



Duwamish Valley & Port of Seattle Access and Mobility Study

Port Community Action Team

Presented by: Avery Brown, Jake Bookwalter, Rich Brown

INDIGENOUS LAND ACKNOWLEDGEMENT

We would like to acknowledge that we are on the traditional land of the first people of Seattle, the Duwamish People past and present and honor with gratitude the land itself and the Duwamish Tribe.

Project Team



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Project Lead



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Jake Bookwalter
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Planner and Designer
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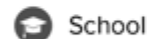
Study Area

DUWAMISH VALLEY, INCLUDING GEORGETOWN AND SOUTH PARK NEIGHBORHOODS

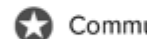
- **Port of Seattle Parks** (from north to south):
 - Jack Block Park
 - ʔuʔəlatx^w Village Park & Shoreline Habitat (former Terminal 105 Park)
 - həʔapus Village Park (former Terminal 107 Park)
 - Gateway Park North
 - Duwamish River People's Park (former Terminal 117 Park)

Duwamish Valley & Port of Seattle Access and Mobility Study

Full Map



School



Community Hub

Commercial Core



Port Park

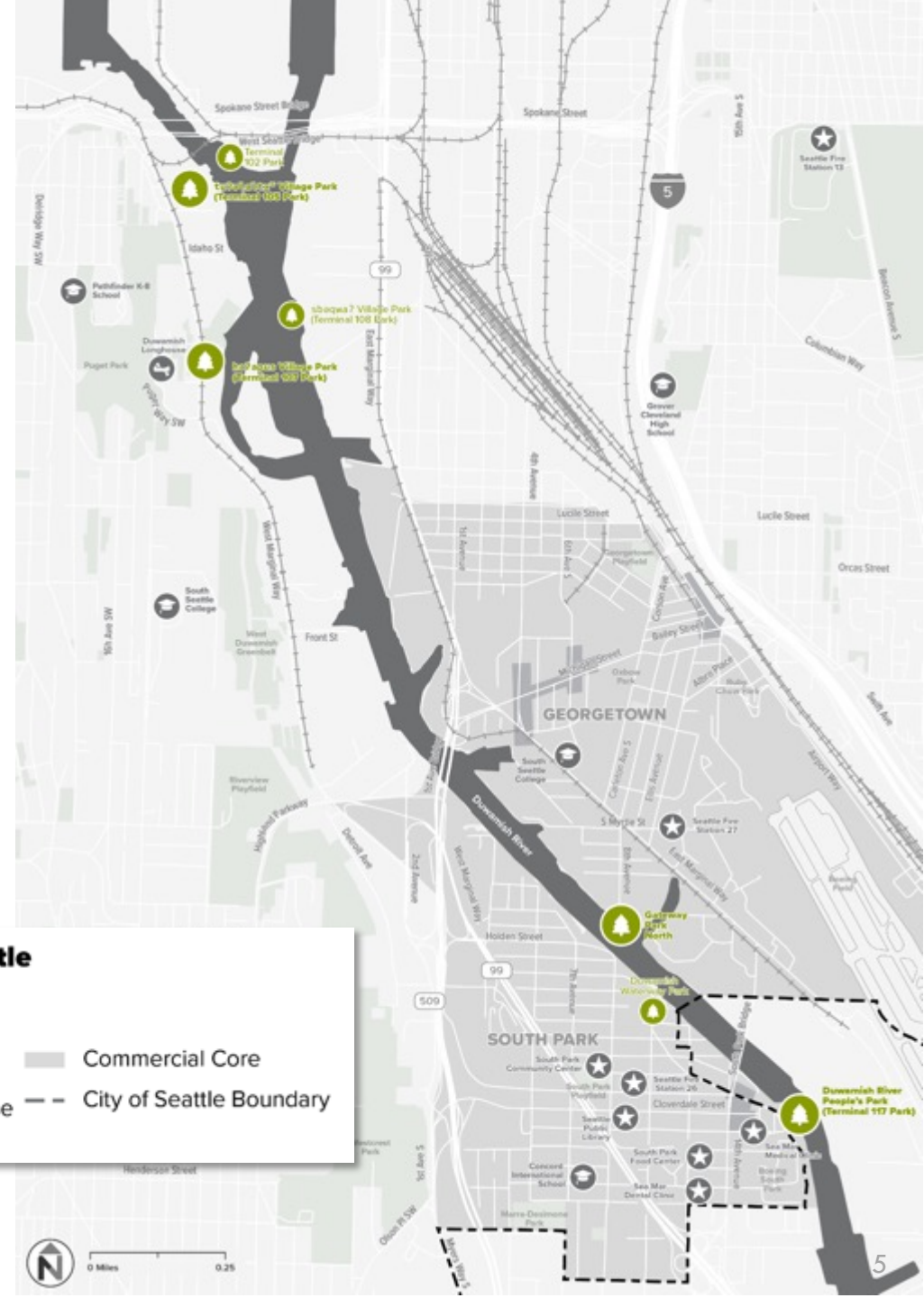


Duwamish Longhouse and Cultural Center

City of Seattle Boundary



0 Miles 0.25



Learn more about the Port and Seattle Parks Foundations recent renaming of six Port-owned parks here: <https://www.portseattle.org/NameIncredibleParks>

Project Goals

SAFETY

Improve safety by identifying and improving locations with a history of collisions or with a perceived safety risk.

Focus on areas uncomfortable for people walking, rolling, and bicycling within the Duwamish Valley and near Port of Seattle properties.

Crashes (2010-2020)

Full map

Number of people bicycling involved in a crash

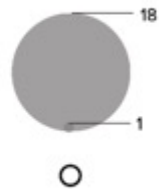
2
1

Number of vehicles involved in a crash

Number of people walking involved in a crash

3
1

Crashes resulting in severe or fatal injury



- Port Park Properties
- Duwamish Longhouse and Cultural Center
- Community Hub
- School
- Study Neighborhoods
- Commercial Core
- City of Seattle Boundary

Source : City of Seattle, WSDOT 2020



Project Goals

ACCESS & MOBILITY

Enhance walking, rolling, and bicycling connections between Duwamish Valley destinations, Port of Seattle properties, and existing multimodal facilities.

