2 rehabilitation
 - Delivering Reconnect West Seattle traffic management commitments
 - Managing access to the Lower Spokane Street Bridge

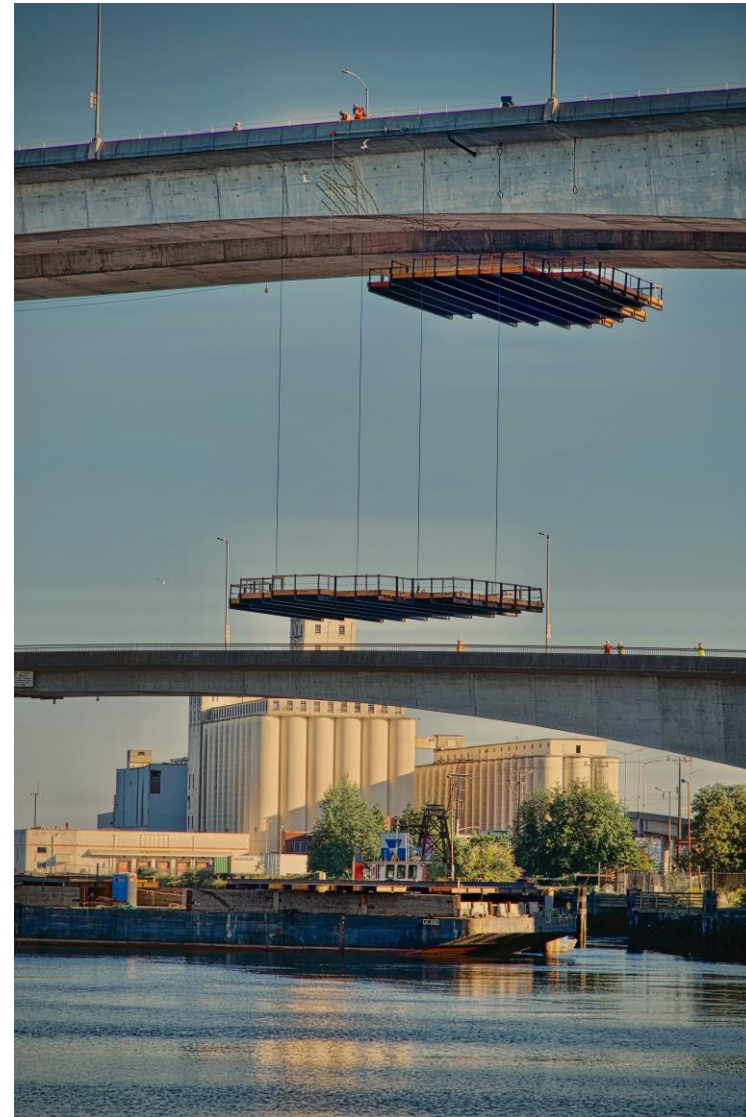


Photo credit – Patrick Robinson



West Seattle Bridge emergency closure

- Bridge closed on March 23, 2020 due to rapid growth in cracking along the center section of the bridge
- After closure, crack growth continued, confirming immediate removal of live traffic load was essential
- Mayor declared the closure a City emergency in July and decided in November to move ahead quick to repair the bridge
- Initial stabilization efforts, completed in December, are performing as expected



Preliminary design cost estimate for rehabilitation

Established cost estimate to measure against as we move forward:

