Reconnect West Seattle

DRAFT July 2020

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Executive Summary

Reconnect West Seattle envisions a reconnected West Seattle peninsula that has similar levels of travel across the Duwamish to those seen before the closure of the High-Rise Bridge, while also reducing the environmental injustices that impact communities in the Duwamish Valley. We will get there through a community-led process to identify challenges and prioritize solutions – for those who are able – that increase options for transit ridership, bicycle and pedestrian trips, and safety on our streets and sidewalks, especially in neighborhoods that are acutely impacted by increased traffic.

This document outlines the approach to identify traffic mitigation projects along detour routes, establishes mode share goals by zip code, and identifies SDOT's plans to help travelers make their trips on different modes. It is a draft and will be updated as it is informed by the people affected by the closure.

Reconnect West Seattle – Five Actions

To ensure West Seattle travelers can go where and when they need to, SDOT is taking the following actions to ensure the projects, services, and facilities are provided to maintain mobility to and from West Seattle.

1) Develop Detour Routes and Projects to Mitigate Impacts on Neighborhoods

Neighborhood Traffic Mitigation Proposals are rapid-action, community-led planning efforts to support communities on the south end and Duwamish Valley that are acutely impacted by the increased traffic along detour routes. These neighborhoods including South Park, Georgetown, SODO and South West Seattle (Roxhill, Highland Park, Riverview, South Delridge).

2) Analyze West Seattle Travel Behaviors and Establish Goals for Mode Change in West Seattle

At the beginning of 2020, there were 21 vehicle travel lanes crossing the Duwamish River. With the bridge closure and the Low Bridge restrictions, there are now 12 travel lanes for personal vehicles, all concentrated at the south end of West Seattle. Before coronavirus physical distancing requirements and the West Seattle High Bridge closure, morning commute hour car trips made up about 82% of all trips crossing the Duwamish. If no actions are taken to help those who are able to adopt alternative modes of transportation but previously drove, there would be a 53% gap once traffic slowly returned to pre-COVID levels. This is the challenge that we must collectively solve to reconnect West Seattle. The Mobility Action Plan survey is an opportunity for people living and working in West Seattle to identify challenges and inform a plan to help people safely ride the bus, bike, walk or take a water taxi as the phased reopening of our economy continues.

3) Engage the Community, asking for feedback on what else can be done for mode change

The Neighborhood Traffic Mitigation Project Prioritization process and Mobility Action Plan survey are both active from July 9 through July 31 to collect critical information to inform the development of the Reconnect West Seattle Plan.

4) Create an Implementation Plan based on community Feedback

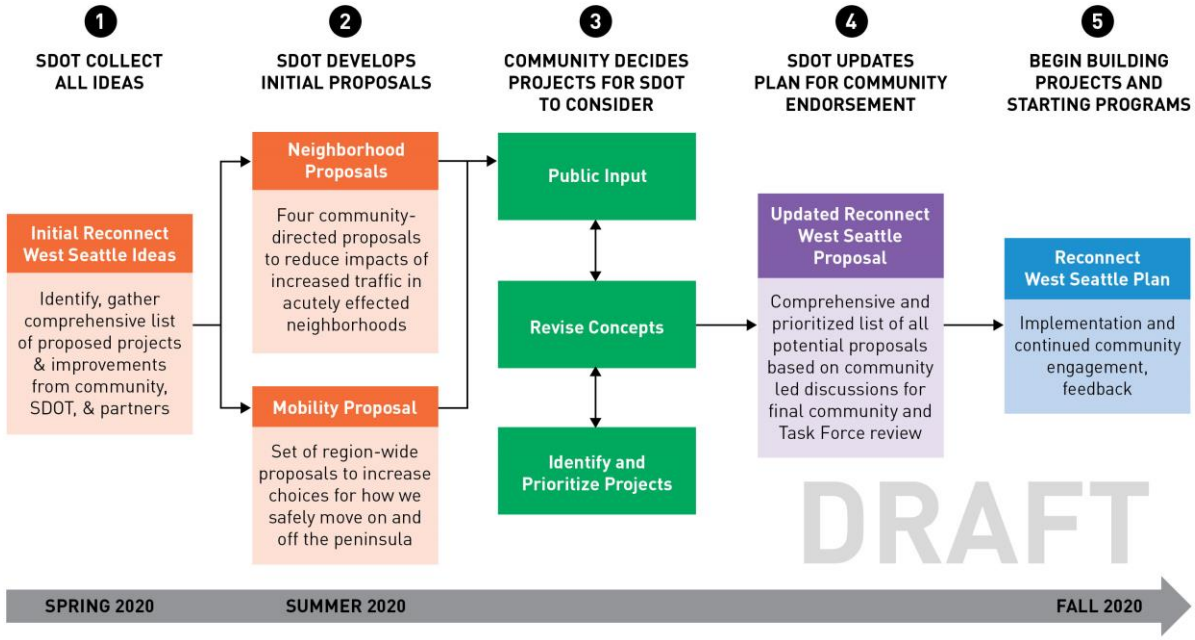
The West Seattle Bridge Community Task Force will provide input and guidance to SDOT as final projects and priorities are identified and as difficult implementation decisions are made with limited funding.

5) Regularly check in with the public about changes needed

Implementation and evaluation will be on-going throughout the West Seattle Bridge project as travel behaviors and traffic change. Public input and Community Task Force guidance will continue to shape and inform needed projects, programs and policies to Reconnect West Seattle.

Schedule

Over the summer, SDOT will work with the community to better understand travel patterns and identify additional projects, services, or facilities needed to make sure that people can travel to their intended destination. Community will lead the Neighborhood Traffic Mitigation process, providing SDOT will prioritized lists of projects At the end of the summer, SDOT will develop an Implementation Plan based on community feedback that will identify the commitments and milestones needed to move toward implementation. The table below shows the overall schedule for Reconnect West Seattle.



For More Information about the public prioritization and survey process active in July 2020, please visit seattle.gov/reconnectwestseattle or email WestSeattleBridge@seattle.gov.

