

West Marginal Way SW

Virtual Open House



Zoom meeting tips

- You've entered the meeting in listen-only mode.
- Ask questions or make a comment
 - Type your questions or comment into the chat. Select "All panelists and attendees" so everyone can see your comment
 - Raise your hand and we'll unmute your microphone so you can speak
- Please limit comments and questions to 30 seconds
- We'll try to get to all questions, but questions can also be sent afterwards to WestSeattleBridge@seattle.gov

Agenda

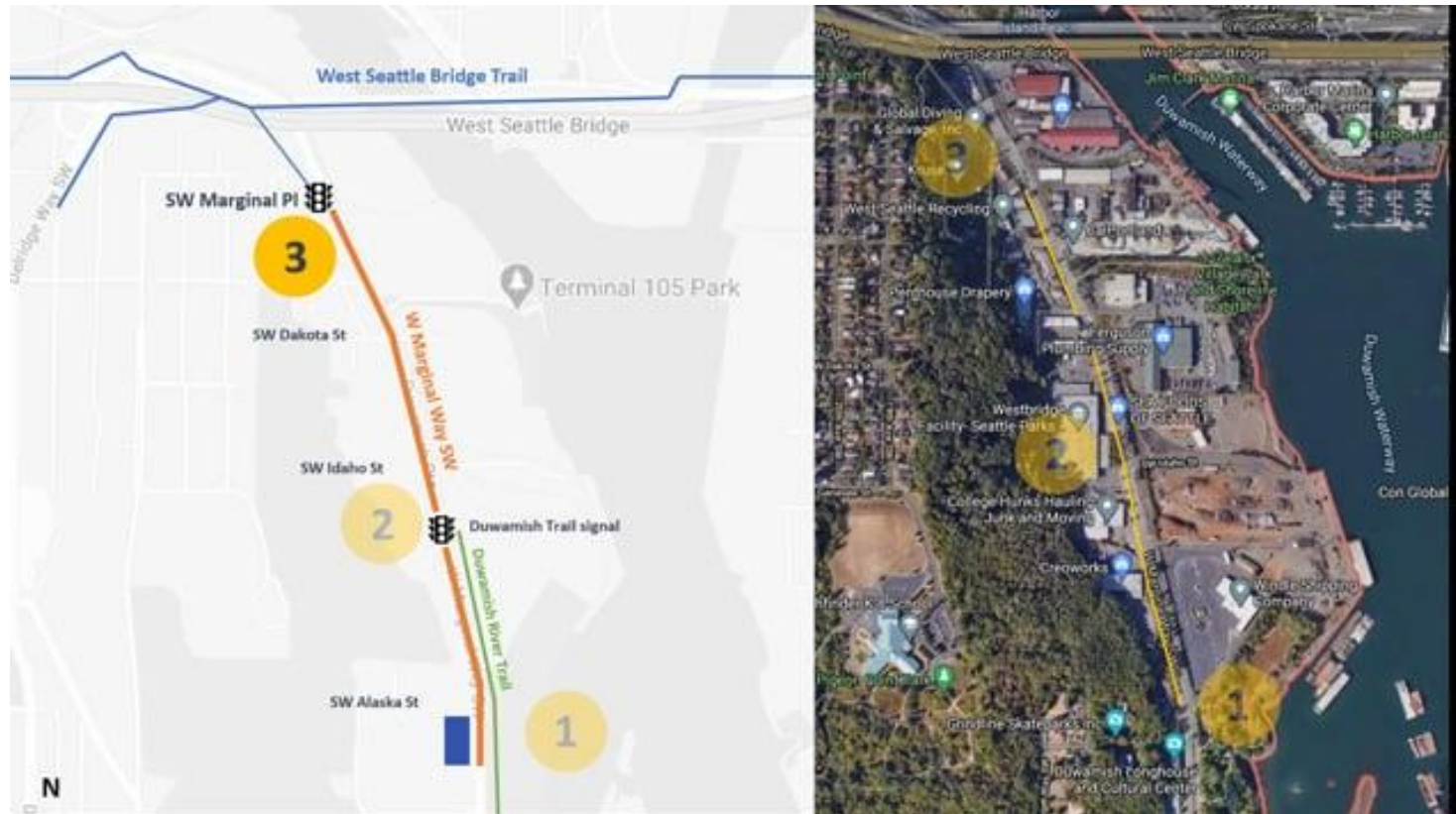
- West Marginal Way SW context and background
- Planned and completed projects
- Analysis of data and constraints
- What we've heard
- Proposed designs for the southbound curb lane
- What we've heard
- Public/stakeholder engagement and next steps



A quick moment of meditation and reflection



West Marginal Way SW



West Marginal Way SW – Making it safer and more accessible for all users

West Marginal Way SW is important because it is a:

- Major Truck Street and Heavy Haul route
- Gap in the bicycle network between West Seattle, Georgetown, and South Park
- Home of the Duwamish Longhouse and Cultural Center

Since the West Seattle High-Rise Bridge closure, West Marginal Way SW has become an essential connection for freight, people, and business. Our goal is to keep all users of the roadway moving **predictably and safely**.

Seattle complete streets ordinance

- Section 1. SDOT will plan for, design and construct all new projects to provide safe and appropriate accommodation for pedestrians, bicyclists, transit riders, and persons of all abilities
- Section 3. Because freight is important to the basic economy of the City and has unique right-of-way needs to support that role, freight will be the major priority on streets classified as Major Truck Streets. Complete Street improvements that are consistent with freight mobility but also support other modes may be considered on these streets

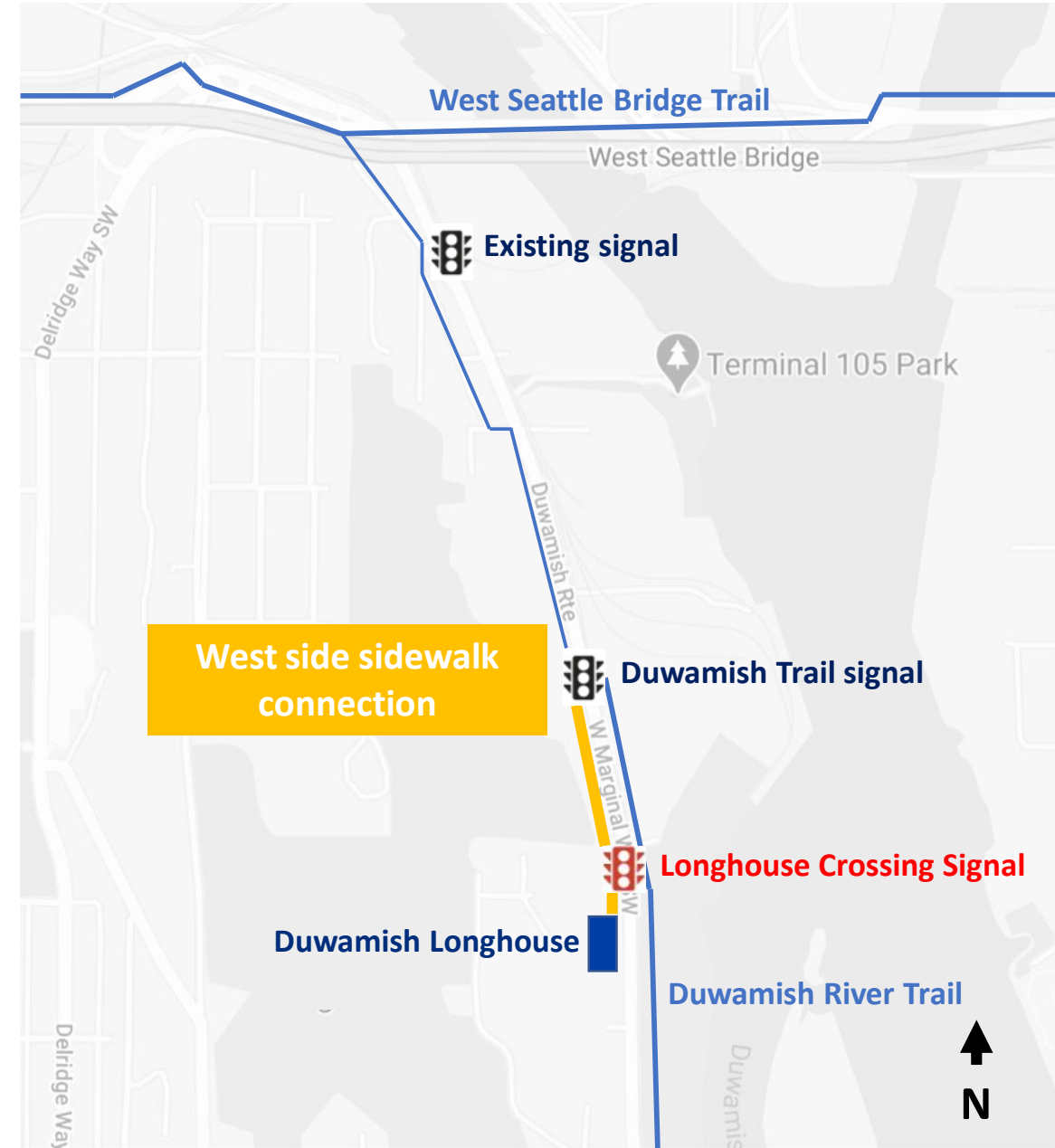


A photograph of a street scene during the day. In the foreground, there are large, rectangular concrete slabs with metal reinforcement bars (rebar) protruding from them, laid out on the pavement. To the left of these slabs is a gravel area. In the background, a multi-lane road with yellow lane markings has several cars driving away. The road is lined with trees and utility poles. A white text box with a dark blue border is overlaid on the center of the image, containing the text "2021 construction projects".