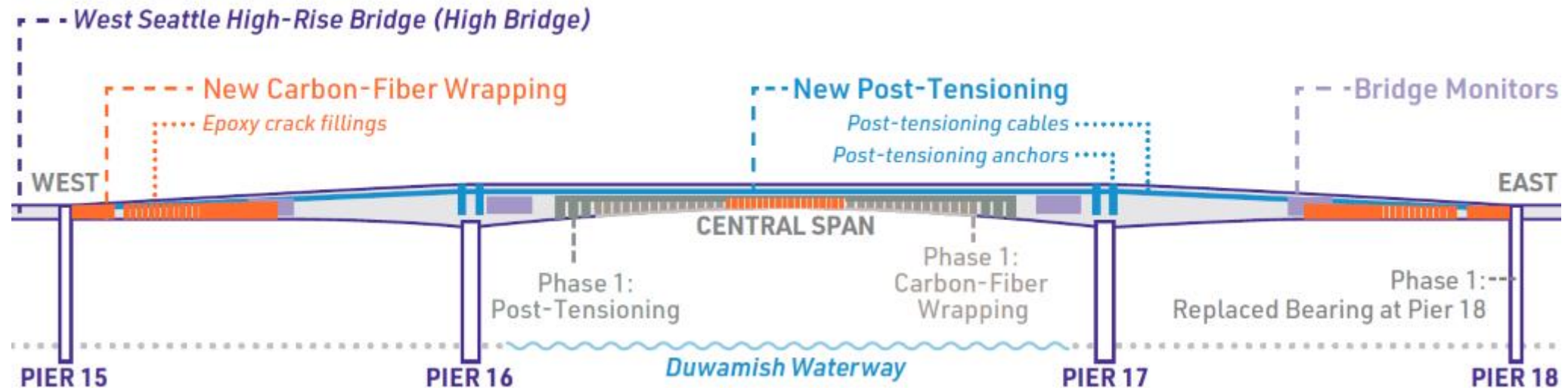
- Total program cost: \$175 million includes high and low bridge rehabilitation, Reconnect West Seattle, monitoring, phase 1 rehabilitation, and program management
- High Bridge rehabilitation: approx. \$58 million
- Swing Bridge rehabilitation: approx. \$14 million



High bridge rehabilitation preliminary design

- Use proven construction methods to ready the bridge for traffic to return
- Install new carbon-fiber wrap on the central span and end spans
- Complete additional post-tensioning throughout
- Include Pier 18 ground stabilization. This work is not required prior to bridge reopening.
- Consider including repair projects to the bridge corridor while the bridge is out of commission (e.g., concrete repairs, expansion joint replacement)

PHASE 2 REHABILITATION



Focused on maintaining the swing bridge

Swing Bridge Rehabilitation Project

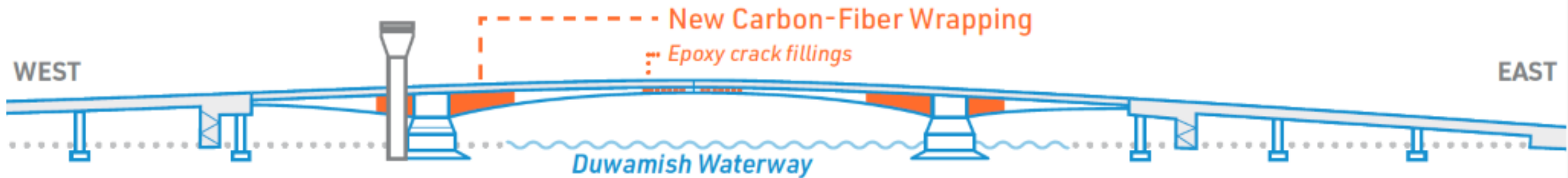
- Take a proactive approach to strengthen and monitor low bridge while the high bridge is closed
- Coordinate preventative improvements with current FHWA commercial vehicle load standards
- Work on low bridge rehabilitation in the same contract as the high bridge rehabilitation work




Swing bridge preliminary design

- Install new carbon fiber wrap (internal and external of girders)
- Complete epoxy crack injections throughout
- Look closely at the mechanical center-lock system that latches the two spans of the bridge together when it's in the closed position

LOW BRIDGE REHABILITATION



Bridge rehabilitation construction schedule

	2020	2021				2022			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
High Bridge Structural Rehabilitation	Preliminary design + issue RFQPA		Contractor selection, final design, permitting + materials procurement		Rehabilitation/construction				
Low Bridge Structural Rehabilitation	Preliminary design + issue RFQPA		Contractor selection, final design, permitting + materials procurement		Rehabilitation/construction				
Key	Project design			Project construction					

Note: Schedule and budget will be updated next after we reach intermediate design; this information is subject to change.