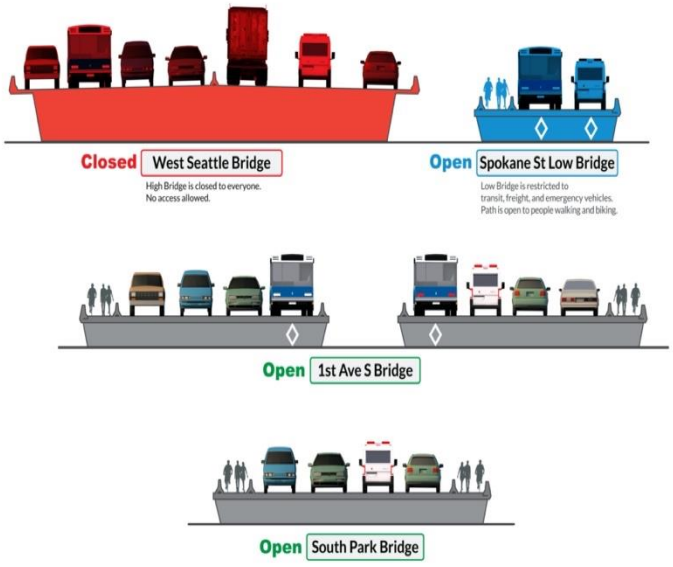
Context

Introduction

In late February 2020, SDOT's structural engineering consultant recommended that the rate of deterioration of the West Seattle High Bridge (WSHB) cracks made it necessary to consider traffic restrictions. As staff prepared to share that news with key stakeholders and the public, additional cracking confirmed the need to immediately close the bridge to traffic on Monday, March 23.

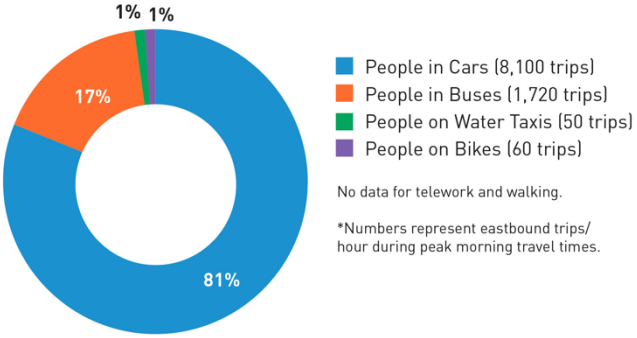
Problem Statement

The closure of the West Seattle High Bridge (WSB) created a traffic management conundrum that cannot be solved with traditional detours or service changes. At the beginning of 2020, there were 21 vehicle travel lanes crossing the Duwamish River, with connections to the West Seattle peninsula: the WSHB (7 lanes), the Low Bridge (2 lanes), the 1st Ave South Bridge (8 lanes) and the South Park Bridge (4 lanes).

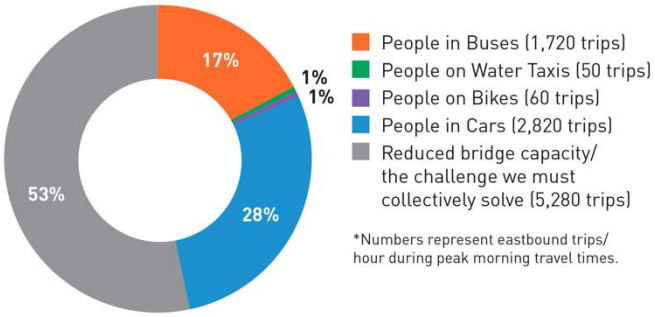


With the WSHB closure and the Low Bridge restrictions, there are now 12 travel lanes for personal vehicles concentrated at the south end, leaving the north end of the peninsula with a capacity disadvantage and reduced options for commuting and other trips on and off the West Seattle peninsula. WSHB had average daily traffic (ADT) volumes of 84,000, including 19,000 daily transit riders. The WSHB closure is anticipated to last at least through 2021. As part of the closure mitigation, the Spokane Street Low Bridge has been restricted to transit, freight, and emergency response vehicles, and the adjacent path is open to people walking and biking.

How People Got Around in 2019



Impacts If No Actions Were Taken



The closure of the West Seattle High Rise Bridge due to accelerated deterioration has a profound impact on the residents and businesses of the Duwamish Valley and West Seattle, further compounding the day-to-day challenges people experience associated with the coronavirus global health pandemic. While traffic volumes are historically low at this writing, we expect them to rise as social-distancing requirements change and more people return to physical worksites, errands and activities. To help people get to all the places they want and need to go in the time until the West Seattle Bridge is repaired or replaced, we need to build usable projects and programs for travelers.

Goals

1. Address increased traffic volumes and other impacts to neighborhoods along detour routing
2. Reimagine West Seattle transportation through mode share shifts and travel pattern changes throughout the peninsula
   a. Shift West Seattle travel to downtown from the bridges across the Duwamish to waterborne modes
   b. Build permanent and temporary bicycle infrastructure on major West Seattle north/south arterials
   c. Develop, cultivate, and maintain reliable transit pathways to/from West Seattle
3. Understand community concerns and obtain feedback on projects, services, and facilities needed for West Seattle travelers to shift to non-car modes
4. Develop a comprehensive implementation plan that incorporates community feedback to ensure travelers reach their desired destinations
5. Regularly communicate with community in the coming months and years as traveler patterns change to address transportation needs

Objectives

Before the West Seattle Bridge closure, there were an average of 9,930 trips crossing the Duwamish Waterway in a weekday AM peak hour, 8,100 of which occurred in cars or trucks.

To provide similar levels of person-carrying capacity, car trips crossing the Duwamish to the West Seattle peninsula need to be reduced by about 60%, from 8,100 in the AM peak hour[1] to 3,500 in the AM peak hour. With limited travel lane capacity, we need to provide alternatives to the traveling public that greatly reduce demands on the road network. This includes evaluating concepts for high-capacity modes using the surface and water, providing appropriate infrastructure for cyclists, and acknowledging the different options available to the various neighborhoods of West Seattle.

The 2021 mode share goal is based on baseline travel information from 2019, before COVID-19 and the closure of the West Seattle High-Bridge. By using 2019 data as the baseline, the 2021 mode share goal aims to accommodate all 2019 baseline trips so they can take place at the same times and to the same places as they did before the West Seattle High Rise Bridge closure. The table below outlines the shift between modes from the 2019 baseline to the proposed 2021 goal mode share and reallocation of baseline car trips.

	2019 Baseline Trips[2]	2019 Baseline Mode Share	2021 Goal Mode Share	2021 Goal Trip Counts	Change Needed
Cars	8,100	82%	35%	3,500	-4,600
Surface Transit	1,720	17%	30%	3,000	+1,280
Water Transit	60	1%	10%	1,000	+940
Bicycle	60	1%	10%	1,000	+940
Telework[3]	--	--	10%	1,000	+1,000
Walk[4]	--	--	5%	500	+500
Total	9,930	100%	100%	10,000	--

[1] A reallocation of trips needs to occur on all trips throughout the day. AM peak hour trips are used as it represents the heaviest volumes in the baseline scenario.
[2] Eastbound AM Peak trips per hour on bridges crossing the Duwamish. Assumed people per car of 1.2.
[3] No baseline data available for telework.
[4] No baseline data available for walk mode share.