2021 construction projects

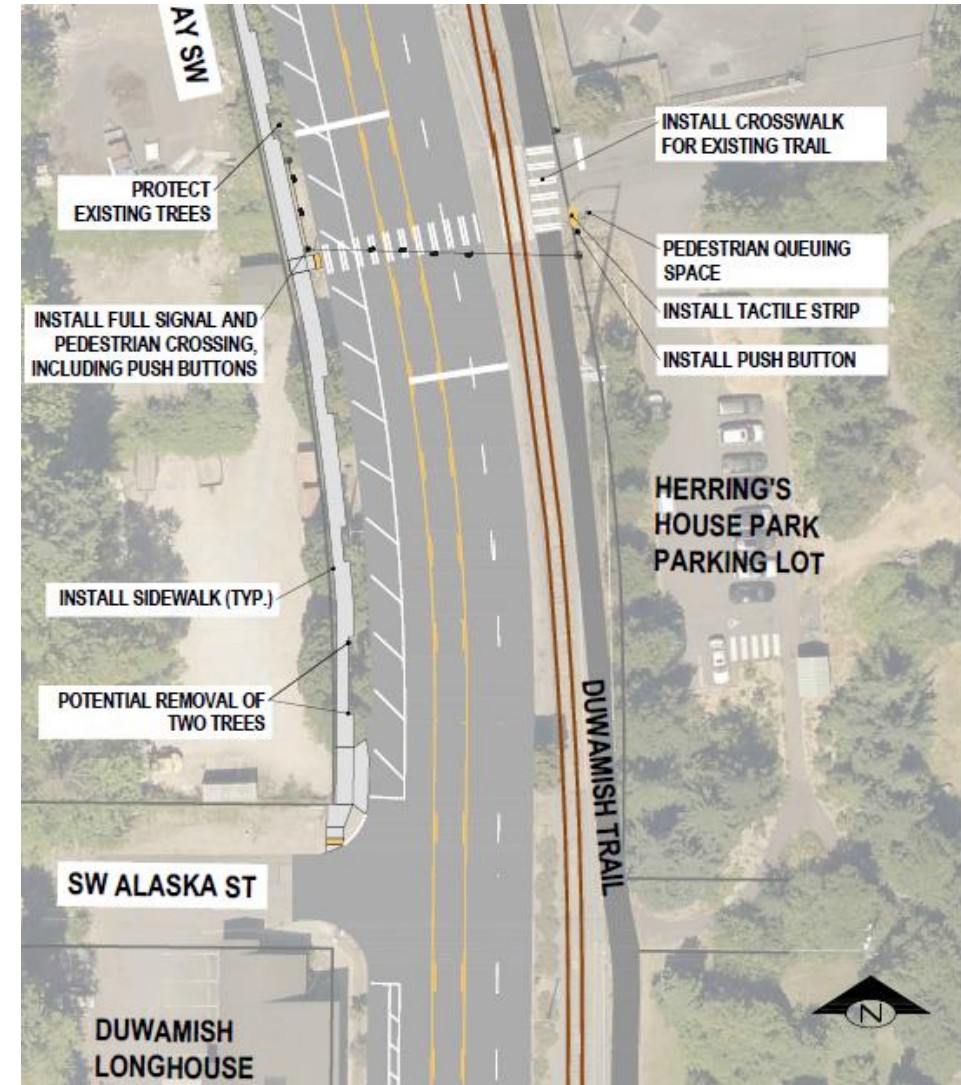
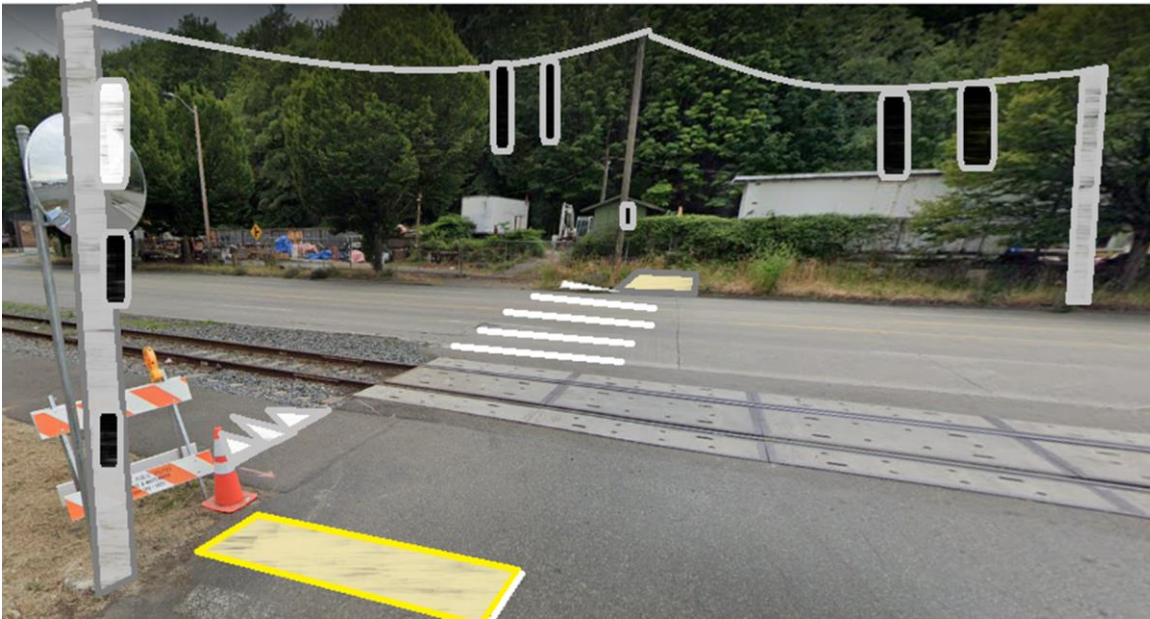
Confirmed projects: 2021 construction

- Duwamish Longhouse interim crossing signal
 - Permanent installation in 2022, pending BNSF coordination
- West side sidewalk connection
 - Placed between trees and property line (replaces dirt path)
 - Driveway rebuild



Longhouse signal

- Interim design



Sidewalk connection

- Extends existing west side sidewalk south of Duwamish Trail signal
- Placed between trees and property line (replaces dirt path)
- We may need to remove one to two trees to meet ADA width standards
- Driveway rebuild





Analysis of corridor data and constraints

Average daily traffic

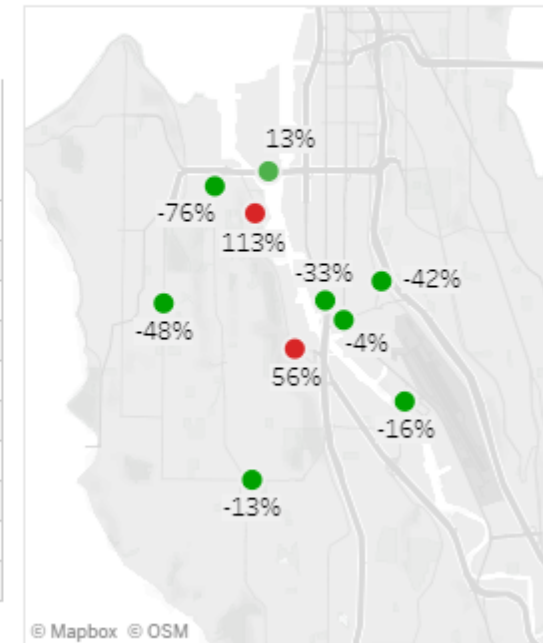
- Volumes have increased on West Marginal Way by 113%
- Carries 7th highest traffic out of 12 corridors being monitored