Our contracting approach is helping us stay on schedule and move quickly

- Released the high and low bridges rehabilitation Request for Qualifications and Project Approach (RFQPA) on March 10
- Moving forward with General Contractor/Construction Management (GC/CM) approach
- GC/CM alternative delivery method provides better schedule predictability
- Proposals due April 12



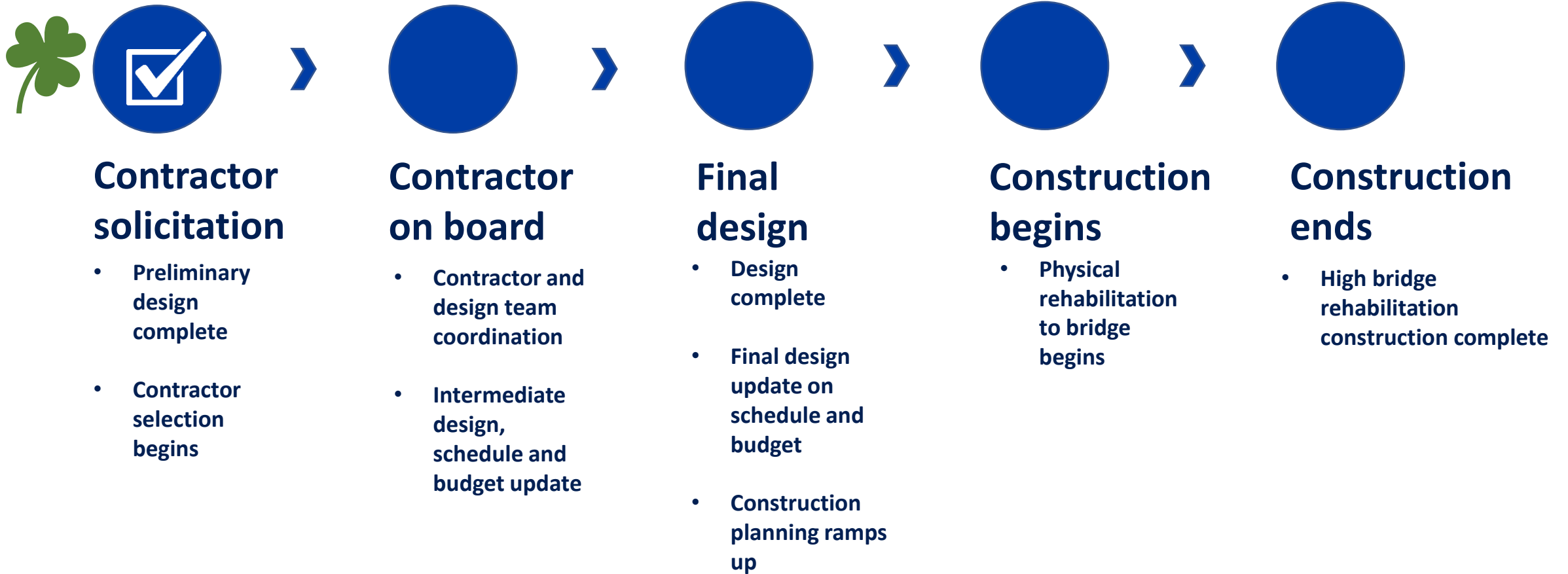
Initial stabilization of the high bridge was completed at the end of 2020.

Project Construction Goals

- Honor schedule commitments
 - High bridge construction complete June 2022
 - Substantial construction complete by end of 2022
 - Reduce risk to the project and maximize quality in design and construction
- Maximize safety (workers, community, traveling public)
- Open communications about project
- Collaboration with the Project Team and stakeholders during design and construction
- Be a good neighbor (minimize impacts to stakeholders and public)