- Focus on people of all ages and abilities
- Promote Port of Seattle parks as welcoming, inclusive community spaces



Many sidewalks in South Park and Georgetown are not accessible for people with mobility challenges

Project Goals

HEALTH & EQUITY

Address the impacts of institutional racism, historic disinvestment, and environmental degradation that have contributed to health and economic inequities in the Duwamish Valley.

- Improve health through active travel
- Reinforce sense of place and community identity
- Support youth leadership



Community Leadership and Capacity Building
Center the voices and needs of the Duwamish Valley community with community-led process to satisfy the needs expressed by underserved populations and advance locally identified solutions.

Project Approach



Network Mapping

Maps of existing multimodal networks:

- Walking
- Bicycling
- Transit
- Freight
- Vehicle



Field Work

- Walking assessment of sidewalks
- Bike ride of current network
- Survey of Port parks conditions



Persona Journeys

Typical trips between Duwamish Valley destinations to highlight opportunities for improvement



Needs Assessment

- Opportunities for improvement
- Destinations for connection
- Barriers for walking, rolling, biking, and taking the bus



Solutions & Next Steps

- Improvement project identification
- Opportunities for collaboration

Coordination with other Duwamish Valley efforts

- **Georgetown to South Park Trail**

A safe walking and biking route connecting people with local businesses, services, and destinations on both sides of our river. (Source: <https://dvsafeststreets.org/gsptrail>)

- **Duwamish Valley Safe Streets**

A volunteer organization of South Park and Georgetown community members who envision a network of comfortable walking and biking routes that connect people to destinations in and around our neighborhoods.



GEORGETOWN SOUTH PARK TRAIL

THE GEORGETOWN SOUTH PARK TRAIL WILL BE A SAFE WALKING AND BIKING ROUTE CONNECTING PEOPLE WITH LOCAL BUSINESSES, SERVICES, AND DESTINATIONS ON BOTH SIDES OF OUR RIVER.



Source: [Duwamish Valley Safe Streets](#)

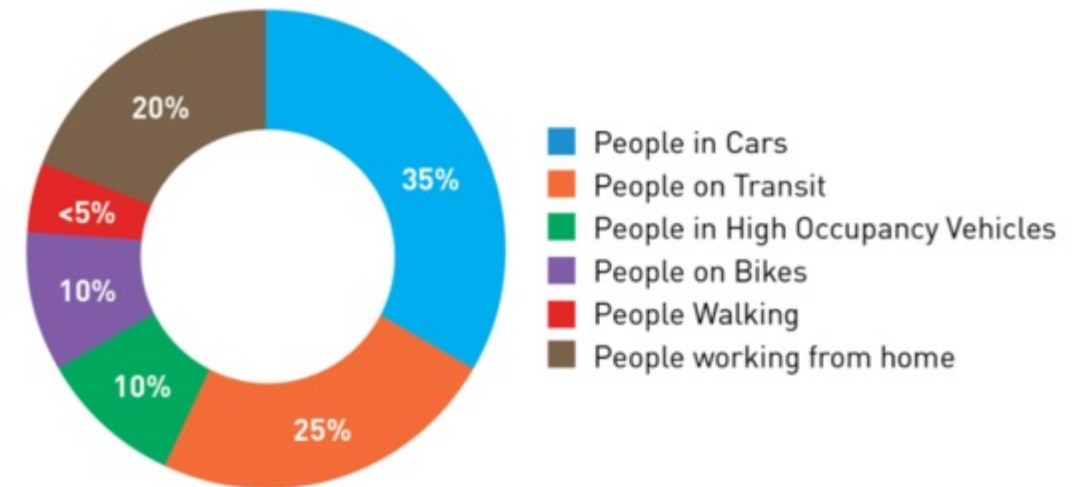
Coordination with other Duwamish Valley efforts

Reconnect West Seattle Implementation Plan

SDOT's community-led process to identify challenges and prioritize solutions to increase options for transit ridership, bicycling and walking trips, and safety on our streets and sidewalks, especially in neighborhoods that are acutely impacted by increased traffic.

Source: [Reconnect West Seattle Framework](#)

Modified Mode Share Goals
(September 2020)



How People Get Around - Change Needed



We must change how we move to mitigate the impacts of the West Seattle bridge closure.

Source: [Reconnect West Seattle, SDOT](#)

Coordination with other Duwamish Valley efforts

Outside Citywide: South Park

A City of Seattle interdepartmental initiative to envision and create an integrated, equitable, and inspiring public space network for a thriving, green Seattle.

- [Interactive mapping platform](#) to explore public space connections



Environmental Challenges in South Park

Source: [Outside Citywide, South Park Neighborhood Profile](#)



NETWORK MAPPING

BICYCLE NETWORK

Bicycle Infrastructure

Full Map

- Protected Bike Lane
- Multi-Use Trail
- - - Neighborhood Greenway
- - - Stay Healthy Street
- Bike Lane
- - - Proposed Trail Connection
- 🌲 Port Park Properties
- 🏠 Duwamish Longhouse and Cultural Center
- ★ Community Hub
- 🎓 School
- Study Neighborhoods
- Commercial Core
- City of Seattle Boundary

Source : City of Seattle



Bicycle Infrastructure North Map

- Protected Bike Lane
- Multi-Use Trail
- - - Neighborhood Greenway
- - - Stay Healthy Street
- Bike Lane
- - - Proposed Trail Connection
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Source : City of Seattle



Bicycle Infrastructure South Map

- Protected Bike Lane
- Multi-Use Trail
- - - Neighborhood Greenway
- - - Stay Healthy Street
- Bike Lane
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Source : City of Seattle

BICYCLE NETWORK

- Duwamish Trail and 1st Ave bridge trail are important routes, but they are **disconnected**.
- End before connecting to other facilities
- Don't get you into the heart of South Park or Georgetown
- **Sharrows** don't count.
- Unprotected bike lanes along **freight routes**.
- **Difficult to find your way**. Even the locals need maps.