Weekly Bridge Traffic Monitoring Report

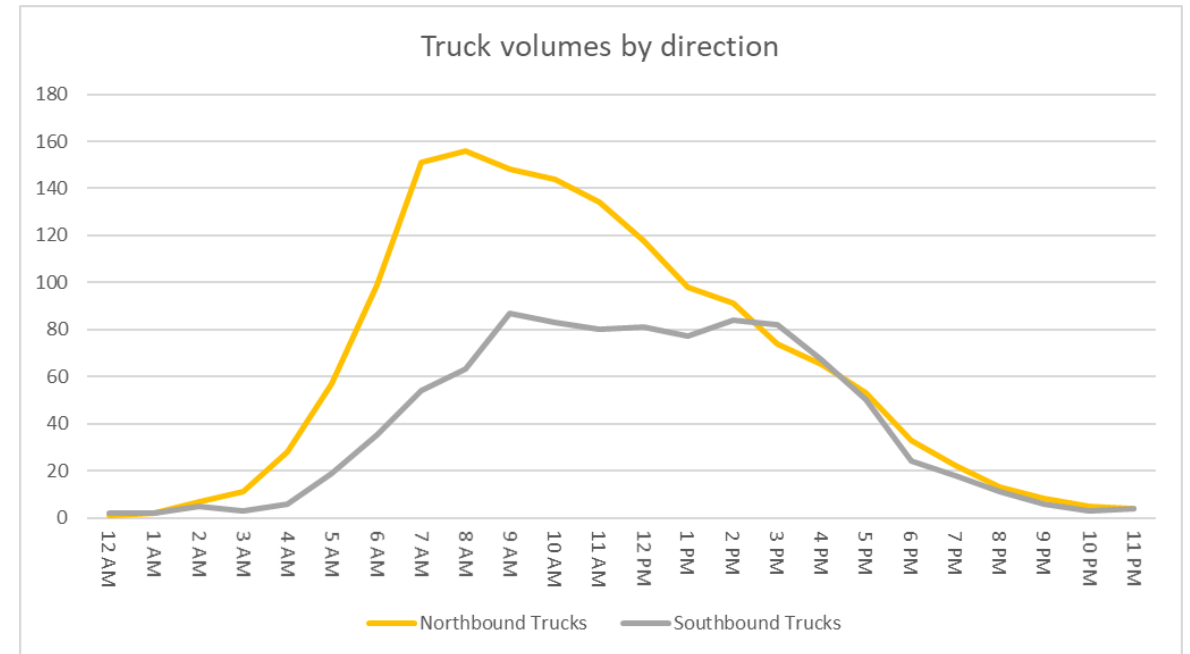
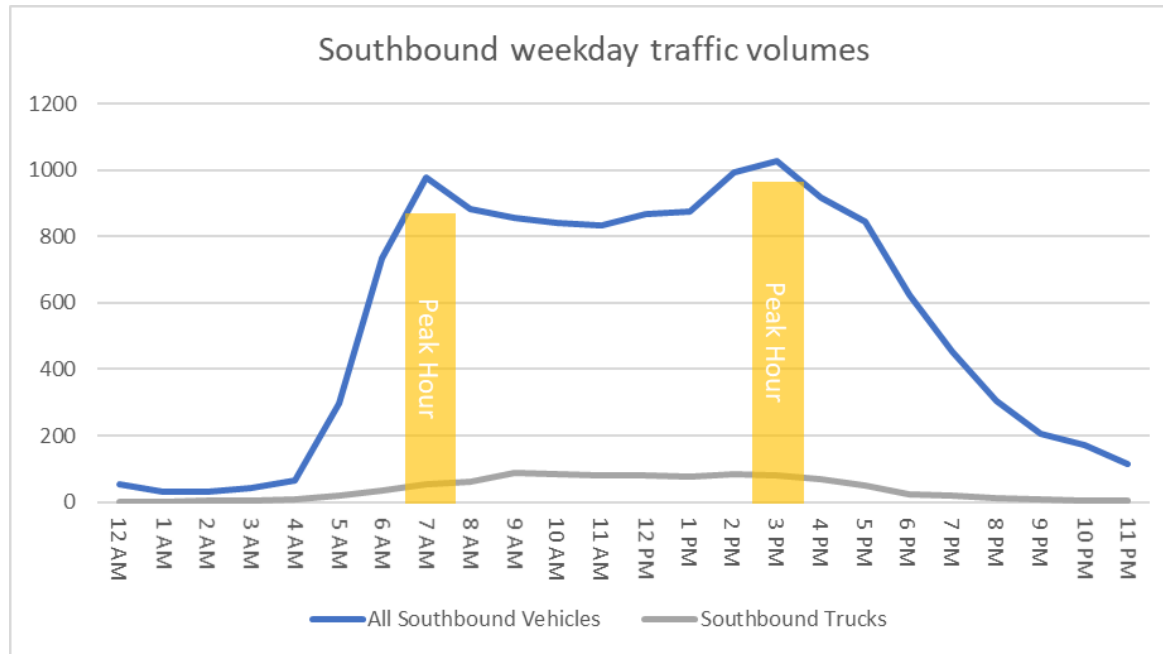
Week ending on
1/1/2021

Vehicle Volumes

Location		Average Weekday Volume	Baseline Volume (Feb 2020)	Change
Spokane St Low Bridge	●	9,450	8,340	13%
E Marginal Way at 1st Ave S	●	37,950	56,950	-33%
35th Ave SW at SW Raymond St	●	13,040	25,260	-48%
West Marginal Way SW at Duwamish River Trail	●	20,610	9,680	113%
Delridge Way SW at SW Andover St	●	5,520	23,400	-76%
South Park Bridge	●	13,120	15,640	-16%
Highland Park Way SW at West Marginal Way SW	●	29,570	18,920	56%
SW Roxbury St at 15th Ave SW	●	21,960	25,360	-13%
Airport Way S & Corson Ave S	●	10,260	17,720	-42%
S Michigan St at 4th Ave S	●	34,980	36,410	-4%
1st Ave S Br	●	83,600	96,370	-13%
SR 99 at S Lander St	●	30,150	70,940	-58%



Average daily traffic and truck volumes (southbound)



*Data collected 11/5/20 to 11/11/20 at SW Dakota St

Traffic calming and results

The issues

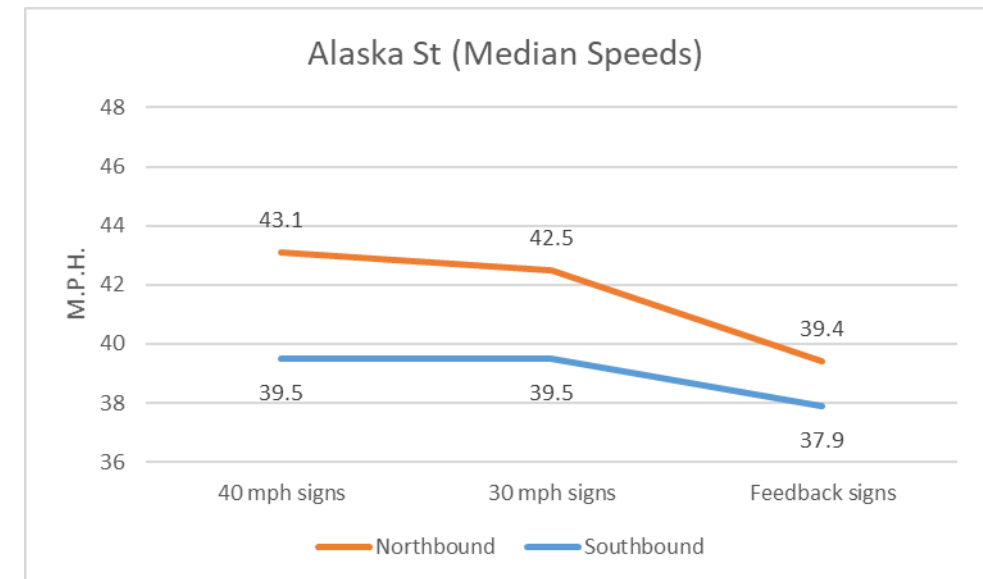
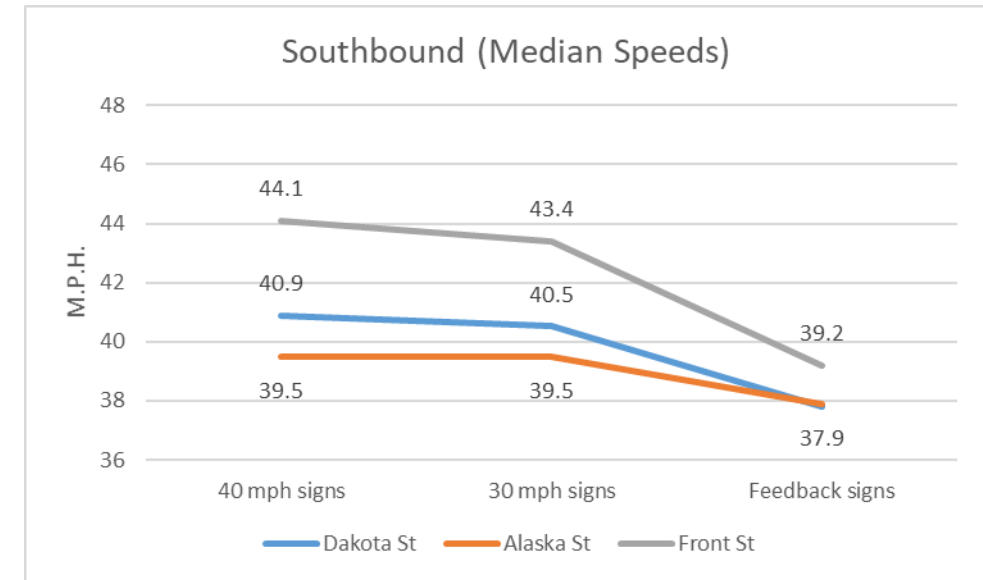
- High speeds make it difficult to access the Duwamish Longhouse
- April 2020: 50% of people driving are traveling above 42 mph