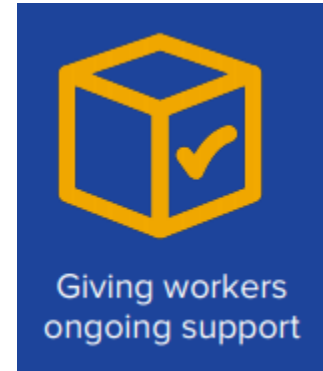
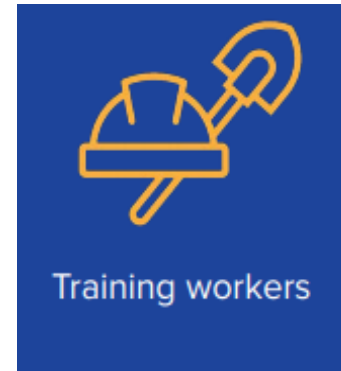
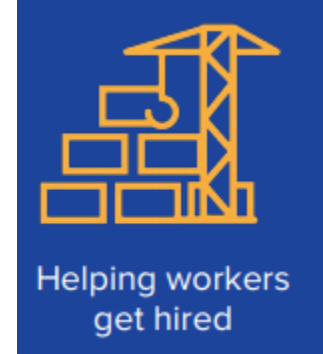
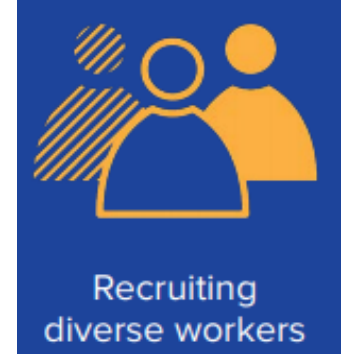
Note: Reopening goal remains mid-2022

High Bridge rehabilitation construction milestones



High and low bridge rehabilitation contracting

- Continuing to invest in the surrounding communities in both street/safety investments, and through contracting provisions
- Seeking Community Workforce Agreement/Priority Hire for this project, ensuring the contractor hires from economically distressed ZIP codes. Seeking approval from USDOT
- Including a Disadvantaged Business Enterprise (DBE) goal established later in design by WSDOT

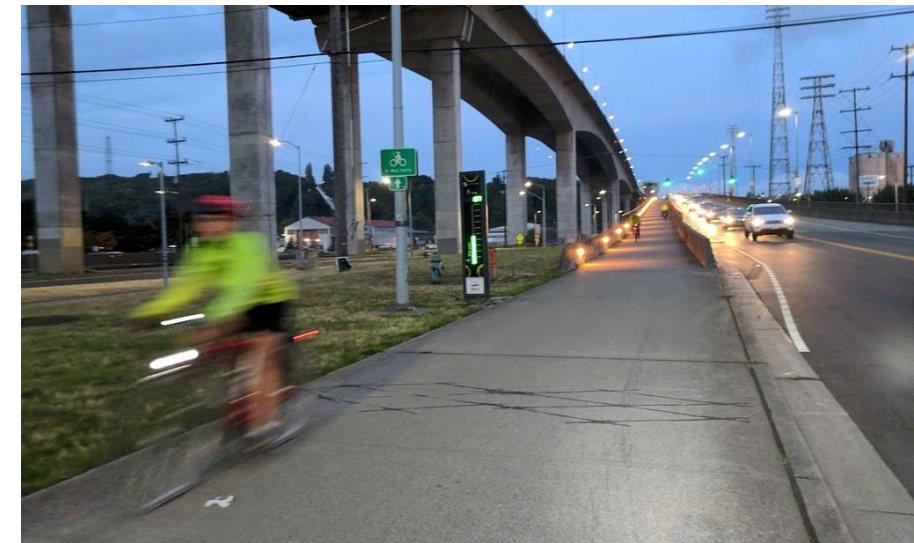


Low Bridge Access: enforcement and fines



Beginning January 2021, private vehicles driving on the bridge between 5 AM and 9 PM will be **fined \$75 for each trip.**

- Began **photo enforcement system** in January 2021
- **Priority access** for emergency vehicles, heavy freight, buses, and other pre-approved users with license-plate based access
- Low Bridge is open to **private vehicles** from 9 PM to 5 AM
- Conducting targeted outreach now to inform equitable policy updates this Spring with a focus on BIPOC owned businesses, healthcare providers and people seeking life-saving medical treatment



Working with the community



8,600 people receive
weekly email updates



92 blog postings
shared with community



2x the number of blog
views since March 2020



200+ interviews or
responses to media requests



Met with **145+** stakeholder
groups



Meet monthly with **3** advisory
groups to inform and guide City's
response to the Bridge closure:

- Community Task Force
- Employer Resource Group
- Maritime Town Hall

Reconnect West Seattle

A plan to achieve a reconnected West Seattle peninsula with similar levels of travel across the Duwamish to those seen before the closure of the High-Rise Bridge, and at the same time reducing impacts to communities in the Duwamish Valley.