Bicycle Infrastructure

Full Map

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Bicycle Infrastructure

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Source : City of Seattle

DUWAMISH VALLEY ON-STREET BIKE FACILITIES



Faded sharrows indicate bike routes, but don't add to rider comfort.

Sharrow on S Cloverdale St in South Park



Unprotected bike lane with car lanes on both sides.

Bike lane along E Marginal Way approaching South Park Bridge



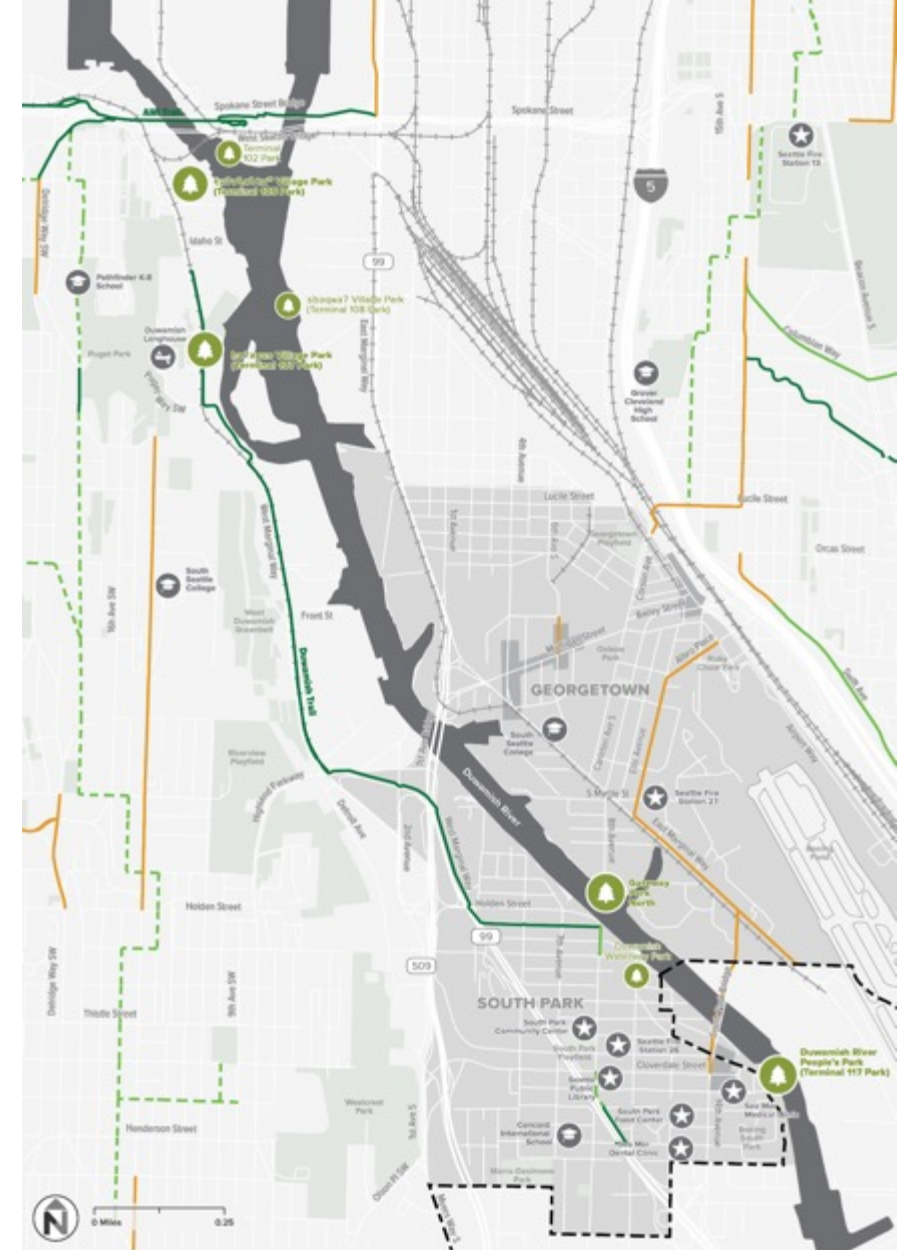
Drainage and maintenance issues impact the safety of people riding.

Bike lane along 16th Ave S approaching South Park Bridge

BICYCLE NETWORK

Main bike routes for local travel between and within Georgetown and South Park:

- **Duwamish Trail and 1st Ave Bridge trail**
 - Ends before Village Park and West Seattle Bridge trail
- **East Marginal Way**
 - Unprotected bike lane along a major truck street
- **South Park Bridge**
 - Bike lanes end at Dallas Ave S (South Park Plaza)
- **8th Ave S and S Cloverdale St**
 - Sharrows connecting to library, community center, and Duwamish Trail
- **Ellis Ave S**
 - Unprotected bike lanes in south Georgetown