Action 1: Neighborhood Mitigation Strategies

The WSB closure creates challenges in different parts of West Seattle and surrounding communities with 12 travel lanes concentrated at the south end of the peninsula:

- **South:** The bridge closure and detour disproportionately impacts the south end of West Seattle where communities already face higher levels of pollution and asthma
- **North:** While the north end of the peninsula has a driving capacity disadvantage today, there are promising water, transit and rolling opportunities in 2021

The Duwamish Valley community is far more diverse than much of Seattle. In South Park, 63% of residents are people of color and 40% speak a language other than English at home.[5] This community faces a number of environmental injustices, leaving people to face health, public safety, and economic disparities:

- Proximity to the Lower Duwamish Waterway Superfund site, one of the most toxic hazardous waste sites in the nation
- Higher rates of asthma, lower rates for life expectancy
- Air pollution from a disproportionate number of polluting industries as well as surrounding major highways – State Highways 99 and 509, and I-5

The Neighborhood Mitigation Plans work in partnership with those communities most immediately impacted by the detour routes—southern West Seattle (Highland Park, Roxhill, S. Delridge, and Riverview) South Park, Georgetown, and SODO—to address increased traffic volumes and other impacts of the multi-year West Seattle High Bridge (WSHB) safety closure that began on March 23, 2020.

This process will identify actions and projects that could potentially be implemented in the near-term (within 12 months) to help mitigate the impacts of the WSHB safety closure. These actions will seek to:

- Center equity concerns, with a focus on vulnerable populations and underserved communities that are at risk of disproportionate impacts through the WSHB safety closure
- Reduce the impact of environmental injustice in the Duwamish Valley
  Support safe and sustainable travel through the geographically impacted communities for all travel needs
- Support access to and recovery of local businesses and commercial districts
- Ensure equitable and safe access to public space for recreation and health

The list of potential projects to inform each Neighborhood Mitigation Plan was generated from ideas we received from community, along with some of our own ideas, and projects from existing transportation and neighborhood plans, like the Bike Master Plan, Transit Master Plan, and the Pedestrian Master Plan. The list includes projects that 1) can be completed within a year, and 2) cost less than $100,000. It is our intention that many of the projects will be implemented as soon as possible, in less than a year.

To see the list of potential projects, please visit www.seattle.gov/reconnectwestseattle.

[5] http://greenspace.seattle.gov/wp-content/uploads/2018/06/DuwamishValleyActionPlan_June2018.pdf

Action 2: Establish Mode Change Goals for West Seattle

Background

SDOT analyzed available data sources to better understand the origins and destinations of West Seattle travelers. By gaining a deeper level of understanding about people moving to and from the West Seattle Peninsula, we can better understand how pre-COVID, pre-WSB closure mode share will need to change. SDOT will analyze/analyzed the following data sources: Commute Trip Reduction Survey (2019), PSRC Household Travel Survey data, Transportation Network Companies (TNCs) , Teralytics, Bikeshare, and Acyclica.

Key Findings

During commute periods, 56.1% of surveyed commuters take transit when traveling to Downtown Seattle/ South Lake Union. When traveling to non-Downtown/SLU locations, that drops to 27.4% of surveyed commuters. (Source: Commute Trip Reduction 2019) .Only 6.1% of Downtown/SLU commuters from 98116 (Junction/North Admiral/Alki) and 1.8% of all other West Seattle to Downtown/SLU commuters use the water taxi during a typical week. (Source: Commute Trip Reduction 2019).

- Given the planned service reductions in 2020-2021, COVID-related social distancing, and potential connections via other modes, SDOT and its agency partners should explore re-orienting transit services to new destinations to maximize available connections.
- SDOT and agency partners should evaluate new/ revised routes or service frequencies to meet rider demands. Additional improvements could be made at both water taxi end points to achieve greater ridership. These improvements should focus on meeting the needs of riders from West Seattle to the Downtown Core (that would not require a transfer to a bus in Downtown Seattle).
    - SDOT may want to explore new connections that would result in a flatter walk from the water taxi terminals to boost ridership and access.
- SDOT and its agency partners should also evaluate a high capacity connection between West Seattle and King Street Station to connect to other regional services.
- To address the low transit mode share for commuters/travelers outside of Downtown Seattle, SDOT should work with King County Metro to evaluate new bus connections (examples listed below include Alki to SLU, Delridge to SLU, West Seattle to Southeast Seattle/Mount Baker/Beacon Hill/Rainier Valley, and West Seattle to Central District/Capitol Hill/ Montlake.
- SDOT should also explore capital improvements to ensure transit travel times remain competitive with driving.

Commute Trips from West Seattle to South Lake Union have a higher drive alone mode share than trips to Downtown Seattle (Source: Commute Trip Reduction Survey, 2019)

- Trips originating in zip code 98136 (Fauntleroy/Lincoln Park/Seaview) to SLU have access via the C Line, which runs directly through the heart of this zip code, and provides the only direct access from West Seattle to SLU, however, transit mode share is relatively low (35.3% transit, 42.4% drive alone). SDOT should explore potential peak only overlay with RapidRide C Line or other ways to address the long distances and long travel times between these two points.
- Zip code 98106 (Highland Park/Delridge/North Delridge) to SLU have a high drive alone mode share (36.7%). SDOT should work with its agency partners to explore a potential new transit route to facilitate this connection.

- Zip code 98116 (Junction/North Admiral/Alki) to SLU have a high drive alone mode share (36.4%). SDOT should work with its agency partners to explore a potential new transit route to facilitate this connection.

A substantial portion (35%) of vehicle trips originate from West Seattle between 9AM and 3PM. This indicates that there is additional demand in the midday timeframe that may necessitate more all-day services in addition to the current peak commute services. (Source: Teralytics)

- SDOT should evaluate capital improvements to ensure reliable transit pathways continue through midday time period providing available capacity and travel time savings. Pairing this work with flexible work schedules could help manage demand.

9% of vehicle trips originating in West Seattle travel to SE Seattle/Mount Baker/Beacon Hill/Rainier Valley, 4% of which occur between 9AM and 3PM (Source: Teralytics).

- SDOT should work with its agency partners to explore new/revised all-day east-west connections from West Seattle to Southeast Seattle. Potential efforts could include vanpool and carpool matching to incentivize shared trips and reduce drive alone trips.

26% of TNC trips starting in West Seattle go to non-Downtown/SLU destinations in Seattle including 10% to Southeast Seattle/Mount Baker/Beacon Hill/Rainier Valley and 7% to Central District/Capitol Hill/ Montlake.

- These areas do not currently have a high frequency transit route with a competitive travel time. SDOT should work with its agency partners to explore new connections between these areas. Potential efforts could include vanpool and carpool matching to incentivize shared trips and reduce drive alone trips.