What we did

- May 2020: Speed limit signs changed from 40 mph to 30 mph
- September 2020: 6 radar feedback signs installed

The results

- Lowered speed limit signs to 30 mph
 - Reduced speeds by 1-2%
- Installed radar feedback signs
 - Reduced speeds by 4-11%
- Slower southbound speeds observed where most people driving travel single file



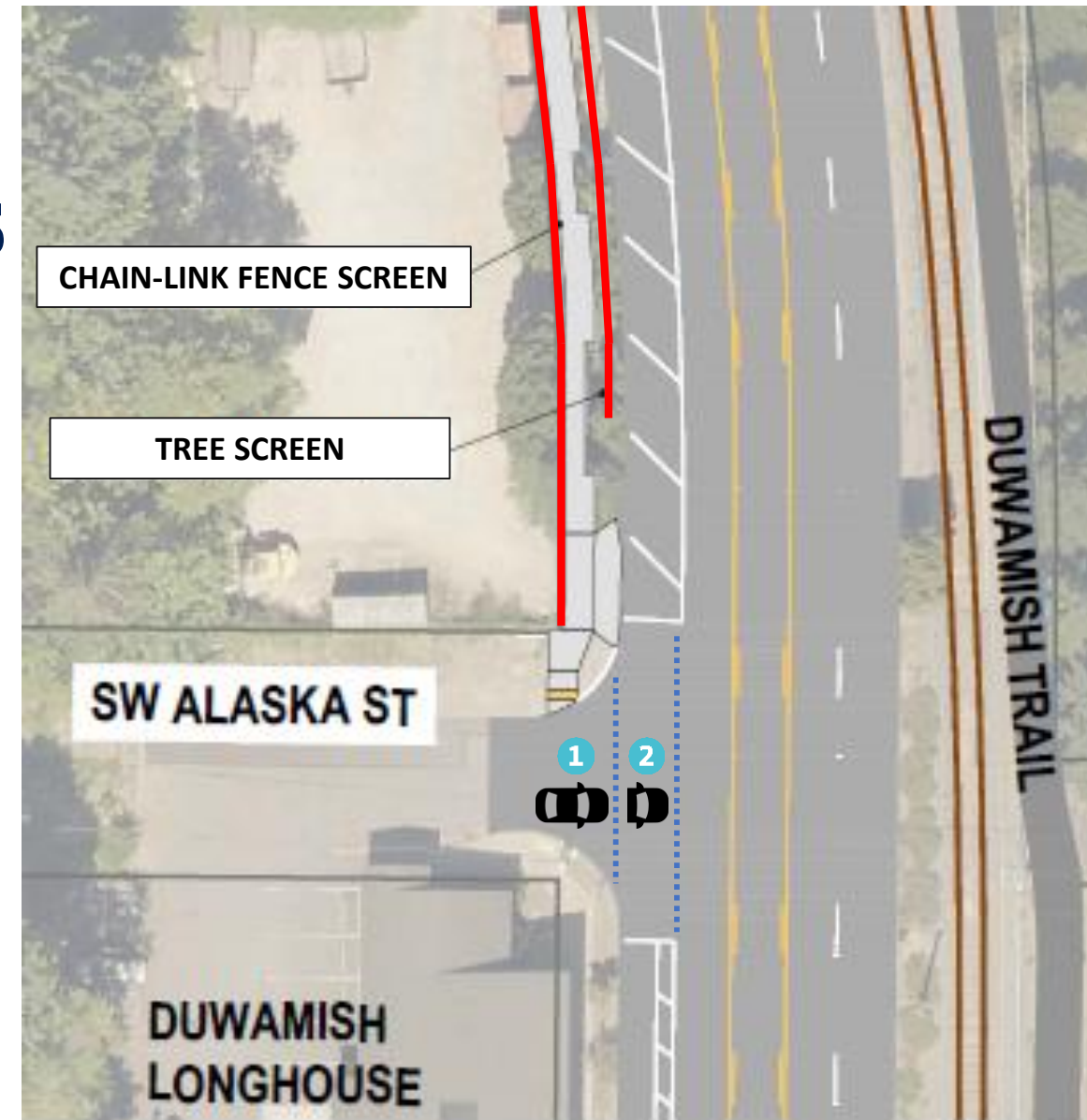
Duwamish Longhouse lane drop

- October 2019: lane drop installed
- Improved sightlines for people entering West Marginal Way from SW Alaska St
- On-street parking allows for safe and direct curbside access for people driving to Duwamish Longhouse



Longhouse lane drop - SW Alaska St sight lines

- Two screen lines (fence and trees) make it difficult to see approaching southbound drivers
- Position 1 – Stopped at curb edge
 - Assumes two southbound lanes open and lane drop removed
- Position 2 – Stopped at lane drop edge
 - Assumes lane drop is in place



Longhouse lane drop - SW Alaska St sight lines



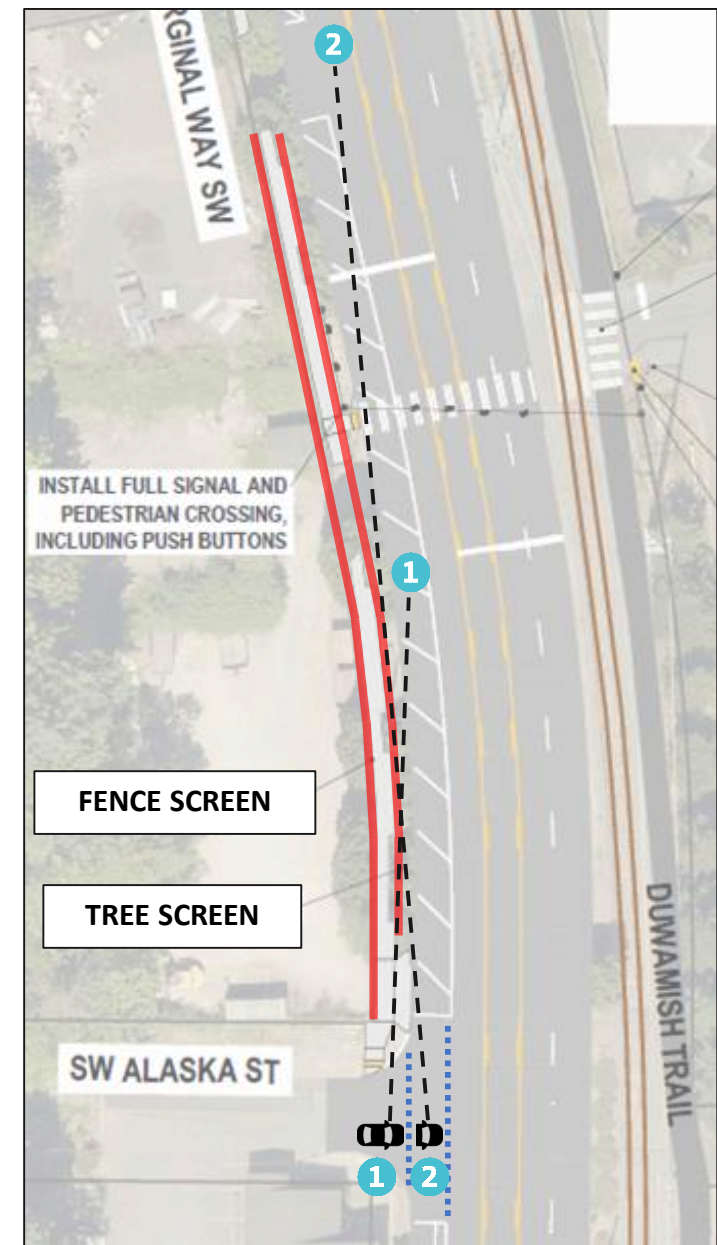
Position 1



Position 2

Longhouse lane drop - SW Alaska St sight lines

- Position 1 – 170' stopping sight distance
 - Southbound drivers must travel at 27 mph to safely stop
 - 3% of people drive 27 mph or slower
- Position 2 – 340' stopping sight distance
 - Southbound drivers must travel at 43 mph to safely stop
 - 85% of people drive 43 mph or slower



