



BALLARD BRIDGE PLANNING STUDY

TECHNICAL WORKSHOP
SEPTEMBER 12, 2019

SUMMARY REPORT

EVENT OVERVIEW

On September 12, 2019, we hosted a technical workshop for the Ballard Bridge Planning Study at the Ballard Branch Library Meeting Room (5614 22nd Ave NW). The workshop was from 10:30 AM to 1:00 PM. Stakeholders from the bike and freight community were invited to participate. The workshop consisted of a short presentation (Appendix A), display boards (Appendix B), and roll plots (Appendix C) showing the various options (Appendix C) for the interactive group discussions.

Agenda

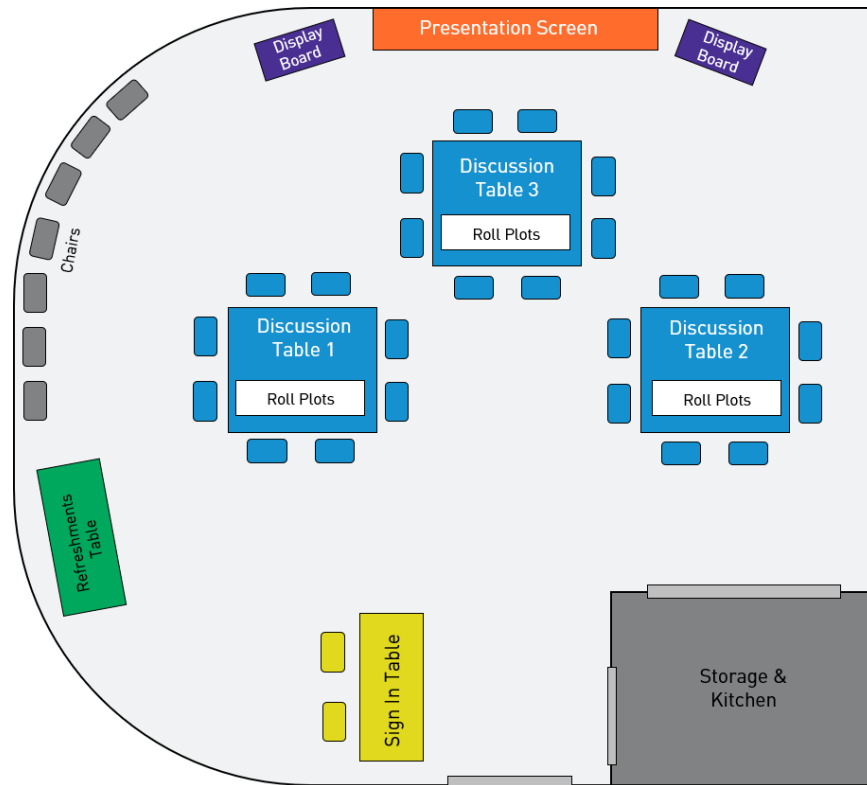
Time	Topic	Lead
10:30 – 10:40 AM	Welcome and Introductions	Wes Ducey, SDOT
10:40 – 10:50 AM	Ballard Bridge Planning Updates	Wes Ducey, SDOT
10:50 – 11:00 AM	Overview of Three Bridge Options	Matt Baughman, COWI Marni Heffron, Heffron Transportation
11:00 AM – 12:30 PM	Small Group Discussions on Bridge Options (40 minutes each for north end and south end with a 10-minute break in between)	All
12:30 – 12:45 PM	Report Out & Summarize	Wes Ducey, SDOT
12:45 – 1:00 PM	Next Steps & Adjourn	Wes Ducey, SDOT

EVENT LAYOUT

The room was set up with a welcome table, refreshments table, presentation screen, two display boards, and three discussion tables. Each discussion table had markers, sticky notes, a flip chart, and a set of 7 technical roll plots:

- High-level Fixed Bridge Replacement – North
- Mid-level Moveable Bridge Replacement – North
- Low-level Moveable Bridge Rehabilitation – North
- Existing Connections - North
- SPUI (High-level and Mid-level Bridge Replacement) – South
- Low-level Moveable Bridge Rehabilitation – South
- Existing Connections - South

The diagram below shows the room layout.



Drawing not to scale

ATTENDANCE

There were 7 stakeholders at the workshop. Attendance included members from the Ballard Alliance, Seattle Freight Advisory Board, Port of Seattle, North Seattle Industrial Association (NSIA), Cascade Bicycle Club, and the Seattle Bicycle Advisory Board.

There were 5 Seattle Department of Transportation (SDOT) advisory staff members and 6 consultants at the workshop.