Almost 400 respondents reported commuting from West Seattle to zip code 98134 (Harbor Island/SODO/Stadiums), directly across the Duwamish from the peninsula. Of these commuters, 63.5% drive alone, while only 16.9% ride transit. Trips originating in zip code 98106 (Highland Park/Delridge/North Delridge), which is the closest peninsula zip code to 98134 represent a 70.6% drive alone and 10.6% transit mode shares. (Source: Commute Trip Reduction 2019)

- Improve connections across Duwamish from 98134 to SODO/Stadiums (evaluate new/revised routes and/or stops)

What Transportation Options Are Available to Provide More Capacity and New Connections?

SDOT evaluated various transportation modes to understand current capacity and utilization, limitations, and opportunities to increase capacity. To implement many of these items, SDOT will work closely with its agency partners. Once mode shift targets are established, SDOT will reach out to the applicable partners to begin discussions.

Reliable Transit Pathways To/From West Seattle

Since March 2020, the availability of transit to, from, and within the West Seattle Peninsula decreased due to COVID-related service reductions and social distancing guidance. Due to the WSB closure, all routes previously operating on the WSB now operate on the Lower Spokane Bridge.

As of 3/31/2020, the Lower Spokane Bridge access was restricted to freight, transit, and emergency vehicles to:

- Ensure a consistent, reliable path for emergency vehicles
- Maintain an uninterrupted supply chain so people have the goods they need to observe the Governor's stay-at-home order
- Provide a reliable pathway for transit riders

This policy was updated on 06/25/2020, after review with the West Seattle Bridge Community Task Force, to expand access to all vehicles at night between 9 pm and 5 am, seven days a week and anytime access for public and private school buses.

Given the reduced capacity to move people to/from West Seattle, SDOT will work with King County Metro, Sound Transit, and other agency partners to develop the following concepts:

- Design new/re-design bus routes based on origin-destination patterns identified above
- Install transit priority treatments to improve transit travel times and reliability, focused initially on improvements leading to the Lower Spokane Bridge, while maintaining freight and marine access
- Operate commuter rail service, like Sounder, across the Duwamish waterway to provide additional capacity to/from downtown Seattle

Waterborne Transit

Currently, King County operates four daily trips on a passenger-only water taxi from Seacrest Dock in West Seattle to Colman Dock in Downtown Seattle. During current COVID-related social distancing, the capacity of this vessel is 57 passengers. To increase capacity for waterborne transit, SDOT and partners are evaluating actions and potential fleet options (including private options) to expand waterborne access. SDOT and partners are evaluating options to increase capacity for waterborne transit.

Through coordination with public agency and private partners, SDOT identified a list of potential vessels for expanded waterborne access and dock options on the West Seattle peninsula and along the Downtown Seattle waterfront. SDOT identified numerous vessels (private and publicly owned) that can carry between 50 and 400 people. Additionally, potential docks were identified on the West Seattle peninsula and Downtown Seattle sides that could accommodate new water taxi service. A full list of these facilities are included in Attachment 2.

Comfortable and Welcoming Bicycle Network

Within the West Seattle peninsula and surrounding neighborhoods of SODO, Georgetown, and South Park, there are 21.1 miles of all ages and abilities bicycle infrastructure including 11.9 miles of trails, 8.9 miles of Neighborhood Greenways, and 0.3 miles of protected bicycle lanes. There are also existing signed bike routes, sharrows, buffered bike lanes, and standard bike lanes throughout West Seattle. Maps of these facilities are included in Attachment 2.

The existing bicycle facilities in West Seattle do not provide last-mile connections to Duwamish Waterway crossings, lack connectivity throughout the peninsula, and are not comfortable for riders of all ages and abilities.

The Seattle Bicycle Master Plan Implementation Plan (BMPIP) identifies several new all ages and abilities bike projects within West Seattle in 2020 and 2021. These new routes would expand the mileage by up to 5.7 miles (for a total of 26.8 miles).

Throughout our community engagement, we have heard and gathered proposals and feedback directly from bike community members who are deeply and rightfully concerned about how they will bike on, off, and throughout the peninsula. The Mobility Action Plan Survey contains the Bike Network Prioritization Process – which will aim to identify what gaps we need to fill in our existing bike network in West Seattle so more people feel safe and empowered to bike commute, if able.

Freight Pathways and Goods Delivery Options

Maintaining the free movement of goods is critical to the economic health of the region and will be even more essential as we better understand the financial implications of the new economy. We have heard and gathered proposals and feedback directly from freight community members who are deeply and rightfully concerned about how they will move goods on, off, and through the peninsula and Harbor Island.

Heavy Haul Vehicles

Due to the decreased travel lane capacity for goods and people movement to/from West Seattle, SDOT seeks to balance freight and people movement. For local businesses and haulers who may be adversely impacted by reduced roadway capacity, SDOT identified the following transportation needs for freight and maritime businesses:

- Reliable routes and delivery access to provide essential goods and services to commercial and industrial areas in West Seattle
- Consistent information about the status of the WSB and the detour routes to ensure ongoing business operations

SDOT continues to work with the freight, maritime, and other impacted communities to develop projects to sustain freight pathways. This list is based on project ideas already identified in the Freight Master Plan, and are broadly categorized here:

- Channelization improvements to provide improved freight access on arterials and ensure access to businesses' private driveways
    - Evaluate and, where feasible, implement Freight and Transit (FAT) only lanes
- Improve signal timing on freight and detour routes to improve flow of freight
- Improve interactions with people riding bicycles where these modes interact.
- Working with WSDOT to improve access to/from state facilities

- Continuing ongoing capital improvement projects that benefit freight, such as the East Marginal Way Corridor Improvement Project

Goods Delivery Transportation Demand Management

Given reduced travel lane capacity to and from West Seattle, SDOT will explore strategies to alleviate congestion impacts and minimize the disruption of goods and service delivery. Potential strategies include: encourage trip reduction, package consolidation and consumer education, and shifting trips to different times of day.[6] Potential projects include:

- Incentivize commercial vehicles to travel outside of peak travel times
    - Expand commercial loading areas during off-peak hours
    - Provide priority routing during certain times of day, including potential use of the Lower Spokane Bridge
    - Assess whether Port traffic on swing bridge could be shifted to other terminals
- Consolidate deliveries and/or trip reduction to the peninsula through partnership with parcel and delivery providers, UW's Urban Freight Lab, and the Freight Advisory Board
    - Facilitate microhub or distribution center infrastructure on the West Seattle peninsula to decrease the number of smaller vehicles crossing the Duwamish
    - Work with provider partners to educate consumers about e-commerce order consolidation and delivery times

To implement many of these projects, SDOT needs to collect or obtain a high-quality data set of freight (heavy haul and goods delivery) trips to/from West Seattle. If current datasets don't exist, the development of technology solutions could enable real-time data collection. Additionally, SDOT should explore onboarding additional machine readable API feeds to include dynamic message signs (DMS) information, alternate and detour route information, and traffic flow data to help streamline communication of this data for freight and passenger movements.