Longhouse lane drop - Alaska St sight lines



Lane utilization (PM peak hours)



By direction:

64%

36%

80%

20%

All lanes:

28%

15%

45%

12%

*Data collected 7/23/20 (3pm-6pm) at SW Dakota St

Travel times

- Southbound travel time change from high bridge closure
 - Increased 25% in the AM (2 min)
 - Increased 10% in the PM (1 min)
- Duwamish Trail connection expected to increase southbound travel times by 10 seconds at peak periods

Vehicle Travel Times (in min)

Route	Time Period	Typical Time Current	Typical Time Baseline (Feb 2020)
Spokane St - EB - Harbor Ave to East Marginal Way S	6-9 AM	3.7	4.1
	4-7 PM	4.1	4.0
Spokane St - WB - East Marginal Way S to Harbor ..	6-9 AM	3.6	3.5
	4-7 PM	4.2	3.7
Fauntleroy Way SW - EB - Ferry to 1 Ave Br	6-9 AM	15.4	14.6
	4-7 PM	17.3	16.1
Fauntleroy Way SW - WB - 1 Ave Br to Ferry	6-9 AM	13.4	18.9
	4-7 PM	16.9	19.9
1 Ave S - NB - 1 Ave Br to S Spokane S	6-9 AM	2.8	3.1
	4-7 PM	3.0	3.0
1 Ave S - SB - S Spokane St to 1 Ave Br	6-9 AM	3.2	3.3
	4-7 PM	3.3	3.6
E Marginal Way S - NB - 1 Ave Br to S Spokane S	6-9 AM	3.6	3.1
	4-7 PM	3.6	3.1
E Marginal Way S - SB - S Spokane St to 1 Ave Br	6-9 AM	3.1	2.9
	4-7 PM	3.6	2.9
W Marginal Way SW - SEB - Harbor Ave SW to 1 Ave Br	6-9 AM	10.8	7.8
	4-7 PM	10.7	9.6
W Marginal Way SW - NWB - 1 Ave Br to Harbor Ave SW	6-9 AM	8.4	7.2
	4-7 PM	10.5	7.9

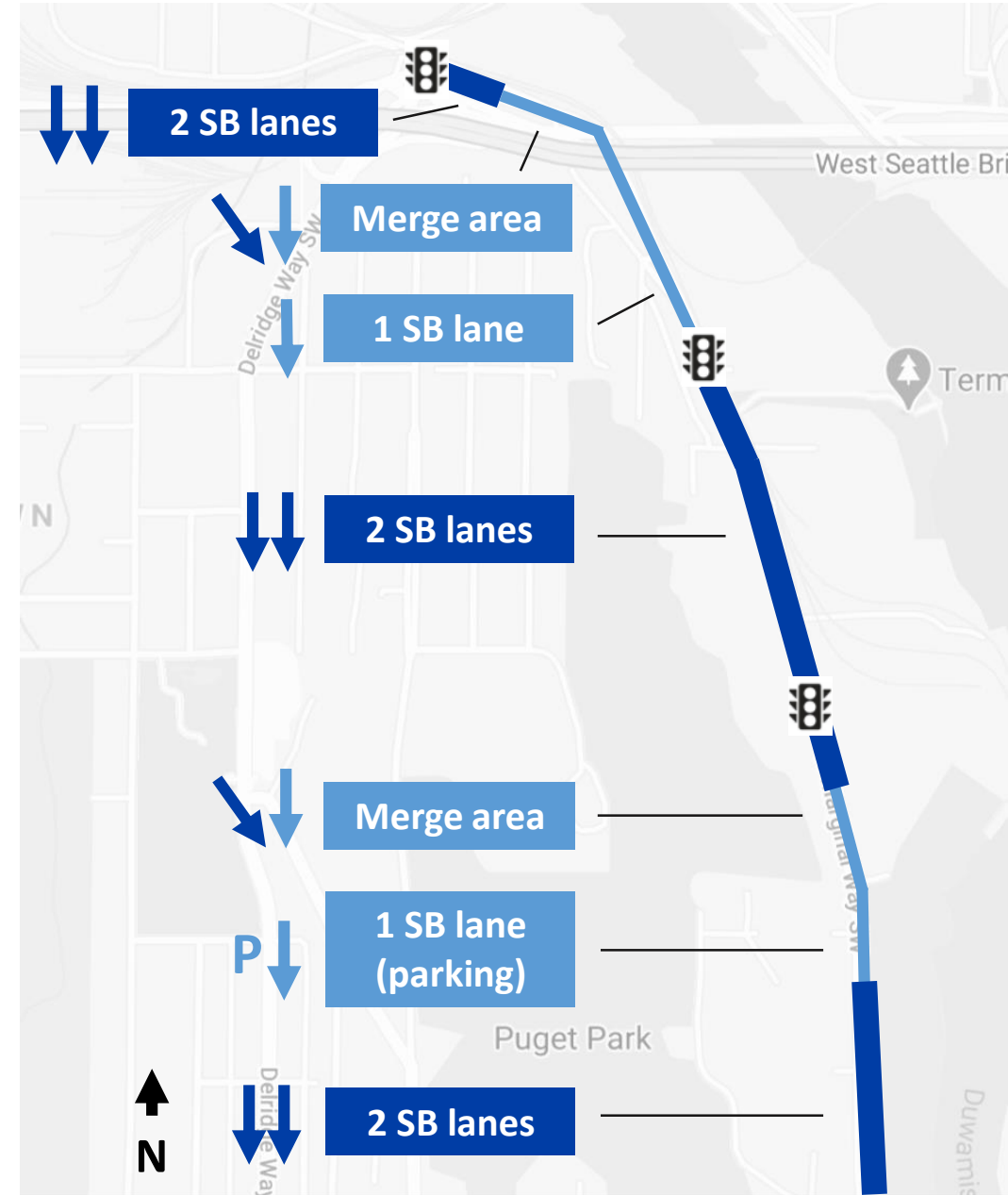
4 - 7 PM Planning Time



Color Legend
 Solid Green <= 0%
 0% > Light Green <= 25%
 25% > Amber <= 50%
 50% > Red

Multiple merge points create existing capacity constraints

- West Marginal Way south of Chelan changes from 1 lane to 2 lanes multiple times
- Creates multiple merge points and unpredictability for drivers