Community & SDOT Stakeholder Attendees

- Haley Keller, Ballard Alliance & Cascade Bicycle Club
- Warren Aakervik, Seattle Freight Advisory Board
- Tom Malone, North Seattle Industrial Association (NSIA)
- Eugene Wasserman, NSIA
- Elliott Strong, NSIA
- Patrick Mayovsky, Port of Seattle
- Geri Poor, Port of Seattle
- Serena Lehman, SDOT Bicycle Advisory Board Liaison
- Chris Saleeba, SDOT Policy and Planning
- John Marek, SDOT Transportation Operations
- Andrew Natzel, SDOT Transportation Operations
- Venu Nemani, SDOT Transportation Operations

Project Team

- Wes Ducey, SDOT Project Manager
- Kit Loo, SDOT Program Manager
- Matt Baughman, COWI
- Lisa Reid, SCJ Alliance
- Susann Babei, SCJ Alliance
- Marni Heffron, Heffron Transportation
- Jasmine Beverly, Cascadia Consulting
- Kate Graham, Cascadia Consulting



Figure 1: Attendees listening to presentation from SDOT.

WHAT WE HEARD

The workshop started with a presentation from SDOT project manager, Wes Ducey, and technical consultants, Marni Heffron and Matt Baughman, on the Ballard Bridge Planning Study process and current considerations. Following the presentation attendees broke into 2 groups to discuss the North and South side connection options being considered. Each group had representation from the bike and freight community, as well as representatives from the technical team. SDOT gathered feedback using sticky notes, drawings, and verbal comments from group members.

Group Discussion Feedback & Observations

High-level Fixed Bridge Replacement – North

- 5% grade is the maximum that is reasonable for people who bike
- Interest in a sidewalk and/or bicycle facility on the 51st/Leary ramp
 - Consider adding an east/west crosswalk at the signalized intersection at the top of the ramp
- Freight would like a right turn onto 15th Ave NW from the NW 51st St/Leary Way NW ramp
 - The turn radius would need to accommodate large trucks (WB-67)
- Evaluate turning radii at the intersection of 14th Ave NW and NW Leary Way
- Concerns about possible property impacts

Mid-level Moveable Bridge Replacement – North

- Would like to see safety improvements for people who bike and walk at 17th Ave NW/ NW Leary Way intersection
- Freight has concerns about making the U-turn from 17th Ave NW onto the southbound on ramp
- Freight would like to be able to turn right from southbound 14th Ave NW onto NW 46th St

Low-level Moveable Bridge Rehabilitation – North

- Disappointed in the lack of reduction in bridge openings
- Prefer the 14-foot wide 2-direction path on 1 side

SPUI (Mid-level and High-level Bridge Replacement) – South

- General support for the SPUI concept
 - Interest in including it with a low-level rehabilitation option
- Would like a wider multi-use path on the west side of the Emerson to SB 15th Ave W ramp
- Would like a connection from the future light rail station (near 16th Ave W & Thorndyke Ave) to the bridge for people who walk and bike
- Would like to connect the Ship Canal Trail to 16th Ave W

Low-level Moveable Bridge Rehabilitation – South

- Concern for access to the southbound bus stop for people who walk and bike
- Interest in improved east-west crossings on 15th Ave W/Ballard Bridge for people who walk and bike
- Would like more signage for people who walk and bike directing them to the west side facilities
- Concerns about the turn radii in the bicycle off ramp to the Ship Canal Trail, specifically for people on cargo bikes
- Would like facilities for people who walk and bike to connect to future Link light rail station (near 16th Ave W & Thorndyke Ave W)
- Concerns from freight drivers about people crossing the bridge at Emerson
 - Freight drivers have limited visibility while turning right

General Feedback

- Concern about constructability of the mid-level moveable bridge replacement
- Interest in understanding the challenges of a tunnel option
- Would like information about in-water touchdown points and impacts
- Interest in an independent bridge for people who walk and bike
- Interest in ship canal crossing height requirements for fixed structures

Feedback received during the technical workshop will be considered by the technical team as they continue to develop and refine the feasible alternatives, associated risks, opportunities, and trade-offs.

APPENDICES

Appendix A: PowerPoint Presentation	p. 7
Appendix B: Display Boards	p. 15
Appendix C: Roll Plots	p. 16
Appendix D: Invitation Email	p. 20



Welcome!