Parking and Curbside Management

In response to the West Seattle Bridge closure, SDOT will study parking and implement parking management strategies (time limits, RPZ, load zones) in business district areas, including Morgan Junction, Admiral Junction, and other neighborhoods impacted by detour traffic and hide-and-ride.

Current Park & Rides

Within West Seattle there are four Park & Rides with capacity for 188 vehicles. In 2019, SDOT identified capital improvements at the Southwest Spokane St P&R that would improve access for West Seattle Residents. The most critical improvement is installing a driveway access going eastbound on SW Spokane St for traffic coming from West Seattle.

Potential New Parking

A 2013 King County Metro study of potential waterborne options identified capacity for approximately 280 parking stalls in surface lots near SW Florida Street. Coordination with the Port of Seattle could identify additional parking options near Terminal 5. Parking options in this vicinity are close to potential dock locations (such as Jack Block Park). However, BNSF railway operations frequently block the tracks at this location, so crossing options would need to be identified. Maps are shown in Attachment 2.

[6] SDOT does not have robust data on freight traffic flows to and from West Seattle. The majority of data available on this sector focuses on the downtown core instead.

Vanpool

Pre-COVID-19, there were approximately 49 vanpools carrying 250 participants that originated in West Seattle, Vashon or Kitsap County with a West Seattle Bridge commute. The vanpools include 35 King County Metro vans, 13 Kitsap Transit vans and a Community Transit group. The map below shows the regional vanpool destinations throughout King County. Currently, only 9 of those 48 Vanpool groups, carrying essential workers, are operating out of West Seattle.

Shared Mobility Pilots, Promotions, and Partnerships

First Mile/ Last Mile (FMLM) Connections

In 2018, King County Metro launched the 'Ride2' pilot, a first mile/last mile connection service, in two locations, Eastgate Park and Ride and West Seattle. The service in West Seattle connected residents to Seacrest Dock (West Seattle Water Taxi) and Alaska Junction (high frequency bus connections to Downtown Seattle and South Lake Union). The Ride2 West Seattle pilot was cancelled after one year of operations due to low ridership (average 29 rides per day) and high operating cost (average $81/ ride). Future consideration of FMLM connections to Seacrest Dock should incorporate lessons learned from this pilot to prevent implementing a high cost service with low utilization.

Carpool Matching

In 2017, SDOT contracted with Scoop carpool to incentivize carpool usage in downtown Seattle. Scoop was a brand new service in Seattle at launch. The pilot was designed to 1) provide a new option to use HOV instead of SOV and 2) assist in building a population of users needed to sustain a ridematching system. Waze Carpool followed approximately a year later and was not part of the pilot. SDOT could implement similar promotions to mitigate the reduced vehicle capacity during the WSB closure.

TNC Partnerships

The 'Rideshare to Transit' promotion during Winter 2019 was managed by SDOT with support from Metro and Sound Transit. The partnership focused on connecting riders with discounted TNC trips to select transit hubs (such as light rail stations and Park & Rides).

Depending on COVID-induced behavior changes, non-shared TNC trips may still be desired over SOV trips for certain parts of the population (e.g. healthcare workers or others with non-traditional schedules, those not served well by transit (too many transfers), wheelchair users, etc). SDOT may consider working to subsidize trips that don't solely focus on connections to transit, especially under near-term conditions. Due to COVID-19, shared rides are currently not offered on platforms and it is unclear when that trend will be reversed.

Micromobility (Bikeshare) Partnerships

SDOT has facilitated a number of promotions and partnerships with bike share companies since the launch of free-floating bike share in 2017. These have ranged from FMLM efforts to support the PVC, to subsidized rides for health care and essential workers during COVID.

Depending on the future of bike and scooter share viability in the Seattle market, these options will continue to be favorable mode shift opportunities for West Seattle residents.

Car Share Partnerships

SDOT partnered on initiatives such as designated spaces near T-Mobile and CenturyLink parks and Metro ran a substantial car share pilot in 2018-2019 at the Northgate Park & Ride that offered parking and discounted rides. SDOT has been coordinating with an incoming free-floating car share operator, Gig, to identify ways that they may be able to serve West Seattle, but specific strategies have not been identified.

Employer Based Resources

The WSB Employer Resource Group, which was formed specifically to discuss ways the private sector could assist in developing mobility solutions around the WSB, is discussing options that may be include a shared employer shuttles or public-private partnerships to expand HOV options.

Employer Shuttles

Since information on private company shuttles is typically not shared publicly, our data on routes/ridership/capacity is ad hoc. The Employer Resources Group will discuss how/whether we can utilize these private resources for larger mobility purpose, such as sharing among employers to maximize their utility.

Telework/Flexwork

SDOT's Transportation Options group contracted for additional staff support at Commute Seattle in preparation for the 2019 SR-99 Viaduct closure to encourage employers and their employees to telework to reduce the number of peak commute trips downtown.

The work could be easily adapted for the West Seattle market and would include employer consultations, education/webinars, resource and information regarding telework policies and promotion in the workplace. We also worked with Metro's WorkSmart program to enhance our suite of services and resources.

Finally, we also launched a telework pledge to drive and challenge employer participation; this type of promotion can take many forms depending on budget and staffing, but ideally would set targets for employers with communications / paid media to recognize their successes. However, this sort of call to action can take many forms and offers many possibilities for engagement. In 2019, our telework scope of work also included some pre and post engagement to determine uptake of telework and flexwork options by commuters.

Employer Shared Transit Stops

Since April 2017, the Employer Shared Transit Stops Pilot allowed employer shuttles by Microsoft and Seattle Children's Hospital to share a dozen existing public transit stops across Seattle. Based on the success of the pilot, over the course of 2019 SDOT refined a set of stop criteria, application processes, and fee schedule to establish a permanent program for sharing of additional transit stops by employers within Seattle. This set of policies was approved by SDOT leadership and the Mayor's Office and is set to be considered by the Council Transportation & Utilities Committee once meetings resume in Q2-Q3 2020.

Microsoft currently shares one stop in West Seattle: Stop #31970, southbound California Ave SW, at farside SW Spokane Street.

How Must Transportation To and From West Seattle Change?

To accommodate the reduced capacity to/from West Seattle, trips that previously occurred in cars need to occur on different transportation modes now.