SW Marginal Pl is one lane and the southbound capacity constraint



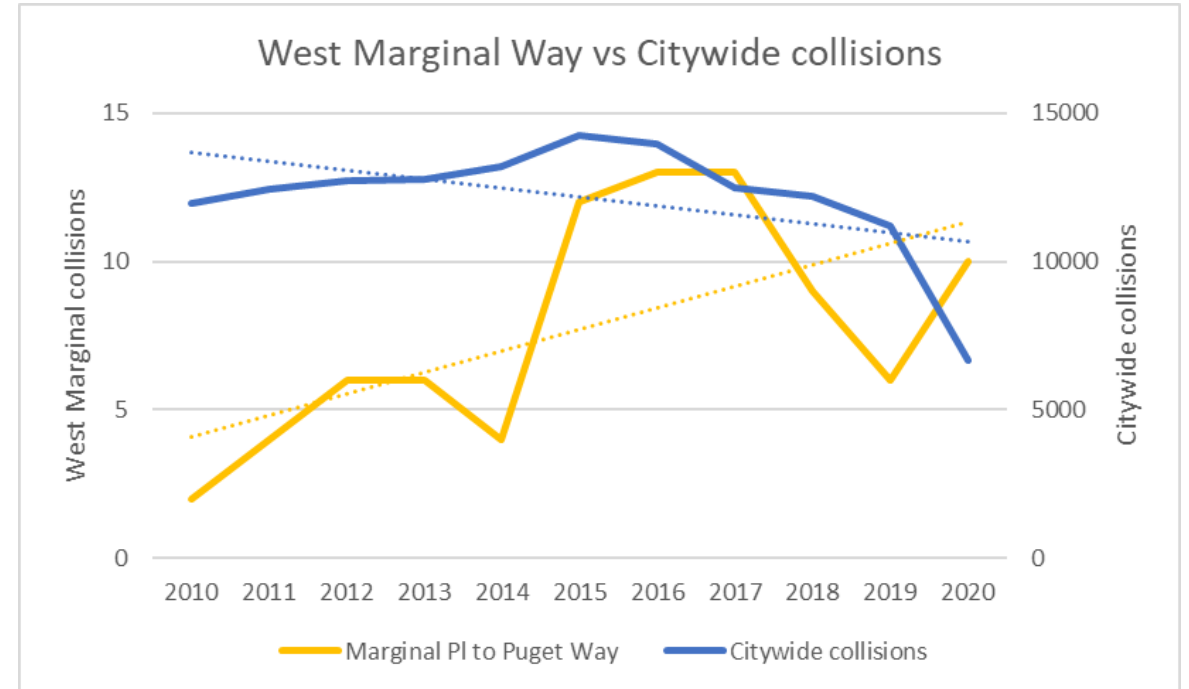
Looking east from Chelan 5-way



Looking north at SW Marginal Pl

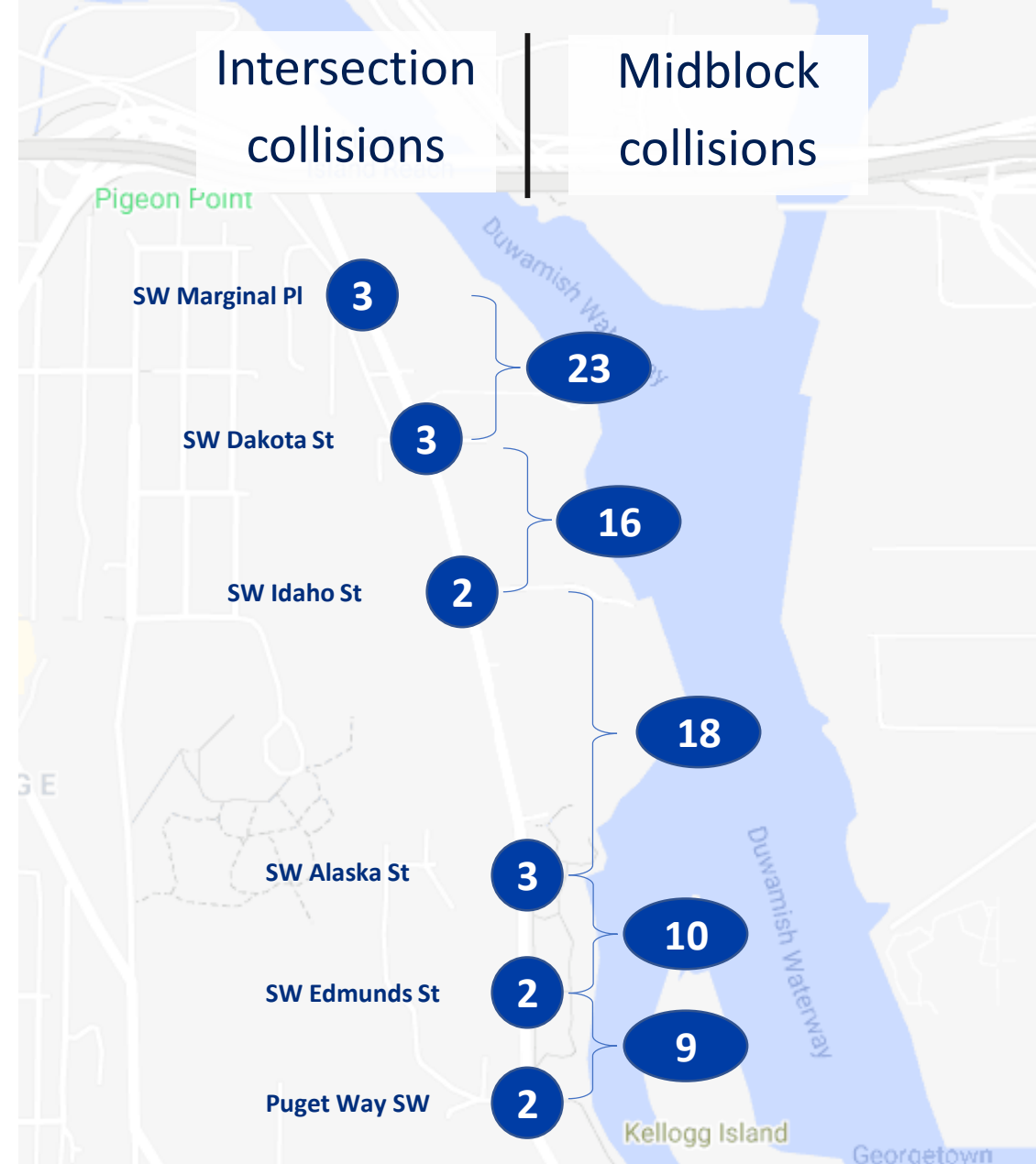
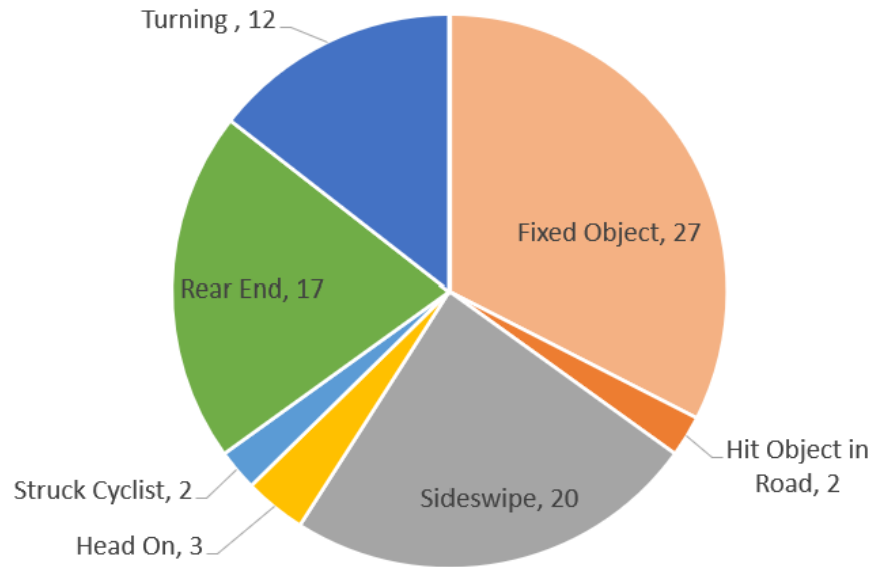
Crash analysis

- W Marginal Way collisions are trending upward (SW Marginal PI to Puget Way SW)