- Project dashboard tracks status
- **2020:** completed all 22 projects
- **2021:** 32 projects planned for implementation
- Continue to collect input from community in early 2021 for project ideas to construct in 2022

Project Name
Sylvan Way Speed Radar

Project Year
2020

Project Description
Radar speed signs on Sylvan Way S

Request Origin
Detour Route Planning

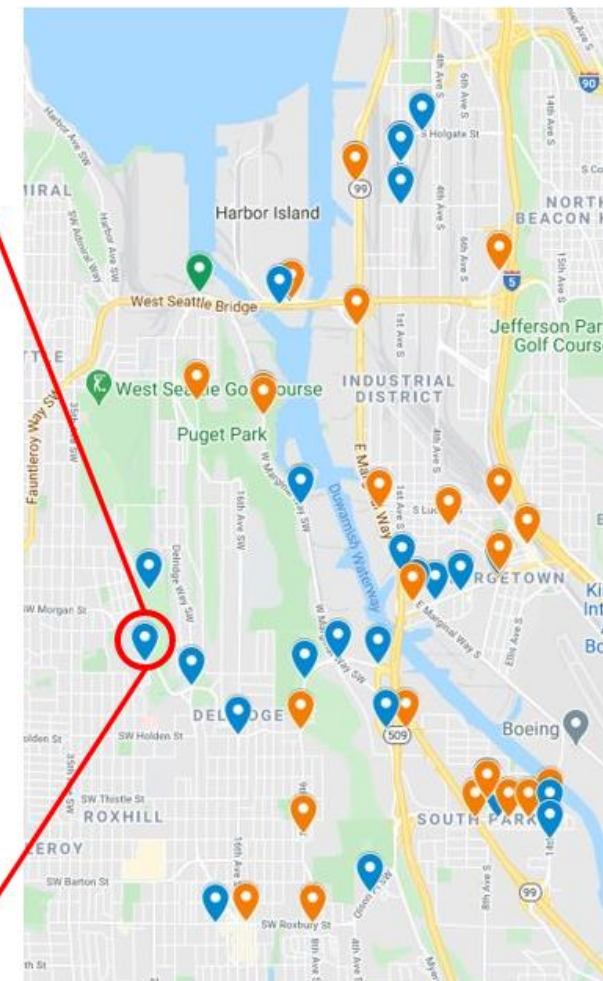
Status
Complete

Project Site or Extents
Sylvan Way S

Lat
47.540055

Long
-122.367156

Contact Info
westseattlebridge@seattle.gov
206-400-7559



To view this map visit: <https://bit.ly/38ODAv3>

Funding Strategy

- Leverage up to \$150 million of the City's financial commitment (\$100M secured; \$50M unsecured)
 - Spent \$31M to date primarily on the stabilization and emergency repairs but also on traffic mitigation efforts, bridge monitoring/testing, high bridge replacement planning, high/low bridge design, and program development.
- Partner with Washington State, the Port of Seattle, and other stakeholders – all recognize the local, regional and state-wide economic and mobility significance of the Bridge
- Utilize and seek additional federal funding
 - Secured \$15.9M in PSRC grants (\$14.4M high bridge; \$1.5M TDM)
 - Applying for a USDOT INFRA grant

INFRA grant – letters of support

- Working on Infrastructure for Rebuilding America (INFRA) grant
- Requesting \$17-21 million
- Six key objectives:
 - ✓ Supporting economic vitality
 - ✓ Climate change/environmental justice
 - ✓ Racial equity/barriers to opportunity
 - ✓ Leveraging of federal funding
 - ✓ Innovation
 - ✓ Performance and accountability
- Application due March 19
- Thank you for Council's letter of support



PSRC Grant Acceptance

Ordinance authorizes acceptance of PSRC allocation of \$14.4 million for West Seattle Bridge High Bridge Repair Project

- \$6.9M Surface Transportation (STP) previously awarded for bridge replacement now reallocated to repair; and
- \$7.5M newly awarded Highway Infrastructure Program (HIP) funds

\$12.4M net amount added to CIP (MC-TR-C110)

(\$2M in appropriation authority previously granted to SDOT in 2020 for bridge replacement, repurposed with acceptance of STP funds)

Questions / Discussion

www.seattle.gov/transportation/WestSeattleBridge