Bicycle Infrastructure

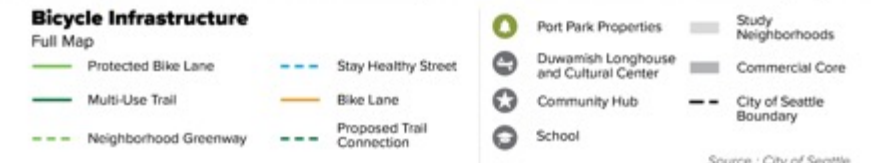
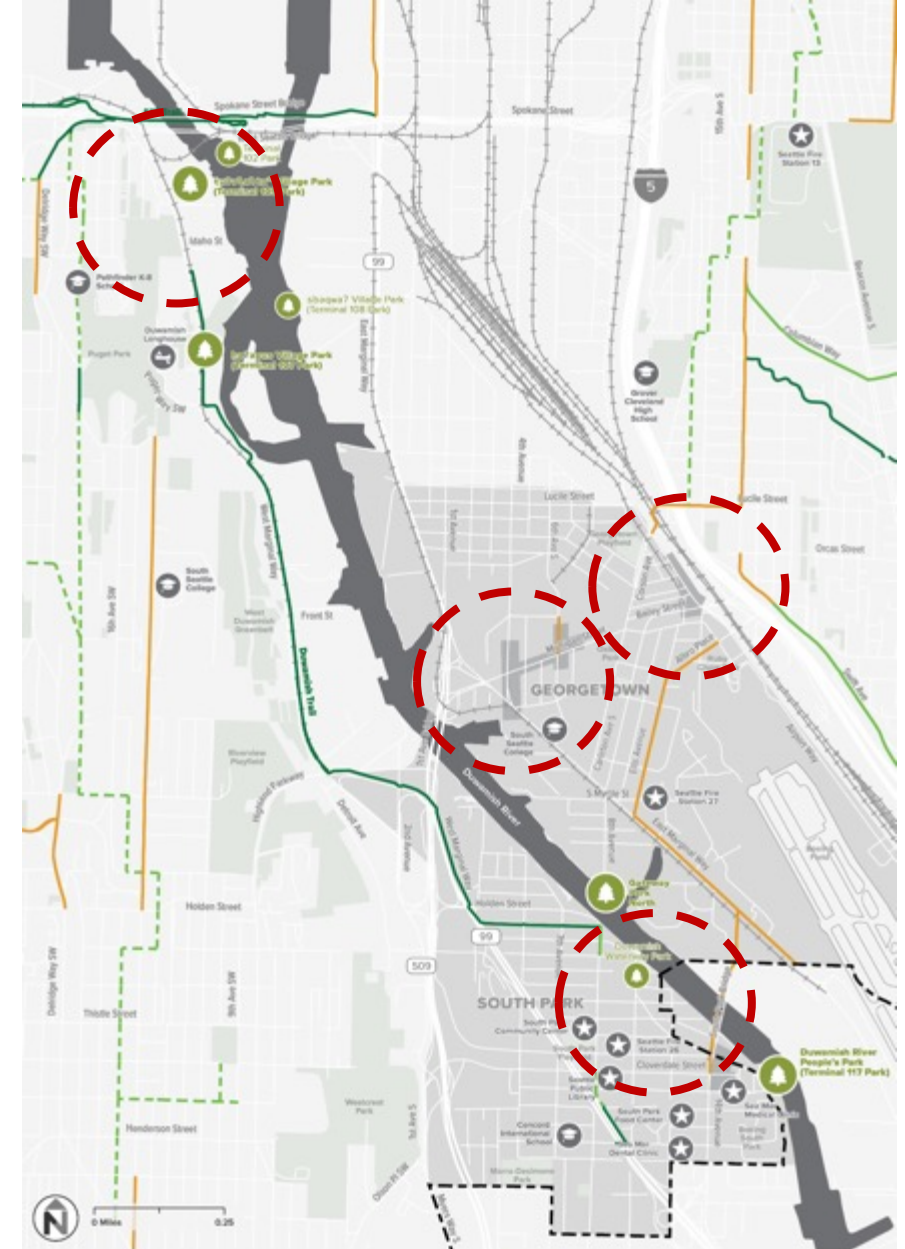
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Source : City of Seattle

BICYCLE NETWORK

Important bicycle network **gaps**:

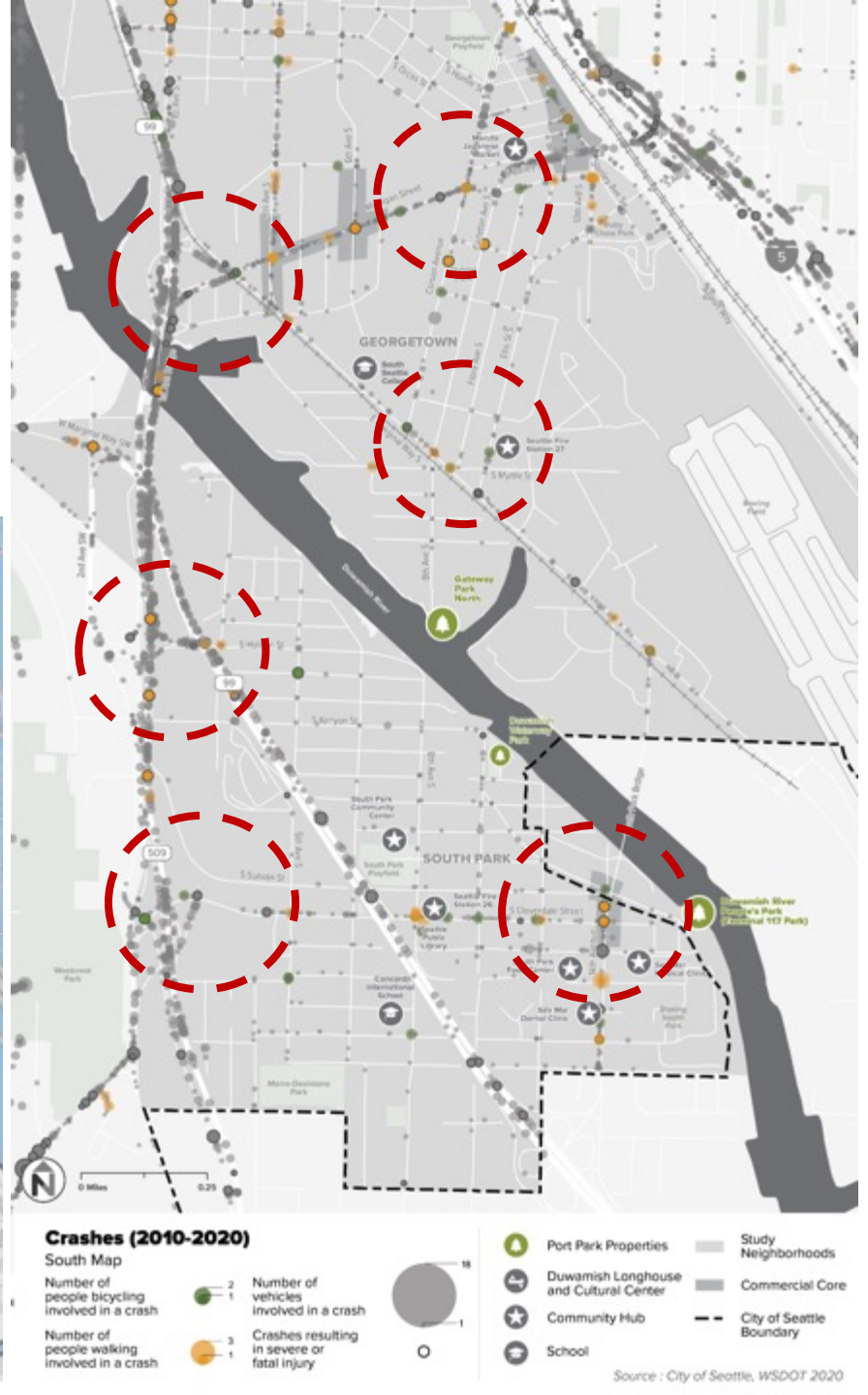
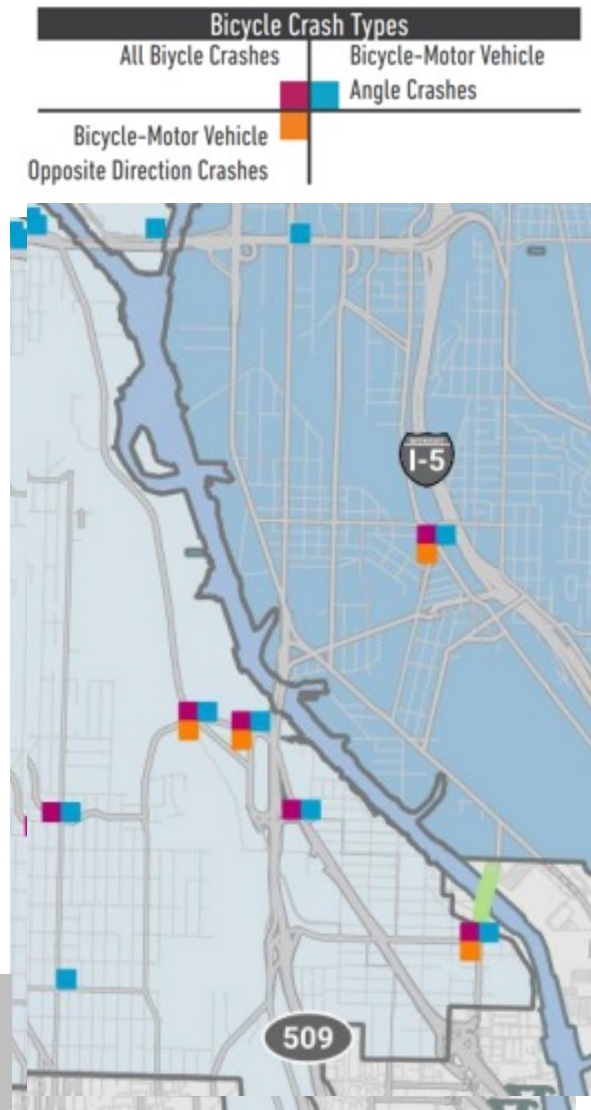
- **West Seattle Bridge Trail to Duwamish Trail** and hōpapus Village Park
- **Georgetown to 1st Ave Bridge trail**, including crossing of E Marginal Way S at S River St
- All ages and abilities bike routes **within** Georgetown and South Park
- **Georgetown to South Park**: Riding along and across East Marginal Way
- **South Park Bridge to Duwamish Trail** via S Cloverdale St and 8th Ave S
- **Georgetown to Beacon Hill** via the Lucille Overpass or Albro St. Bridge
- **Georgetown to Downtown** a route through SODO that connects the Duwamish Valley to downtown



BICYCLE SAFETY

Priority crash hotspots in the Duwamish Valley per SDOT's Bicycle and Pedestrian Safety Analysis:

- 14th Ave S/S Cloverdale St
- S Holden St/SR 99/Duwamish Trail
- Highland Park Way SW/W Marginal Way SW
- Airport Way S/S Lucile St



Source: [Seattle Bicycle and Pedestrian Safety Analysis \(Feb 2020\)](#)