Baseline Volumes and 2021 Goal Mode Share

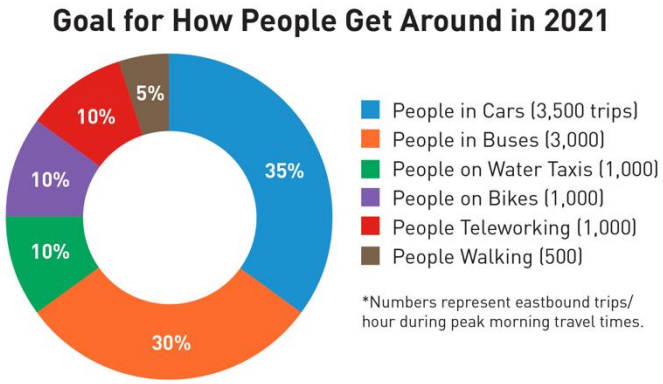
	2019 Baseline Trips[7]	2019 Baseline Mode Share	2021 Goal Mode Share	2021 Goal Trip Counts	Change Needed
Drive Alone	8,100	82%	35%	3,500	-4,600
Surface Transit	1,720	17%	30%	3,000	+1,280

[7] Eastbound AM Peak trips per hour on bridges crossing the Duwamish. Assumed people per car of 1.2.

Water Transit	60	1%	10%	1,000	+940
Bicycle	60	1%	10%	1,000	+940
Telework[8]	--	--	10%	1,000	+1,000
Walk[9]	--	--	5%	500	+500
Total	9,930	100%	100%	10,000	--

Cars

In the 2019 Baseline, the maximum capacity for all Duwamish crossings was about 9,000 vehicles in the AM peak hour. In 2019, about 8,100 vehicles used the bridges.



The capacity reduction due to the WSB closure results in a decrease from 9,000 vehicles per AM peak hour to about 3,700 vehicles per peak hour.

To address this reduced capacity and accommodate for the geographic locations of the remaining bridges and physical limitations of roadway access points, the West Seattle peninsula needs to reduce its car trips from 8,100 in the AM Peak Hour[10] to 3,500 in the AM Peak Hour, representing a ~60% reduction in car trips crossing the Duwamish. As a result, SDOT needs to reallocate about 4,600 AM peak hour trip to other modes.

The use of carpooling would allow more people to move in a smaller amount of vehicles to ensure continued mobility.

Bicycles

In the 2019 Baseline, about 60 bicycles crossed the Duwamish per AM peak hour. The Lower Spokane Bridge can accommodate 400 – 1,000 bicycles[11] per hour. To accommodate 1,000 bicycles per AM peak hour, SDOT will need to make substantive capital improvements across West Seattle.

[8] No baseline data available for telework.
[9] No baseline data available for walk mode share.
[10] A reallocation of trips needs to occur on all trips throughout the day. AM peak hour trips are used as it represents the heaviest volumes in the baseline scenario.
[11] Sources: 400 bicycles per hour aligns with federal guidance (equivalent to a bicycle every nine seconds). Based on travel patterns exhibited elsewhere in Seattle, SDOT has seen 1000 bicycles per hour, which is feasible if signal phasing changes are made and bottlenecks removed.

Transit

In the 2019 Baseline, 1,720 riders took surface transit and 60 riders took water transit in the AM peak hour, representing a combined 18% mode share. To accommodate the reduced car travel, total transit mode share needs to be 40% (estimated at 30% surface transit and 10% water transit). Due to COVID-19 social distancing guidance, King County Metro is currently operating less service and restricting the number of riders on buses. Additionally, planned service cuts in 2020 and 2021 will further reduce transit capacity. The specific distribution between surface and water transit make vary depending on available resources and services. SDOT will also explore the use of Vanpool services as included in the transit mode share.

Telework

SDOT does not have baseline data available for telework/flexwork mode share for all Duwamish crossings, but plans for a 10% telework mode share crossing the Duwamish. This would require that all workers that are able to work remotely or flex their schedules to do so two days a week (focused on Tuesdays, Wednesdays, and Thursdays) when traffic volumes are highest. Flexible schedules would involve employees traveling outside of the typical commute periods (6-9AM and 3-7PM). SDOT also plans to work with employers to help employees and companies accommodate this – see above section on employer-based efforts.

Walk

SDOT does not have baseline data available for walk mode share, but plans for a 5% walk mode share crossing the Duwamish.

What Does This Mean For You?

SDOT developed mode share goals for each zip code and mode, accounting for the following variables:

- Available Duwamish crossings for cars
- Access to high frequency surface transit
- Access to waterborne transit (current or potential)
- Topographic and distance expected for bicycle mode share
- Distance and access for walk mode share

	2019	2021 Goal Mode Share				
	Baseline Mode Share	**98106** Highland Park/ Delridge/ North Delridge	**98116** Alaska Junction/ North Admiral/ Alki	**98126** 35th Ave SW, from Roxbury to Seacrest	**98136** Fauntleroy/ Lincoln Park/ Seaview	**All West Seattle**
Cars	82%	50-55%	10-15%	50-55%	40-45%	35%
Surface Transit	17%	25-30%	30-35%	25-30%	30-35%	30%
Water Transit	1%	5-10%	15-20%	0-5%	0-5%	10%
Bicycle	1%	5-10%	10-15%	5-10%	5-10%	10%
Telework[12]	--	5-10%	10-15%	5-10%	10-15%	10%
Walk[13]	--	0-5%	10%	0-5%	0%	5%
Total	100%	100%	100%	100%	100%	100%

[12] No baseline data available for telework.

[13] No baseline data available for walk mode share.

98106 - Highland Park/ Delridge/ North Delridge

- Decrease drive alone volumes by 50%
- Increase transit usage by 70%, focused on bus access along Delridge, explore added bus trips/new routes along Delridge to accommodate travelers in southern portion of Delridge and Highland Park
    - A new connection to South Lake Union could accommodate lower transit ridership and longer travel times/distances
    - A connection to SODO/Stadiums could help improve travelers seeking to cross the Duwamish for short distance trips
- Increase bicycling to 230 bicycle trips per peak hour, focused on the northern areas of this zip code
- Assume telework/ flexible work schedule at least two days per week for workers that are able

98116 - Alaska Junction/ North Admiral/ Alki

- Decrease drive alone volumes by 80%, as this neighborhood previously had direct access on and off the peninsula via WSB
- Increase transit usage by almost three times baseline volumes, focused on waterborne modes and researching automobile and shared mode access to waterborne modes; explore a new transit connection between the water taxi and South Lake Union to alleviate Alaska Junction crowding on the C Line
- Increase bicycling to 400 bicycle trips per peak hour, with close access to all ages and abilities bike facilities and available back-up transit modes; due to grade changes, explore e-bike options for travelers
- Assume telework/ flexible work schedule at least two days per week for workers that are able