Crash analysis

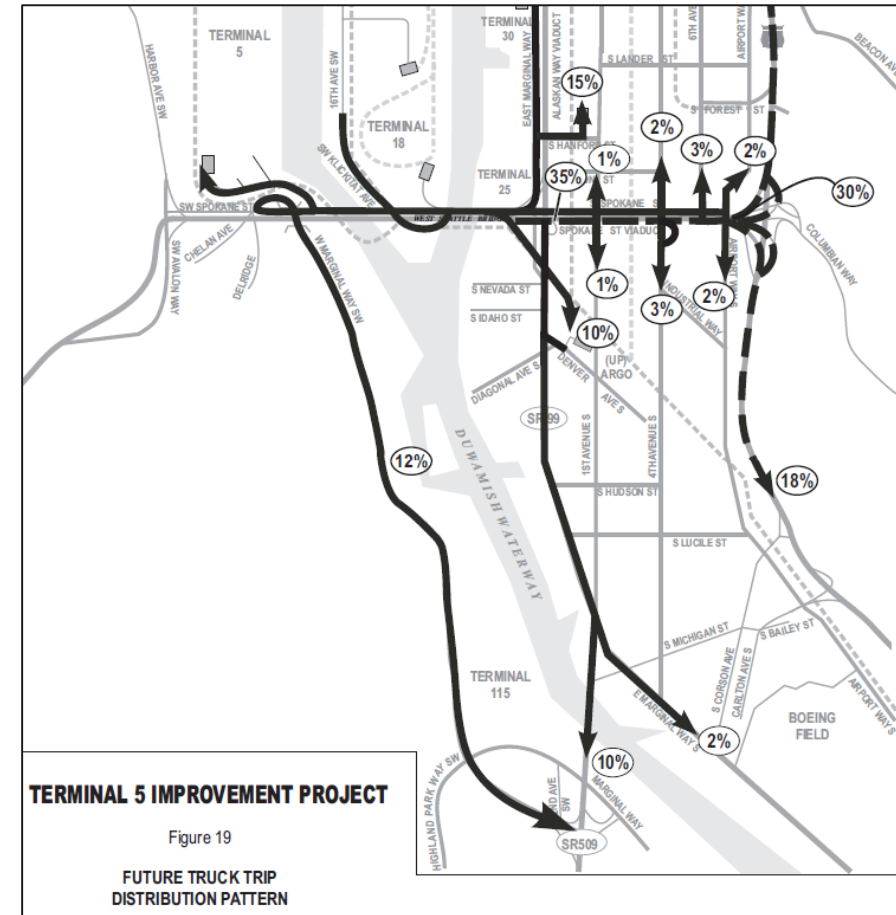
- Most collisions are happening midblock
- Leading collision types are indicative of high speeds



Terminal 5 impacts: Average daily traffic

- Existing southbound Terminal 5 trucks
 - 10 trucks in AM peak hour
 - 8 trucks in PM peak hour
- West Seattle High Bridge reopening in 2022
- Terminal 5 to open by end of Q4 2021 with partial capacity; full capacity in 2023

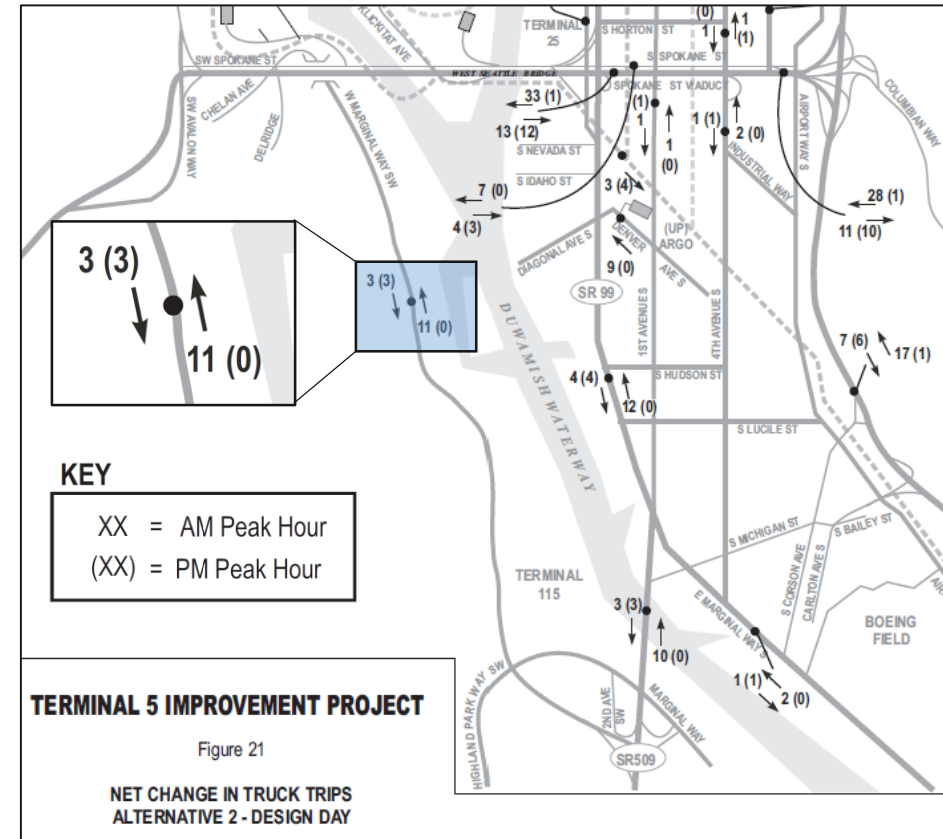
Numbers will be updated with newer truck volume information.



Terminal 5 impacts: Net change in truck trips

- Environmental impact statement
 - Lists 3 additional southbound trucks in both AM and PM peak hours
 - Constitutes **0.3% increase** of existing peak period volumes

Numbers will be updated with newer truck volume information.



What we've heard

Traffic predictions

- The preferred design needs to consider the most updated predicted freight volumes from the opening of T-5, as well the ability to accommodate additional freight in the future.
- Future traffic predictions need to model the extension of SR-509 and how it will impact traffic flow in this corridor.
- The analysis should consider the impact on alternative routes in the area if trucks elect to take a different southbound route because of the reduction to a single lane.

What we've heard

Additional analyses

- SDOT should study and report the bike and pedestrian traffic on West Marginal Way SW.
- A detailed safety analysis needs to be completed for all options before a decision is made. This analysis should show potential impacts of introducing a 2-way protected bike lane into a signal-controlled intersection.



Q&A about data and analysis

A photograph of a street scene showing a proposed design for a southbound curbed lane. In the foreground, there are tram tracks on a gravel bed. To the left of the tracks is a wide, paved area. To the right is a road with yellow lane markings. Several cars are visible in the distance on the road. The background is filled with lush green trees and a building. A semi-transparent white box with dark blue text is overlaid in the center of the image.

Proposed designs for southbound curb lane

Potential project: SW Marginal Pl to SW Alaska St

- SDOT is proposing designs in Sections 1 and 2 for multimodal travel predictability and safety as the data shows is needed
- Total length = 0.6 miles
- No changes are proposed at this time for northbound movements and continue to work with adjacent businesses



Section 1: Duwamish River Trail connection

- Option 1: No build option
 - Maintain existing conditions
- Option 2: Convert southbound curb lane into a two-way protected bike lane
 - We analyzed 4 alternatives to fill the Duwamish River Trail gap and increase multimodal travel options as a part of Reconnect West Seattle



Section 1: Duwamish River Trail alternatives



A – Shared space	B – Protected Bike Lane (PBL) [preferred]	C – Protected Bike Lane (PBL)	D – Off-street trail
<ul style="list-style-type: none"> • Would require removal of 38 mostly mature trees • Narrow buffer 	<ul style="list-style-type: none"> • Can fit with desired widths • Improved driveway sightlines 	<ul style="list-style-type: none"> • North end point has no space to cross • Current curb lane queueing during peak periods 	<ul style="list-style-type: none"> • Requires railroad acquisition • Prohibitively expensive