Project Team

- Wes Ducey, SDOT Project Manager
- Moein El-Aarag, Project Manager
- Matt Baughman, Consultant, Structures Lead
- Marni Heffron, Consultant, Traffic Lead
- Lisa Reid, Consultant, Civil Engineering Lead
- Kate Graham & Jasmine Beverly, Consultant, Outreach & Communications

Stakeholders – Please introduce yourselves

Agenda

10:30 – 10:40 AM	Welcome and Introductions
10:40 – 10:50 AM	Ballard Bridge Planning Updates
10:50 – 11:00 AM	Overview of Three Bridge Options
11:00 AM – 12:30 PM	Small Group Discussions on Bridge Options (40 minutes each for north end and south ends + 10-min break)
12:30 – 12:45 PM	Report Out & Summarize
12:45 – 1:00 PM	Next Steps and Adjourn

Department of Transportation



PLANNING STUDY PROCESS

		2019			
		Spring	Summer	Fall	Winter
	Stakeholder Meetings: with agency and community partners including Sound Transit, Port of Seattle, BNSF, and adjacent BINMIC and community organizations	[Blue bar]			
	Advisory Board Briefings: to involve and seek assistance from Bike, Pedestrian, Transit, and Freight advisory boards	[Blue bar]			
	Online Survey: to introduce the project scope and schedule and to better understand behaviors for users of the Ballard Bridge	[Blue bar]			
	Drop-in Sessions & Community Events: to describe the Ballard Bridge history, review evaluation process, present analyses, and collect community input		[Blue bar]		
	Community Councils & Other Community Group Briefings: to inform the public of the study purpose and progress, and to provide more opportunities for community comments and questions	[Blue bar]			
	Finalize Alternatives Analysis and Share Results: with SDOT directors, the Mayor, and our local, county, and state elected officials			[Blue bar]	



	Technical Screening to identify viable alternatives		Advisory Board Briefings		Online Survey
	Alternatives Analysis		Stakeholder Meetings		
	Share results		Community Involvement		

Subject to change

Department of Transportation



What We've Heard

Key takeaways from Online Community Survey and July Drop-In Session

- Improve accessibility for people walking and biking across the bridge
- Improve marine traffic access (reduce wait times and marine traffic congestion)
- Reduce bridge openings during peak hours
- Widen travel lanes on the bridge to accommodate larger vehicles, including buses, trucks, and other freight vehicles
- Ensure coordination with Sound Transit's future Ballard Link Extension



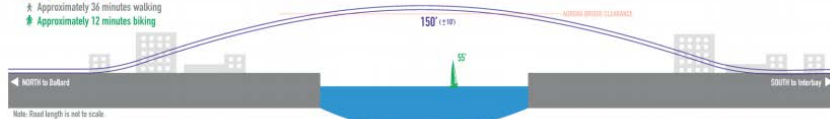
BALLARD BRIDGE OPTIONS

HIGH LEVEL FIXED BRIDGE REPLACEMENT

5% slope / 6,435 ft long

▲ Approximately 28 minutes walking

▲ Approximately 12 minutes biking



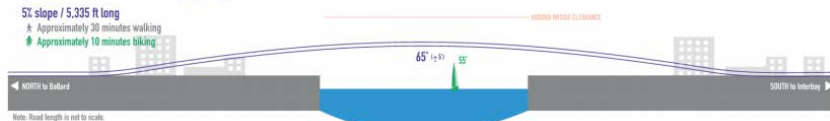
MID LEVEL MOVEABLE BRIDGE REPLACEMENT

Significant reduction in number of bridge openings.

5% slope / 5,335 ft long

▲ Approximately 28 minutes walking

▲ Approximately 10 minutes biking



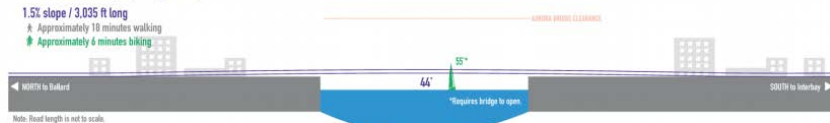
REHABILITATION OF EXISTING MOVEABLE BRIDGE (LOW LEVEL)

Similar number of bridge openings to today.

