West Marginal Way SW Safety Corridor Improvement Project

Seattle Bicycle Advisory Board February 1, 2023



Topics

- Project Background
- Data collection results
- Spokane St Swing Bridge (Low Bridge) closures and detour routes



Purpose of project

- Make W Marginal Way SW safer and more accessible for all travelers and maintain capacity and operations
 - Safer = drivers traveling at posted speed limits, designated space for people walking and biking, increased awareness at driveways and intersections
 - More accessible = predictable movement for all travelers
 - Close a crucial transportation gap= connect the Duwamish Trail and West Seattle Bridge Trail
 - Capacity = maintain existing freight movements along corridor and to Port



Background





Project details

As part of the safety and mobility work along West Marginal Way SW, between Marginal Pl SW and Highland Park Way SW, we are:

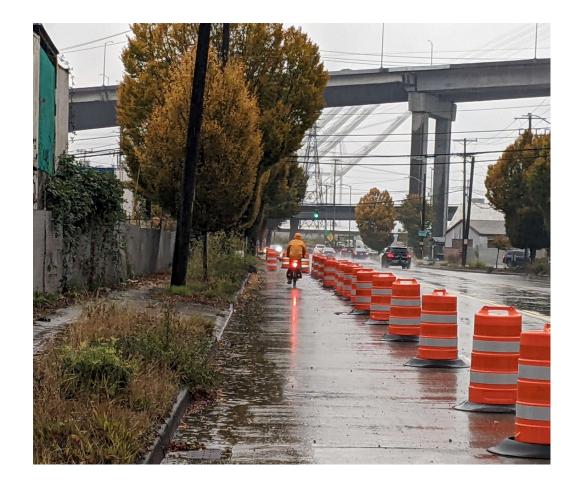
- Adding a 0.4-mile long on-street protected bike lane to close a crucial gap in the regional walking and biking network
- Planning to implement driveway and Duwamish Trail intersection improvements



Data collection since High Bridge reopening

4 data collection occurrences:

- August/September 2022 along east side of corridor for driveway truck, pedestrian, bicycle, and train counts in peak season
- 2. After the High Bridge reopened in September 2022
- 3. In October/November 2022 with southbound lane closure
- 4. In January 2023 with temporary protected bike lane



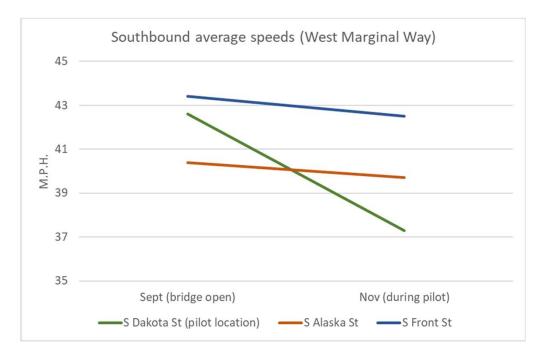
Data Collection

- Between October 23 and November 6, 2022 the southbound curb was closed to test how the proposed design impacted West Marginal Way SW operations
- Data collected included:
 - Driver speeds
 - Driver volumes
 - Walking and biking counts



Findings: Speeds

- Speeds decreased by 12% going from 43 to 37 MPH on average
- Posted speed limit is 30 MPH
- Anticipate speeds moving closer to 30 MPH with permanent project





Findings: Volumes

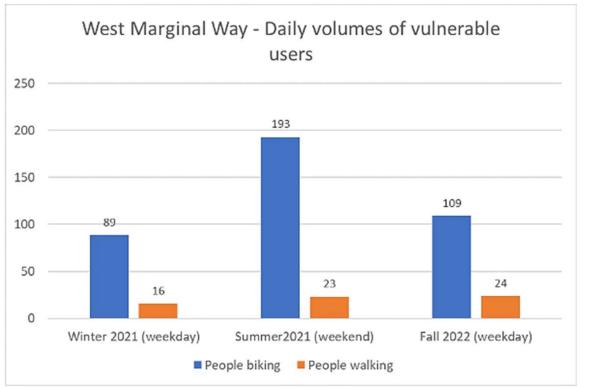
- Driver volumes dropped about 60% since West Seattle Bridge reopened
- Without the bridge detour, traffic patterns are back to lower levels of approximately 15,000 vehicles per day
- During the two-week lane pilot closure, daily traffic volumes were around 12,500 vehicles per day





Findings: Walking and Biking Counts

- The number of people walking and biking on the Duwamish River Trail varies seasonally but ranges from approximately 100 to 200 people per day.
- During a typical day, this translates to 20 people walking or biking per hour.
- Better connecting this area by closing the gap in our network could double the number of people biking and walking.