BICYCLE SAFETY

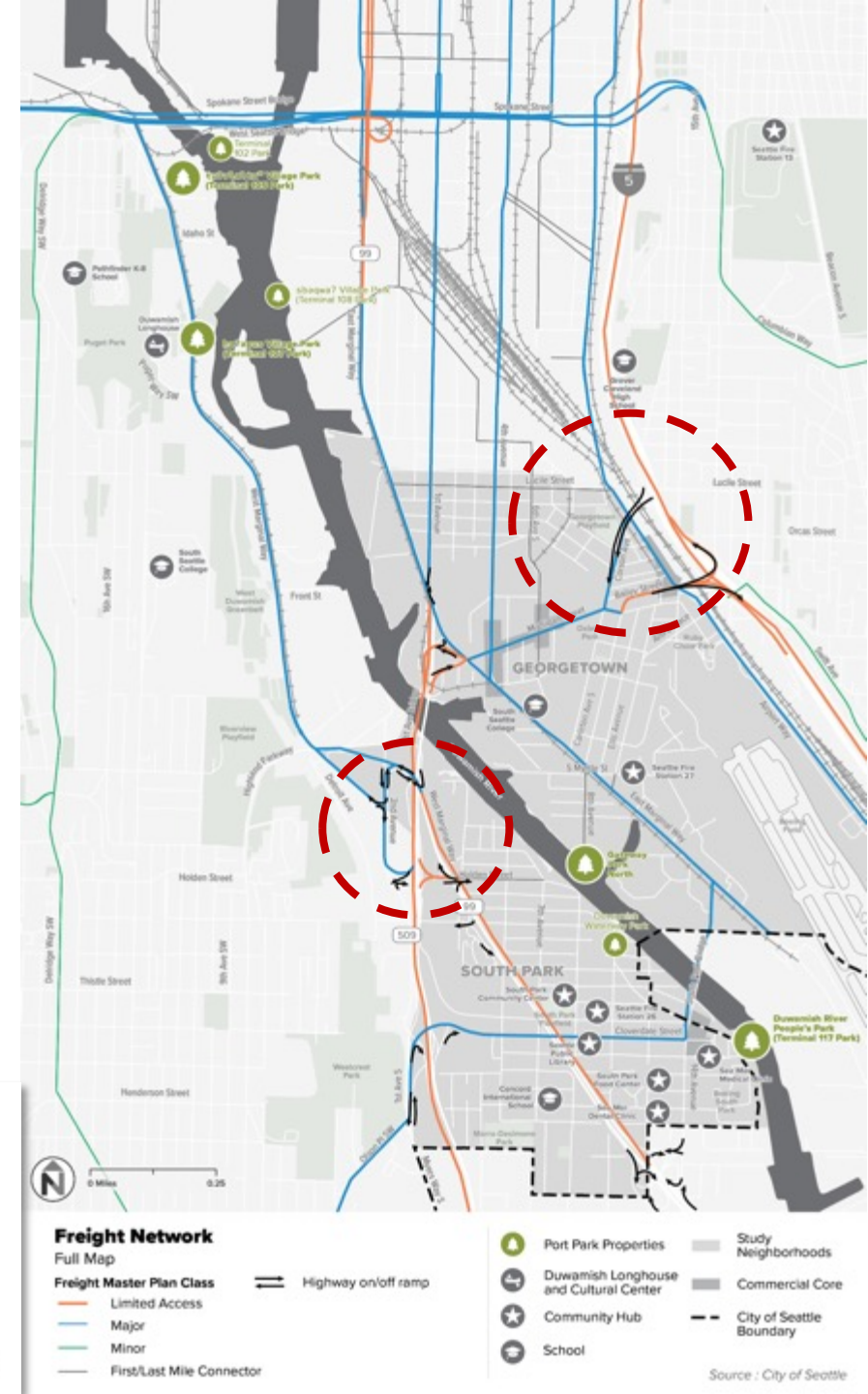
- Our community mourned the death of several people riding their bikes in the Duwamish Valley in recent years.
- *We pause now for a moment of silence to honor the lives lost on Duwamish Valley streets.*



March 24, 2021, a person riding a bicycle was killed by a large truck at S Michigan St/Corson Ave S, an intersection with a history of crashes

FREIGHT NETWORK

- **SR 509 and SR 99 on-/off-ramps** lead to conflicts and perceived lack of safety
- **Amazon distribution centers** create surges of delivery vehicles on South Park and Georgetown streets. Impacts of e-commerce.
- **Railroad tracks and spurs** cross local streets and pose hazards to people bicycling.



Freight Network

Full Map

Freight Master Plan Class

— Limited Access

— Major

— Minor

— First/Last Mile Connector



Highway on/off ramp



Port Park Properties



Duwamish Longhouse and Cultural Center



Community Hub



School

Study Neighborhoods

Commercial Core

City of Seattle Boundary

Source : City of Seattle

Freight Network

Full Map

Freight Master Plan Class

— Limited Access

— Major

— Minor

— First/Last Mile Connector

Highway on/off ramp

Port Park Properties

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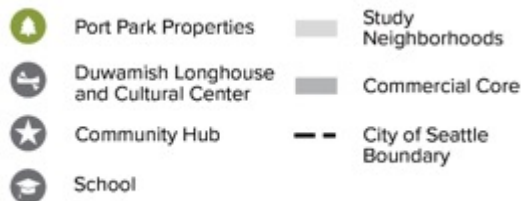
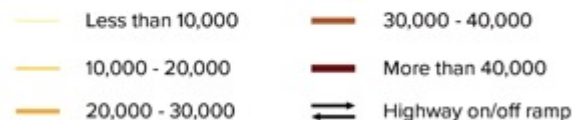
City of Seattle Boundary