98126 - 35th Ave SW, from Roxbury to Seacrest

- Decrease drive alone volumes by 50%
- Increase transit usage by 75%, focused on bus access along north/south spine of 35th Ave SW, explore transit capital improvements to generate new riders
- Increase bicycling to 275 bicycle trips per peak hour, focused on the northern areas of this zip code; due to grade changes, explore e-bike options for travelers
- Assume telework/ flexible work schedule at least two days per week for workers that are able

98136 - Fauntleroy/ Lincoln Park/ Seaview

- Decrease drive alone volumes by 45%, this neighborhood maintains access to South Park and 1st Ave S bridges
- Increase transit usage by 120%, focused on providing new transit routes that offer a travel time savings and/or new connections across Seattle
    - Explore ways to reduce Vashon through-traffic to minimize demands on Duwamish crossings (could result in increased Vashon water taxi ridership)
    - Explore potential peak only overlay with RapidRide C Line to accommodate lower transit ridership and longer travel times/distances
- Increase bicycling to 90 bicycle trips per peak hour, with close access to all ages and abilities bike facilities and available back-up transit modes; due to grade changes, explore e-bike options for travelers
- Assume telework/ flexible work schedule at least two days per week for workers that are able

What Is SDOT Doing To Make This Happen?

SDOT identified key origins and destinations using a variety of modes. Based on this available data, SDOT established the following priorities for evaluation of new/expanded transportation options.

To address the reduced roadway capacity due to the West Seattle Bridge Closure and accommodate for the geographic locations of the remaining bridges and physical limitations of roadway access points, the West Seattle peninsula needs to reduce its car trips from 8,100 in the AM Peak Hour[14] to 3,500 in the AM Peak Hour, representing a ~60% reduction in car trips crossing the Duwamish. As a result, SDOT needs to reallocate about 4,600 AM peak hour trip to other modes. The table below outlines the shift between modes from the 2019 baseline to the 2021 goal mode share.

Baseline Volumes and 2021 Goal Mode Share

	2019 Baseline Trips[15]	2019 Baseline Mode Share	2021 Goal Mode Share	2021 Goal Trip Counts	Change Needed
Drive Alone	8,100	82%	35%	3,500	-4,600
Surface Transit	1,720	17%	30%	3,000	+1,280
Water Transit	60	1%	10%	1,000	+940
Bicycle	60	1%	10%	1,000	+940
Telework[16]	--	--	10%	1,000	+1,000
Walk[17]	--	--	5%	500	+500
Total	9,930	100%	100%	10,000	--

To achieve this, SDOT will evaluate the following new/expanded transportation options to provide the capacity and service availability to meet these mode share goals.

Develop, Cultivate, and Maintain Reliable Surface and Water Transit Pathways

In a baseline scenario, In the AM peak hour, the baseline could accommodate ~2,800 transit riders (2,500 rides on surface modes and 278 on waterborne modes).

Due to the WSB closure, this needs to increase to 4,000 transit rides in the AM peak hour. Additionally, in Fall 2020, service cuts will result in an estimated 20% capacity reduction on King County Metro service. With COVID-related social distancing guidance, transit capacity is further reduced. The table below summarizes baseline capacity figures, Fall 2020 and social distancing capacity changes, and identifies the additional transit capacity needs with and without social distancing.

Transit Capacity per AM Peak Hour	Surface Transit	Water Transit
Baseline Capacity	2,500	278[18]
Fall 2020 Service Reductions	2,000	278
Social Distancing Guidance	600	86
2021 Goal	3,000	1,000
Transit Need with Social Distancing	**2,400**	**914**
Transit Need without Social Distancing	**1,000**	**722**

[14] A reallocation of trips needs to occur on all trips throughout the day. AM peak hour trips are used as it represents the heaviest volumes in the baseline scenario.
[15] Eastbound AM Peak trips per hour on bridges crossing the Duwamish. Assumed people per car of 1.2.
[16] No baseline data available for telework.
[17] No baseline data available for walk mode share.
[18] Represents two round trips in the AM peak hour.

To meet this transit need, SDOT will take the following actions:

1) Expand waterborne transit capacity by 800-900 AM peak hour commuters. This will require additional vessels, dock facilities, and passenger access improvements. SDOT should consider new connections from Seacrest Dock to other areas along the downtown Seattle waterfront, including by not limited to Belltown and Interbay. These improvements should focus on meeting the needs of riders from West Seattle to the Downtown Core (that would not require a transfer to a bus in Downtown Seattle). New waterborne transit will focus on the peak periods, but will allow for flexible work schedules and extend outside of traditional commute periods.
2) Explore a new commuter rail connection (like Sounder) from West Seattle to King Street Station, which will likely require significant capital improvements and coordination with our transit and rail partner organizations. Additional transit capacity on this service would focus on peak period commuters.
3) Coordinate with King County Metro to evaluate new bus routes that focus on connections not well-served by existing routes. Examples include:
    a. New connection between Delridge and South Lake Union.
    b. New peak period connection between North Admiral/Alki/ Alaska Junction to South Lake Union, utilizing the SR-99 Tunnel to provide a competitive travel time.
    c. New peak period express service between Fauntleroy/Lincoln Park/Seaview to complement the RapidRide C Line and address long distances and long travel times between these two points.
    d. New connection between West Seattle to Southeast Seattle/Mount Baker/Beacon Hill/Rainier Valley; vanpool or carpool matching could address the various destinations listed here.
    e. New connection between West Seattle to Central District/Capitol Hill/ Montlake; vanpool or carpool matching could address the various destinations listed here.
    f. For routes operating in zip codes 98106 (Highland Park/ Delridge/ North Delridge) and 98126 (35th Ave SW, from Roxbury to Seacrest), SDOT is planning for a 50-55% surface transit mode share. SDOT should explore capital improvements to ensure transit travel times remain competitive with driving along these routes (namely Routes 21 and 120).
4) Coordinate with employer shuttles to provide access and ensure high-occupancy modes are utilized on trips to/from West Seattle.