Safety Assessment

Safety improvements along driveways that cross the Duwamish Trail and PBL will include:

- median islands
- new signs
- pavement markings





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Key Takeaways

- Verified negligible impacts to overall operations of W Marginal Way SW. The pilot closure and traffic models show changes will increase travel time by 2 seconds per trip
- Indicated a speed reduction would occur after the project is completed. Detailed on an earlier slide





Bicycle detour

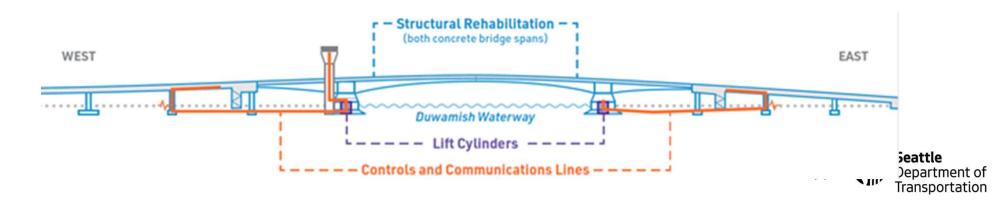
- Low bridge had an emergency closure Dec 23- Jan 13
- Installed temporary bike lane on 1st Ave S and W Marginal Way SW on Jan. 4-5; 1st Ave S removed Jan 14
- There will be future, planned closures in the coming months with a need for bike/pedestrian detour routes
- W Marginal Way SW remains in place while conversations continue about a permanent protected bike lane





Next Steps for Low Bridge Rehabilitation

- Strengthen the bridge (completed Oct 2022)
- Replace pump arrays (scheduled Feb 11 14)
- Rehabilitate the east side lift cylinder, which does the heavy lifting to open and close the bridge (Spring 2023)
- Upgrade the control and communications system that open and close the bridge (2023)



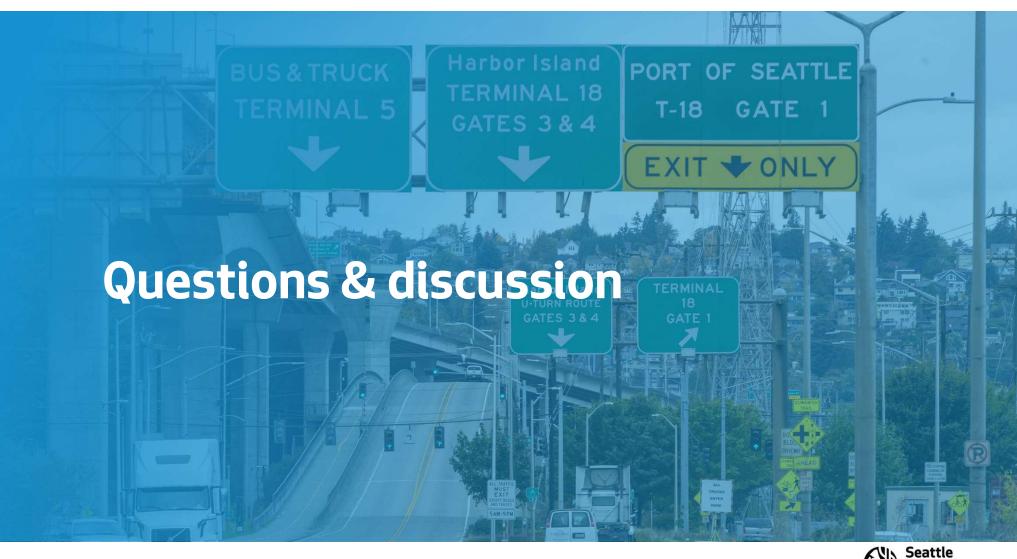


Next Steps

Continue conversations with community partners and stakeholders about the project



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