Source : City of Seattle

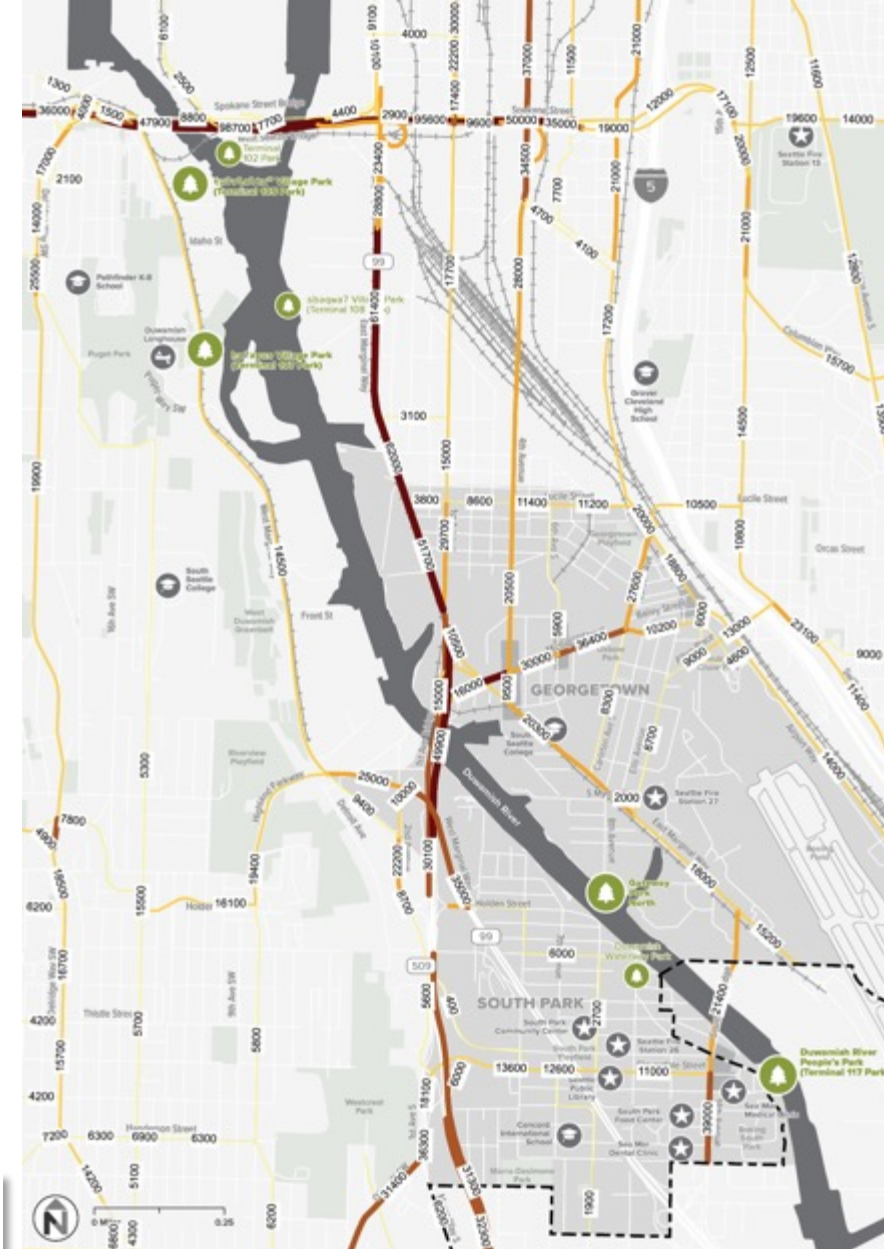
VEHICLE NETWORK

- Freeways divide and isolate (i.e., SR 509 and SR 99). **Lack of street connectivity limits alternate routes** for people bicycling.
- Local streets are **congested**.
 - WSB closure impact: West Seattle traffic travels along the Duwamish Valley’s limited local street connections.
- **Freeway access points** (i.e., on-/off-ramps) lead high-speed traffic onto local streets and bike routes.

Average Weekday Traffic (reported 2018)
Full Map



Source : City of Seattle



Average Weekday Traffic (reported 2018)
Full Map

	Less than 10,000		30,000 - 40,000
	10,000 - 20,000		More than 40,000
	20,000 - 30,000		Highway on/off ramp



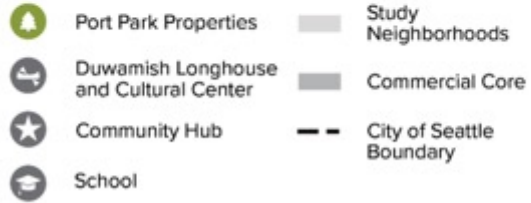
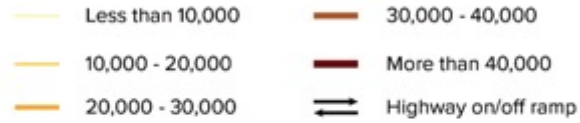
Source : City of Seattle

TRAFFIC VOLUMES

2018 (PRE-WSB CLOSURE)

Average Weekday Traffic (reported 2018)

Full Map

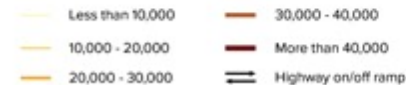


Source : City of Seattle

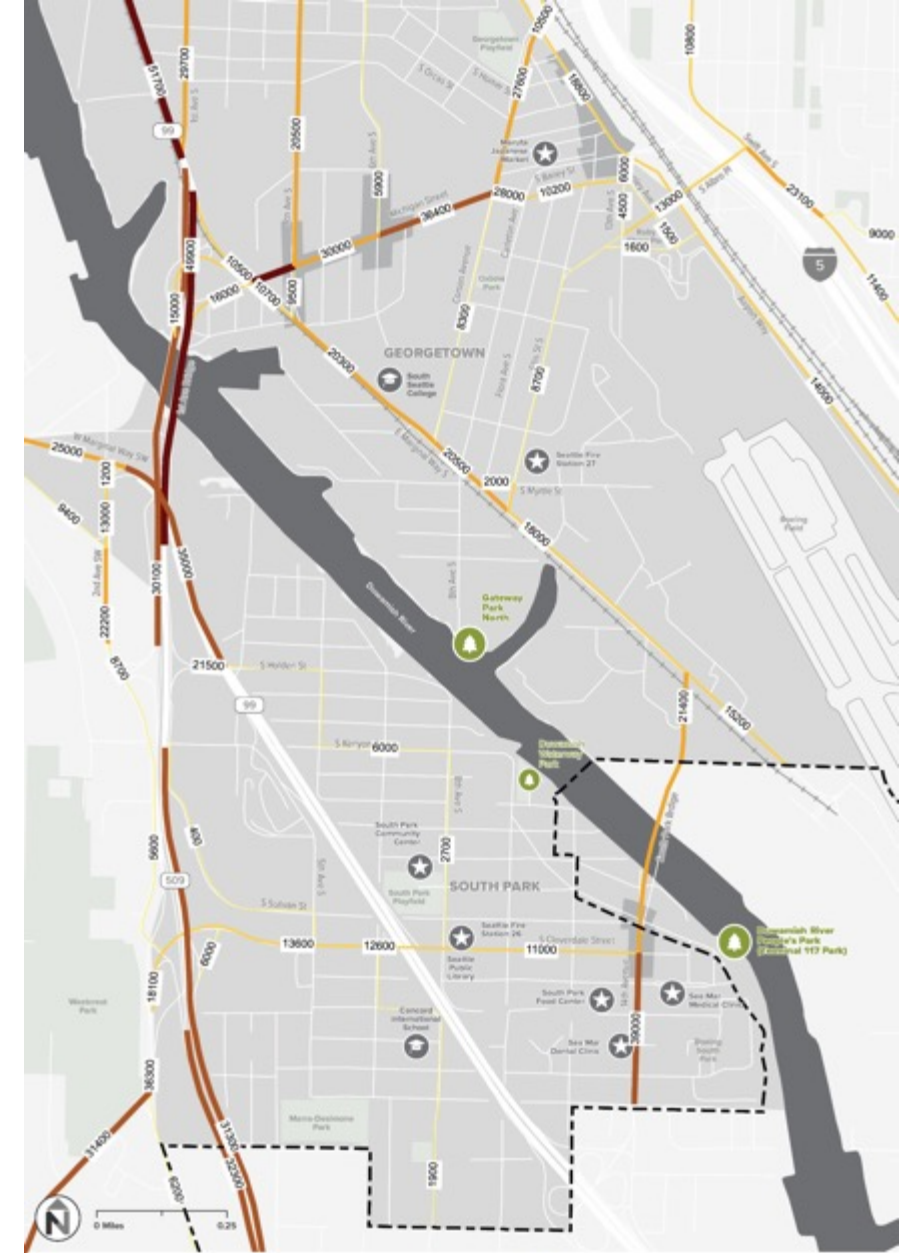


Average Weekday Traffic (reported 2018)