1.5% slope / 3,035 ft long

▲ Approximately 18 minutes walking

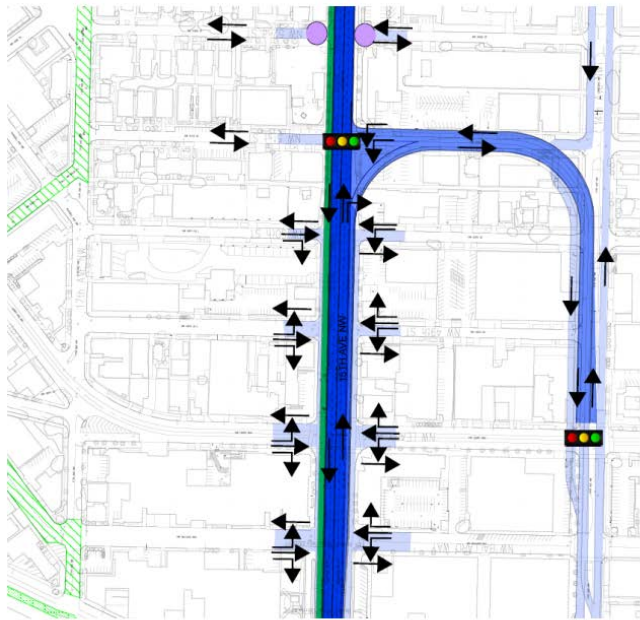
▲ Approximately 6 minutes biking



Department of Transportation



North Side Connections



Department of Transportation



South Side SPUI



Department of Transportation



Considerations

- Geometric Feasibility
- Structural Design
- Constructability and Construction Impacts
- Bike & Pedestrian Safety
- Adjacent Project Coordination
- Cost
- Multimodal Mobility and Connectivity
- Transit and Freight Reliability
- Industrial Operations
- Marine Traffic Impacts
- Environmental Impacts

Department of Transportation



Ground rules for discussion

- Engage in active listening (please limit phone time)
- Act and communicate with respect
- Share “air time”: Ask yourself **W.A.I.T= Why Am I Talking?**
- Commit to being open to new concepts and ideas
- Use “I” statements/speak for yourself & from your own experiences
- Critique ideas, not people
- The goal is not to agree -- it is to gain a deeper understanding



**BREAK OUT SESSION
BEGINS**

Department of Transportation

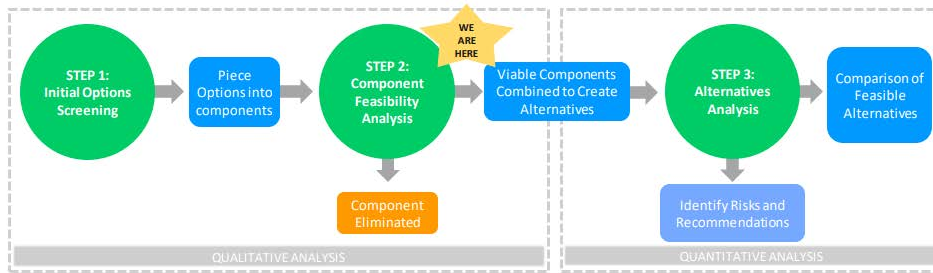


**SHARE OUT AND
REPORT BACK**

Department of Transportation



Evaluation Process



Initial Screening Criteria:

- Provide safe multimodal merges, diverges, and connections
- Maintain multimodal access to Leary Way NW, W Emerson St & W Nickerson St
- Improve pedestrian and bicycle facilities and connections to Burke Gilman and Ship Canal trails
- Design road grades to 5%
- Maintain 20'x20' access for over-legal loads

Feasibility Analysis includes:

- Multimodal traffic analysis
- Geometric feasibility
- Structural analysis
- Constructability evaluation
- Rough Order of Magnitude (ROM) costs

Alternative Analysis Criteria:

- Multimodal Mobility and Connectivity
- Community Support
- Environmental Impact
- Cost Estimate
- Implementation Characteristics

Department of Transportation



Next steps

Date	Activity/Action
October 2019	Public Drop-In Sessions
Winter 2019	Draft Alternative Comparison Report

Department of Transportation



Questions?

BallardBridge@seattle.gov | (206) 775-8894
www.seattle.gov/transportation/BallardBridge

www.seattle.gov/transportation



Department of Transportation



BALLARD BRIDGE OPTIONS

HIGH LEVEL FIXED BRIDGE REPLACEMENT

- 15' slope 1:4.5H:1V
- 1. Approximately 20 marine opening
- 2. Approximately 20 marine opening



MID LEVEL MOVABLE BRIDGE REPLACEMENT

Significant reduction in number of bridge openings.

- 15' slope 1:4.5H:1V
- 1. Approximately 10 marine opening
- 2. Approximately 10 marine opening



REHABILITATION OF EXISTING MOVABLE BRIDGE (LOW LEVEL)

Similar number of bridge openings to today.

- 1:5 slope 1:2.5H:1V
- 1. Approximately 20 marine opening
- 2. Approximately 20 marine opening

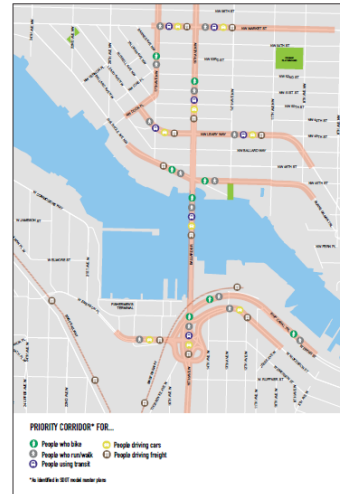


This graphic represents the technical options being considered by the planning study. It does not represent a design or proposed alternatives.