Create Comfortable and Welcoming Bicycle Network

In a baseline scenario, In the AM peak hour, 60 bicycle riders crossed the Duwamish. Due to the WSB closure, this needs to increase to 1,000 bicycle rides in the AM peak hour. Expectations for bike commutes include:

Zip Code	Expected Bicycling Trips per AM peak hour	Notes
98106	200	Trip growth expected in northern areas closest to Lower Spokane Bridge
98116	500	Convenient access to Lower Spokane Bridge and available back-up transit modes; due to grade changes, explore e-bike options for travelers
98126	200	Trip growth expected in northern areas closest to Lower Spokane Bridge; due to grade changes, explore e-bike options for travelers

98136	100	Focus improvements on facilities near available back-up transit modes; due to grade changes, explore e-bike options for travelers

Key bicycle network improvements that align with these expectations include:

- **SW Avalon Way**: New PBL connecting the SW Spokane St Bridge to the Fairmount Park and Genesee neighborhoods (Opening in 2020)
- **West Seattle Neighborhood Greenway Phase 2a and 2b**: neighborhood greenway connecting the West Seattle Neighborhood Greenway Phase 1 to the Alaska Junction (Opening in 2020)
- **RapidRide H Line bike improvements**: southbound PBL on Delridge Way SW south of SW Juneau St and neighborhood greenway connections in the North Delridge and High Point neighborhoods (Opening in 2021)
- **35th Ave SW Alternative Neighborhood Greenway**: neighborhood greenway on 36th Ave SW connecting from SW Graham St to the Camp Long entrance at SW Dawson St (Opening in 2021)

Additional improvements along the Duwamish Waterway crossings and water taxi access improvements will also help achieve mode share goals.

SDOT will also explore ways to improve bicycle and electric bicycle access in West Seattle to help shift mode share.

Manage Access on Lower Spokane Bridge

As of June 2020, the Lower Spokane Bridge is reserved for transit, emergency vehicles, and heavy haul freight and public and private school buses and shuttles. All traffic may use the Lower Spokane Bridge between 9 pm and 5 am. At the recommendation of the Community Task Force, SDOT is also considering how to expand limited access to essential workers, employer shuttles and for work purposes at proximate maritime and industrial businesses. Capacity on the low bridge is limited by the need to maintain access for emergency response vehicles. To continue to manage demand equitably and in a dynamic environment, SDOT should work explore methods to obtain real-time information on Lower Spokane Bridge crossings to help manage passenger and goods movement.

In addition to real-time information, SDOT plans to implement Automated Enforcement of transit lanes and block the box in accordance with HB 1793. Automated enforcement will allow SDOT to manage use of the Low Bridge without in-person enforcement by the Seattle Police Department.

Coordinate Construction Projects in and around Duwamish Crossings

SDOT currently coordinates construction in the right of way through a series of hubs across Seattle. In response to the High Bridge closure, SDOT established two new hub locations to manage construction schedules for private and public construction to minimize impacts to the traveling public.

Coordinate with Employers on Remote and Flexwork Schedules

With reduced capacity, 10% of all trips will need to take place with flexible work schedules or not occur through remote work. For all workers that are able, they should plan for telework/ flexible work schedule at least two days per week focused on Tuesdays, Wednesdays, and Thursdays when traffic volumes are highest. SDOT will work with employers to change policies and practices to enable more West Seattle residents to take advantage of this option.

Manage Roadway Operations at Duwamish Crossings

Given the additional demands on Duwamish crossings with the WSB out of service, SDOT recommends that the SDOT Response Team be deployed near the three remaining Duwamish crossings in order to quickly respond to incidents if they occur. SDOT successfully deployed this tactic during the Permanent Viaduct Closure and recommends continuing it.

Next Steps

Action 3: Community Input and Community Task Force Inform Project Selection

On July 10, SDOT launched a two-part community engagement effort depending on where people live, work or travel most frequently.

First, the neighborhood-specific project prioritization (Action 1) is led by and for people who live and work in the affected neighborhoods along the detour routes, including South Park, Georgetown, SODO and South Delridge/Highland Park, Roxhill and Riverview. The Neighborhood Traffic Mitigation survey is being promoted by community and neighborhood leaders and through traditional, social and ethnic media. The survey consists of a ballot of projects identified by community, by SDOT and taken from existing modal plans.

Second, the peninsula-wide Reconnect West Seattle survey asks people living and working in West Seattle to let us know how they used to travel before the West Seattle Bridge closure and COVID-19 social-distancing requirements, how they travel today, and how they expect to travel in the future when social-distancing requirements ease, but the West Seattle High bridge is still closed. This information will help us work with our partners to implement needed travel options. This survey also includes bike network projects and asks for survey-takers to prioritize the needed bike connections. The Mobility Action Plan survey is being promoted broadly through a postcard being sent to over 40,000 addresses in West Seattle.

Both survey processes are open until July 31. At the request of neighborhoods, surveys have been translated into the following languages and are available on-line and in paper format:

- South Park: Chinese Traditional, Somali, Spanish, Vietnamese, Khmer
- Georgetown: Chinese Traditional, Somali, Spanish, Vietnamese, Korean
- SODO: Chinese Traditional, Spanish, Vietnamese
- S. Delridge/Roxhill/Highland Park/Riverview: Chinese Traditional, Somali, Spanish, Vietnamese, Khmer, Oromo
- Process and promotional one-pagers are available in: Chinese Traditional, Somali, Spanish, Vietnamese, Khmer, Korean, Oromo
- Mobility Action Plan Survey: Chinese Traditional, Somali, Spanish, Vietnamese, Khmer, Korean, Oromo

The City of Seattle, through the Department of Neighborhood's Community Liaison program, is employing seven trusted messengers from each of the following communities to do outreach in Spanish, Khmer, Somali, Vietnamese, Oromo, Korean and Cantonese. Outreach will be conducted in multiple forms: virtual meetings, posting on social media platforms, and door-to-door business outreach. Additionally, advertisements are being purchased in ethnic media outlets that provide news and information to people living in the Duwamish Valley and in West Seattle.

The freight network projects are being reviewed with the Seattle Freight Advisory Board and will be shared with maritime and industrial stakeholders for their feedback in July.

Results will inform SDOT's mobility planning efforts with transportation agency partners, and the selection of projects to fund, design and implement in 2021 and 2021.

The West Seattle Bridge Community Task Force will advise SDOT through the process of prioritizing projects, programs and efforts to support people living and working in the affected neighborhoods.

Action 4: Update Reconnect West Seattle and Create an Implementation Plan

Using the feedback provided in Action 3, SDOT will work with the Community Task Force to update Reconnect West Seattle with a comprehensive and prioritized list of all potential proposals based on community-led discussions and survey results, and to allocate funding. The updated Reconnect West Seattle will serve as an Implementation Plan for SDOT and our transportation partners to begin making changes to the West Seattle transportation network.

Action 5: On-Going Community Engagement and Feedback

After SDOT creates the Implementation Plan in Fall 2020, SDOT will continue engagement with community to see how their transportation needs change over time. The Community Task Force will regularly receive updates from SDOT on implementation progress and on mode shift goal progress and new projects may be identified as needed to respond to changing conditions. This effort will be on-going and major milestones will likely be phased with key transportation changes and COVID-19 recovery timelines.