Section 1: Duwamish River Trail connection

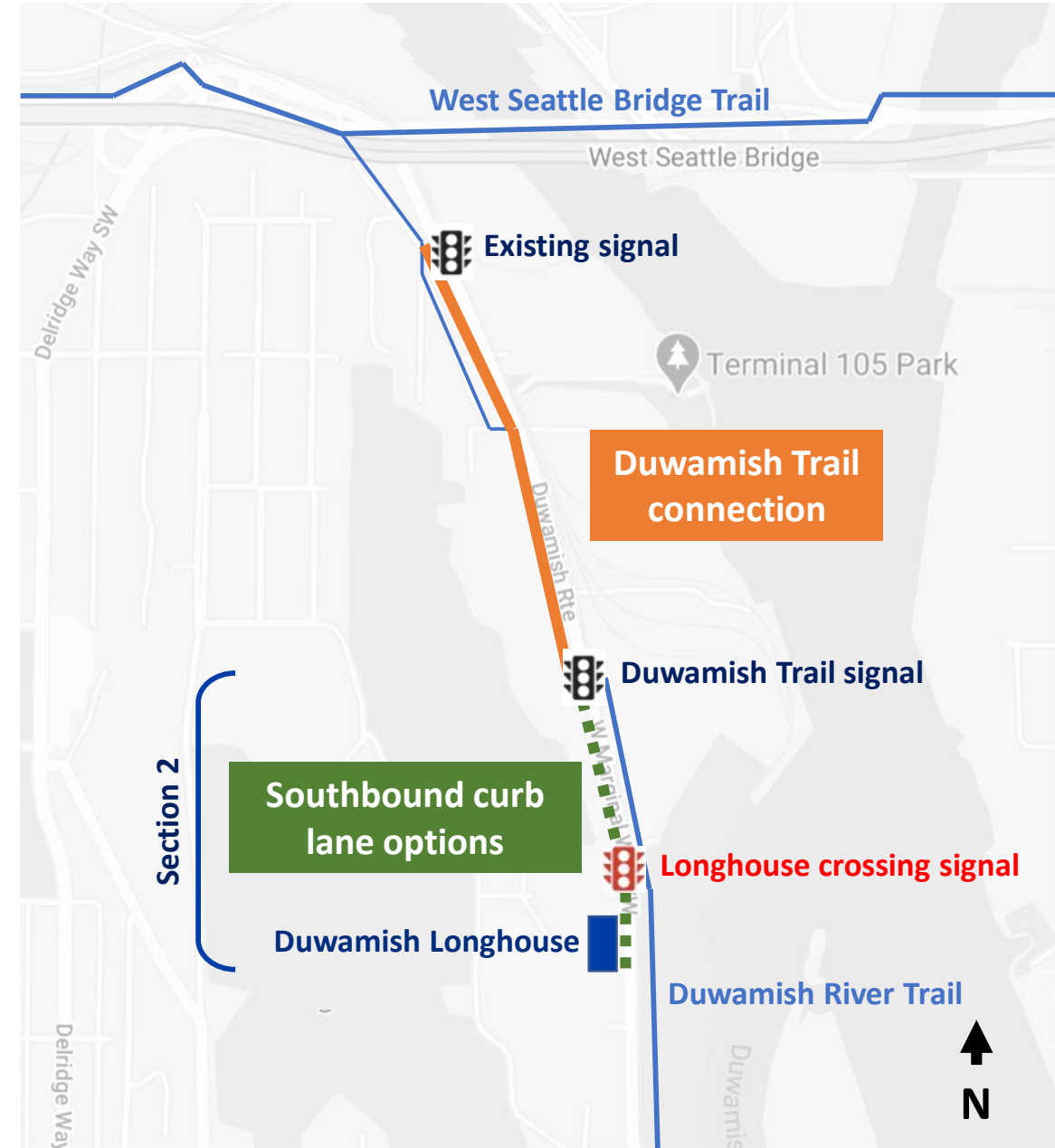
Preferred alternative (B – Protected Bike Lane):

- Provides comfortable facility for people biking that provides adequate space for passing
- Improves driveway sight lines for people driving and biking
- Existing signed bike route has narrow section that does not allow people driving and people biking to pass each other
- 11-foot travel lanes



Section 2: Curb lane design options

- If Duwamish River Trail connection is installed there are several design options for the curb lane south of the Duwamish River Trail signal
- Potential to maintain or remove the existing lane drop



Section 2: Curb lane design options

- Option 1: Extend Duwamish River Trail connection south to Longhouse crossing signal, maintain on-street parking in front of Longhouse
- Option 2: Extend existing on-street parking north to Duwamish River Trail signal
- Option 3: Remove lane drop, remove on-street parking in front of Longhouse





SDOT preferred design options

SDOT preferred designs

- Section 1: Option 2, Duwamish River Trail connection
- Section 2: Option 1 or 2
 - 1: Extend Duwamish River Trail connection south to Longhouse signal
 - or
 - 2: Extend parking north to Duwamish River Trail signal



Assessment of preferred designs

- **Negligible or no change to freight mobility**
 - Very minimal or no impact to existing traffic gaps and future Terminal 5 operations
- **Negligible or no change to travel times and delay**
 - Existing SW Marginal PI bottleneck is the limiting factor for SB travel times
 - Speeds in existing single lane section are still above speed limit
 - Existing single lane section (SW Alaska St) sees no delay today



Assessment of preferred designs

- **Improves safety by reducing risk factors**
 - Lowers speeds closer to speed limit
 - Eliminates potential for high-speed passing
 - Improved sightlines at driveways for predictability of all users
 - Maintain sightlines at SW Alaska St
- **Improves mobility for people biking**
 - More comfortable facility with adequate space to pass
 - Closes key network gap
 - Predictability



What we've heard

Corridor Priorities

- Lowering speeds, increasing safety and completing systems for all of the City's modes is important, but those designs should not come at the expense of the freight network capacity and flexibility.
- SDOT should clearly describe how they are balancing truck and car traffic in this industrial corridor with limited bicycle and pedestrian users. This is a Major Truck and Heavy Haul route in one of only two designated Manufacturing Industrial Center in the city.
- Duwamish Valley neighborhoods deserve bike lanes; bikes should be able to co-exist with freight.

What we've heard

Design considerations

- The signal at the Longhouse should move forward for safety. Once that signal is completed, the lane reduction that is currently in place at the Longhouse should be discontinued.
- Vehicles currently stay in a single lane in this area because of the lane reduction at the Longhouse. If this lane reduction were not in place, vehicles would use both lanes.
- There is currently an area of congestion under the bridge where the lane reduction occurs. The proposed design would extend the area of congestion from just under the bridge all the way to the Longhouse. The north end constraint could change in the future?

What we've heard

Design considerations

- The protected bike lane needs a more substantial barrier to ensure riders are protected.
- Curb side lanes may assist people departing side streets and driveways who would like to pull onto West Marginal Way and head south.
- The design should include a center turn lane to accommodate southbound left turns into Terminal 103.
- There should be better documentation of west side sidewalk walk and bike (option A of section 1), including the number of trees taken down, constraints, and opportunities.

An aerial photograph of a multi-lane highway bridge spanning a body of water. The bridge has several concrete support pillars. In the background, a city with various buildings and a large industrial facility with tall smokestacks are visible. The sky is overcast.

Q&A about preferred project proposal

Business Survey Reminder

Reminder to fill out the business
survey!

[West Marginal Way SW Business
Survey \(qualtrics.com\)](https://www.qualtrics.com)



Do you have a business on West Marginal Way SW?
We want to hear from you!

Improvements and changes are coming to West Marginal Way SW. Since the closure of the West Seattle High Bridge in March 2020, we've seen significant increases in the number and speed of motorists driving on West Marginal Way. The Seattle Department of Transportation (SDOT) is working to prioritize safety and mobility for everyone while accommodating increased traffic.

Your input in this survey will help to inform our decision about which roadway improvements to pursue, as well as how we can best keep you and your business informed with updates.

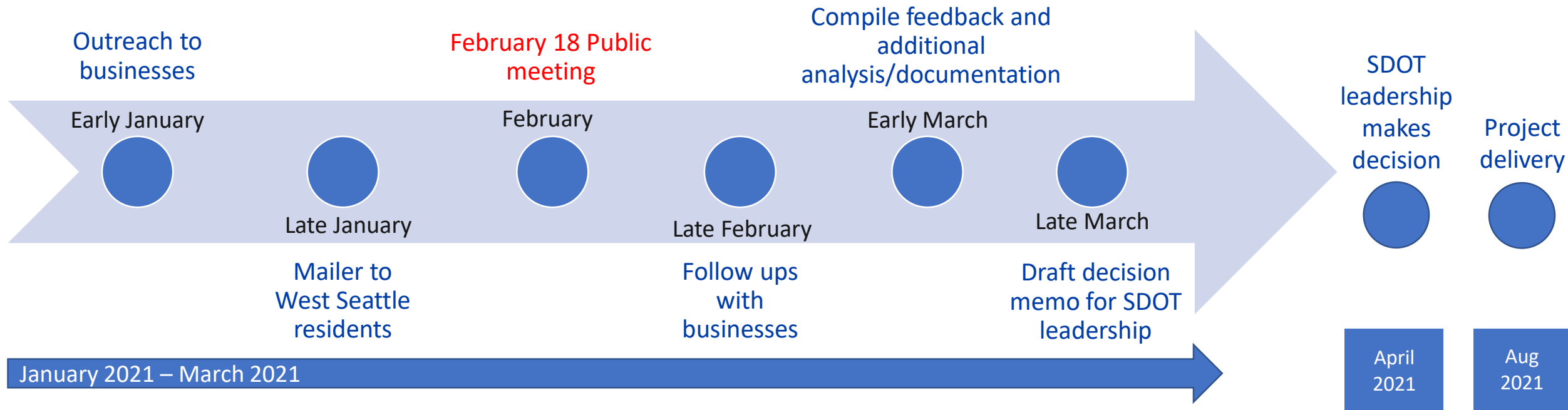
The survey begins with questions about your business. Then the survey asks how you use West Marginal Way. It concludes with an overview of improvements and space for you to provide feedback and input.

Please tell us a bit about your business.

Name of Business:

Contact Name:

Engagement and final decision timeline





**Follow up questions and feedback
WestSeattleBridge@seattle.gov**