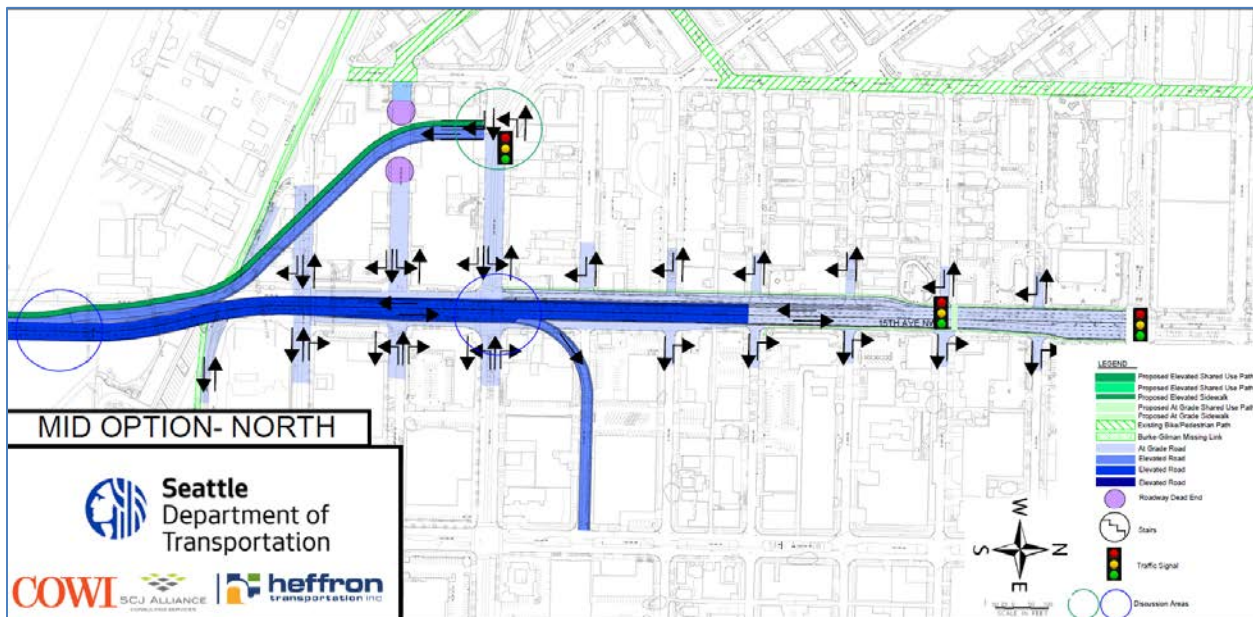
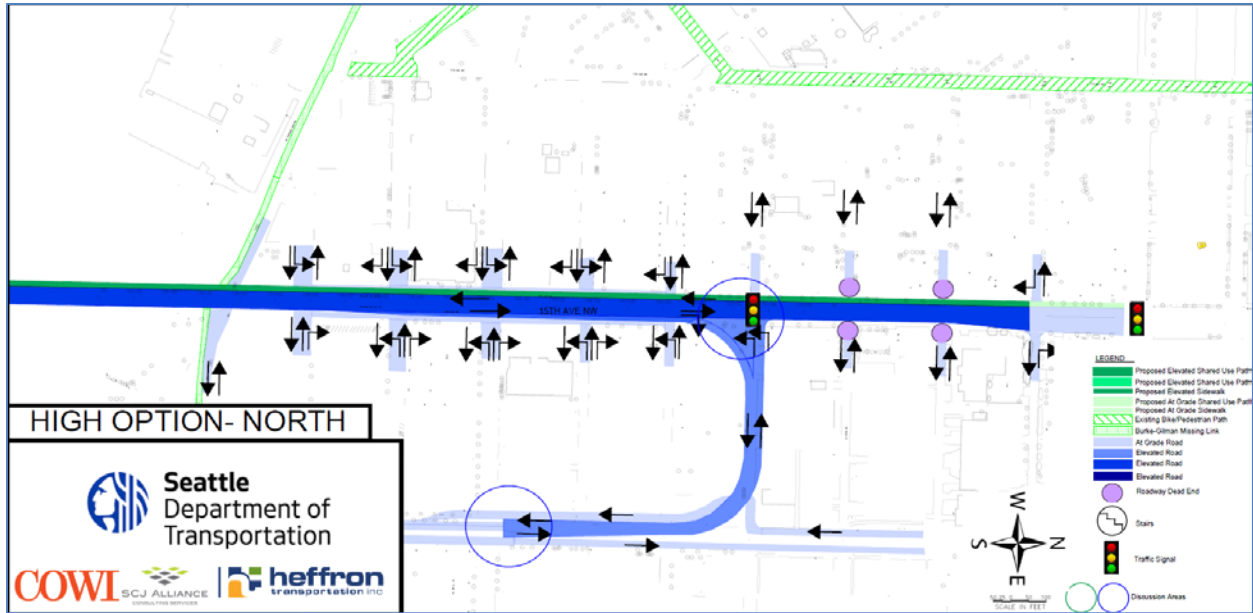
BALLARD BRIDGE CONSIDERATIONS

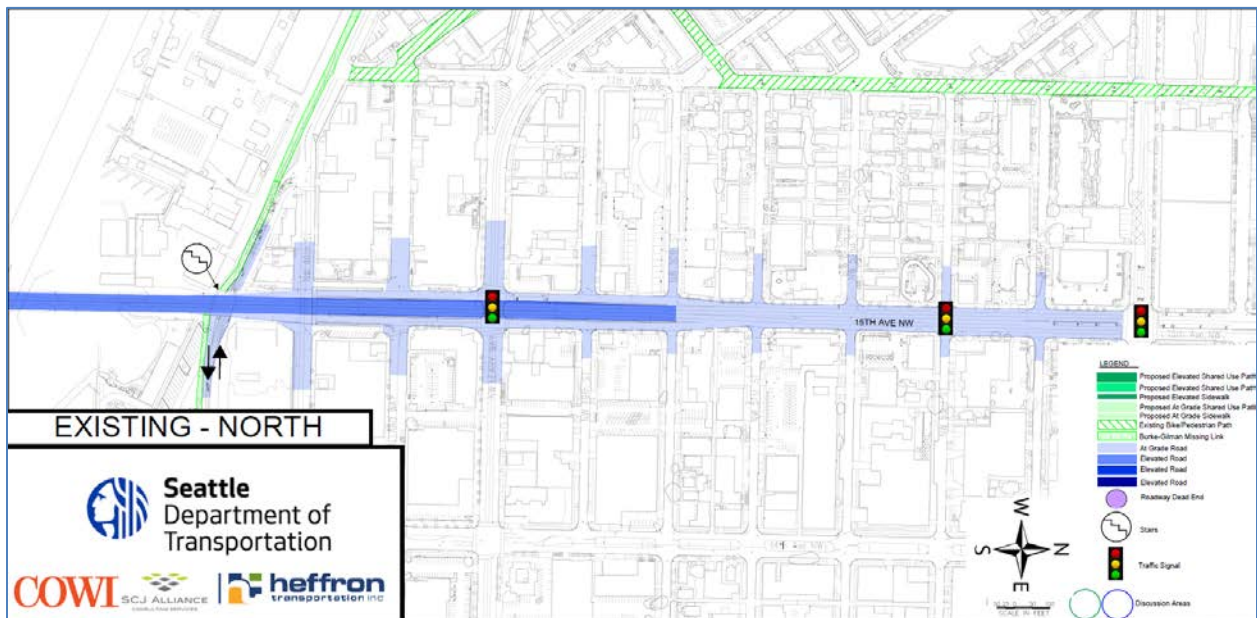
As we explore options for the Ballard Bridge, we must consider factors such as structural feasibility, cost, and community transportation needs. Specific considerations include:

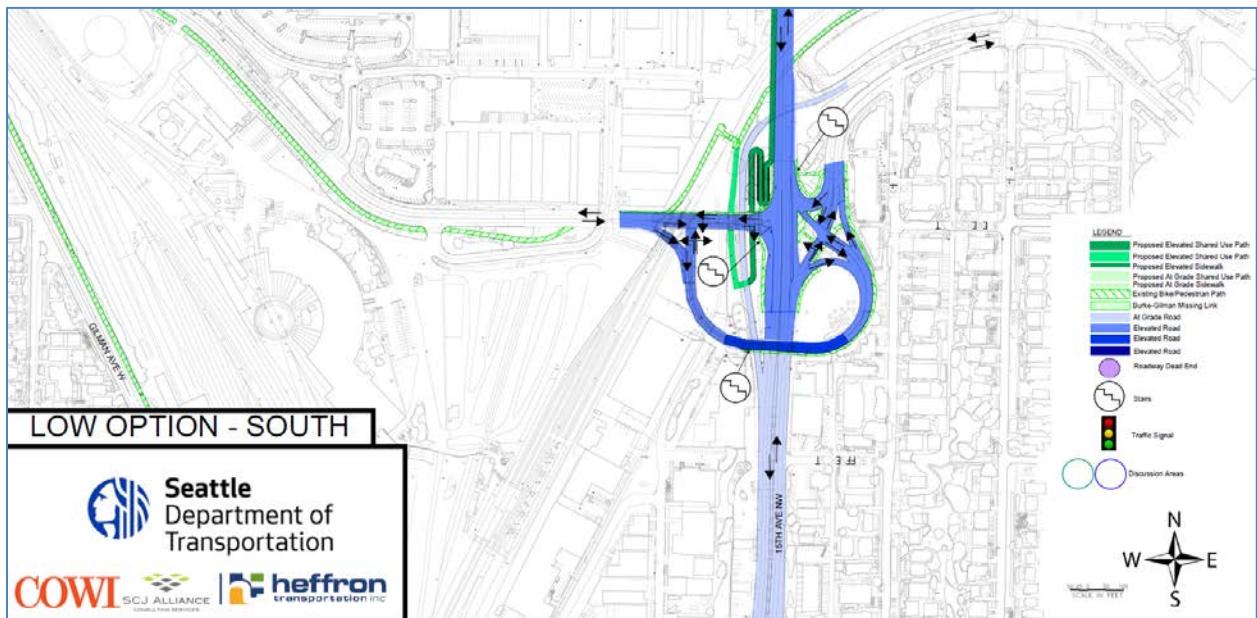
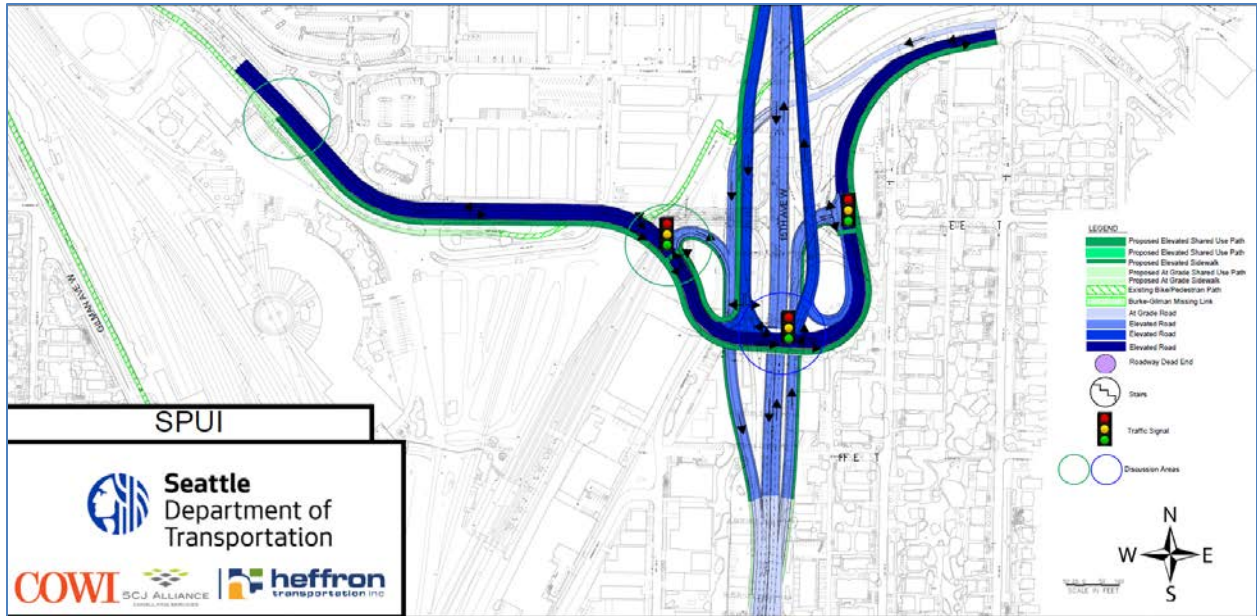
- Maintain multimodal access to Leary Way NW
- Maintain multimodal access to W Emerson St & W Nickerson St
- Provide safe multimodal merges, diverges, and connections
- Improve pedestrian and bicycle facilities
- Maintain pedestrian and bicycle access to Burke Gilman & Ship Canal Trails
- Aim for roadway grades at or less than 5% (max grade of 7% as necessary)
- Maintain access for over-legal loads (20-ft x 20-ft)
- Minimize property effects
- Predictability of bridge openings for marine and roadway traffic

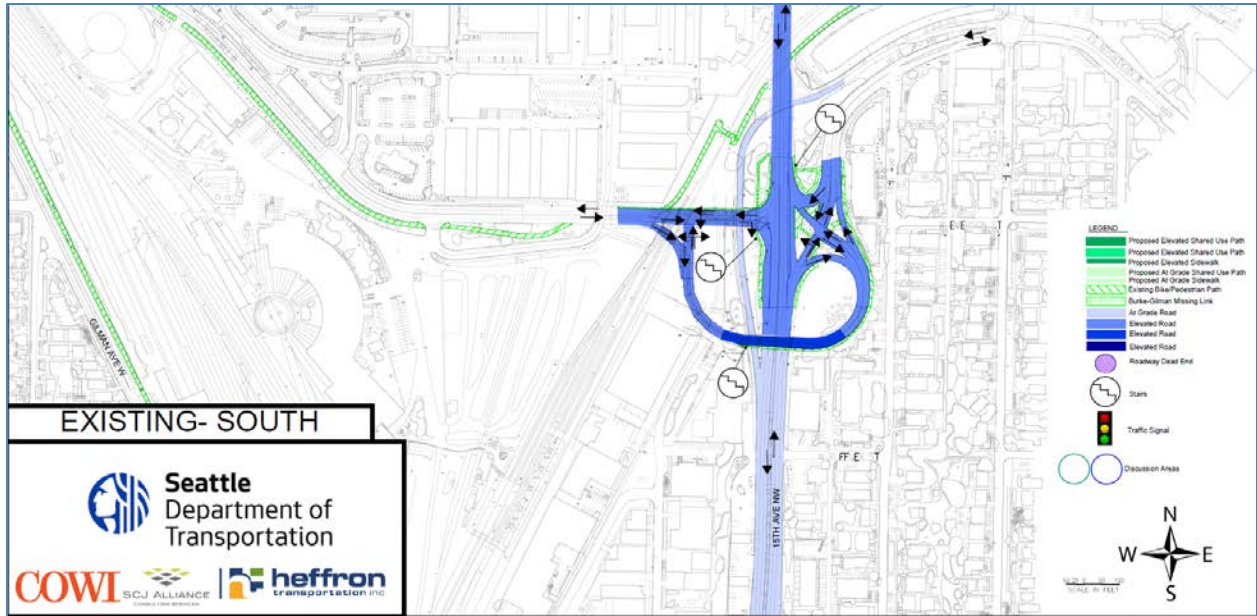


APPENDIX C: ROLL PLOTS









APPENDIX D: INVITATION

Dear Ballard Bridge Stakeholders,

We've kicked-off the long-term [Ballard Bridge Planning Study](#), which explores feasible rehabilitation and replacement options and evaluates how to bring the bridge up to current transportation, functional, and structural standards.

Come to our upcoming Ballard Bridge Planning Study technical workshop on **Thursday, September 12th from 10:30 AM – 1:00 PM at the Ballard Library** to:

- Learn where we've been and what we've heard
- Discuss technical screening findings
- Share insights into multi-modal routes and connections
- Give input on feasible options
- Hear what's next

The planning study began with an online survey followed by a public drop-in session to better understand what community members need, value, and envision for the bridge. As we continue to receive and review community feedback, we'll evaluate cost-effective and constructible structure types. Through the end of the year, we'll work with our agency partners, advisory boards, and community members to propose options that meet these standards and community needs. The final, feasible options will be compared among their associated costs, risks, benefits, and other trade-offs.

This study will not recommend a preferred alternative but rather provide a comparison of feasible alternatives as we coordinate with our elected officials in evaluating funding options.

Be on the lookout for an outlook invitation along with the meeting's agenda.

Thank you,
Wes Ducey

Outreach Team
[Ballard Bridge Planning Study](#)
206-775-8894
BallardBridge@seattle.gov

Invitation sent to:

Sean Cryan	Connect Ballard
Haley Woods	Peddler Brewing/Connect Ballard
Vicky Clarke	Cascade Bicycle Club
Mike Stewart	Ballard Alliance
Larry Ward	Pacific Fisherman Shipyard
Ron Hildebrandt	Trident Seafoods
Eric Gier	Un-Cruise Adventures
Christine Wolf	The Northwest Seaport Alliance
Eugene Wasserman	North Seattle Industrial Association
Warren Aakervik	Ballard Oil
Ray Giometti	Port of Seattle, Fisherman's Terminal
Delmas Whittaker	Port of Seattle, Fisherman's Terminal
Geri Poor	Port of Seattle
Emily Payne	Seattle Bicycle Advisory Board
Jeanne Acutanza	Seattle Freight Advisory Board
David Seater	Seattle Pedestrian Advisory Board
John Marek	SDOT
Venu Nemani	SDOT – Freight Advisory Board Liaison
Serena Lehman	SDOT – Bicycle Advisory Board Liaison
Belen Herrera	SDOT – Pedestrian Advisory Board Liaison
Kit Loo	SDOT
Diane Wiatr	SDOT
Jonathan Lewis	SDOT