North Map

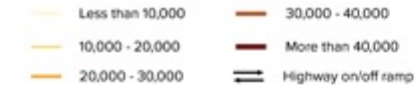


Source : City of Seattle



Average Weekday Traffic (reported 2018)

South Map



Source : City of Seattle

VEHICLE CONDITIONS



West Seattle traffic clogs W Marginal Way along Duwamish Trail.



High speed traffic along Ellis Ave, Georgetown's only bike route.



Traffic backs up along S Michigan St impeding crossings.

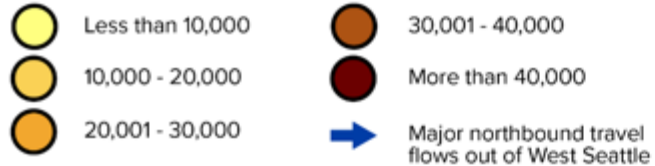
WEST SEATTLE BRIDGE CLOSURE IMPACTS

Prior to the West Seattle Bridge (WSB) closure:

- **80,000 cars a day** crossed the bridge
 - **21 car lanes** crossed the Duwamish River.
- Now, only **12 car lanes** cross the river mostly through the Duwamish Valley.
- Freight vehicles accessed the Port of Seattle along the WSB **Major Truck street**.

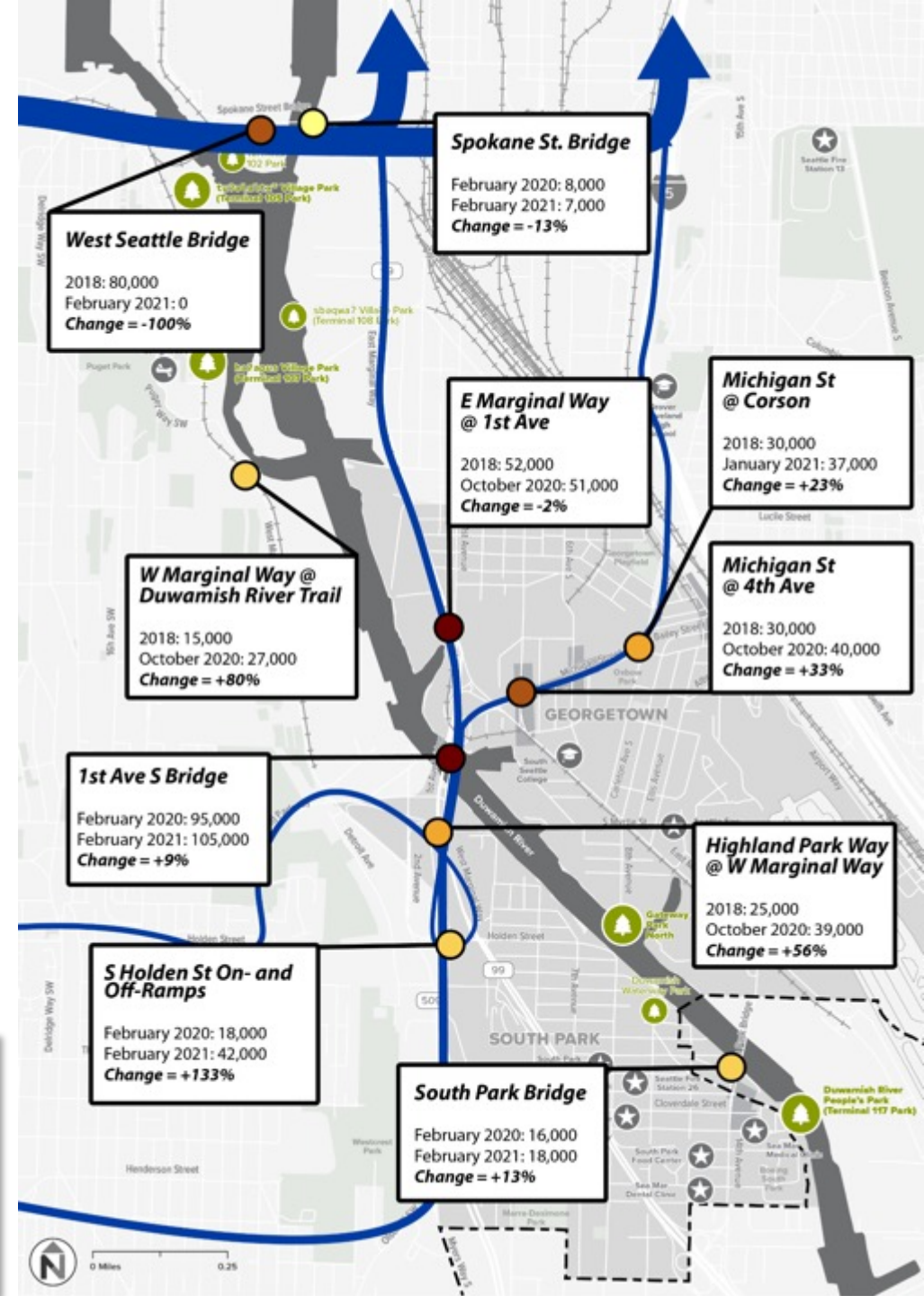
Pre-West Seattle Bridge Closure Travel

Average daily travel before bridge closure (2018 or Feb. 2020)*



*Volume data not available for all points immediately before the bridge closure in March 2020

Source: City of Seattle

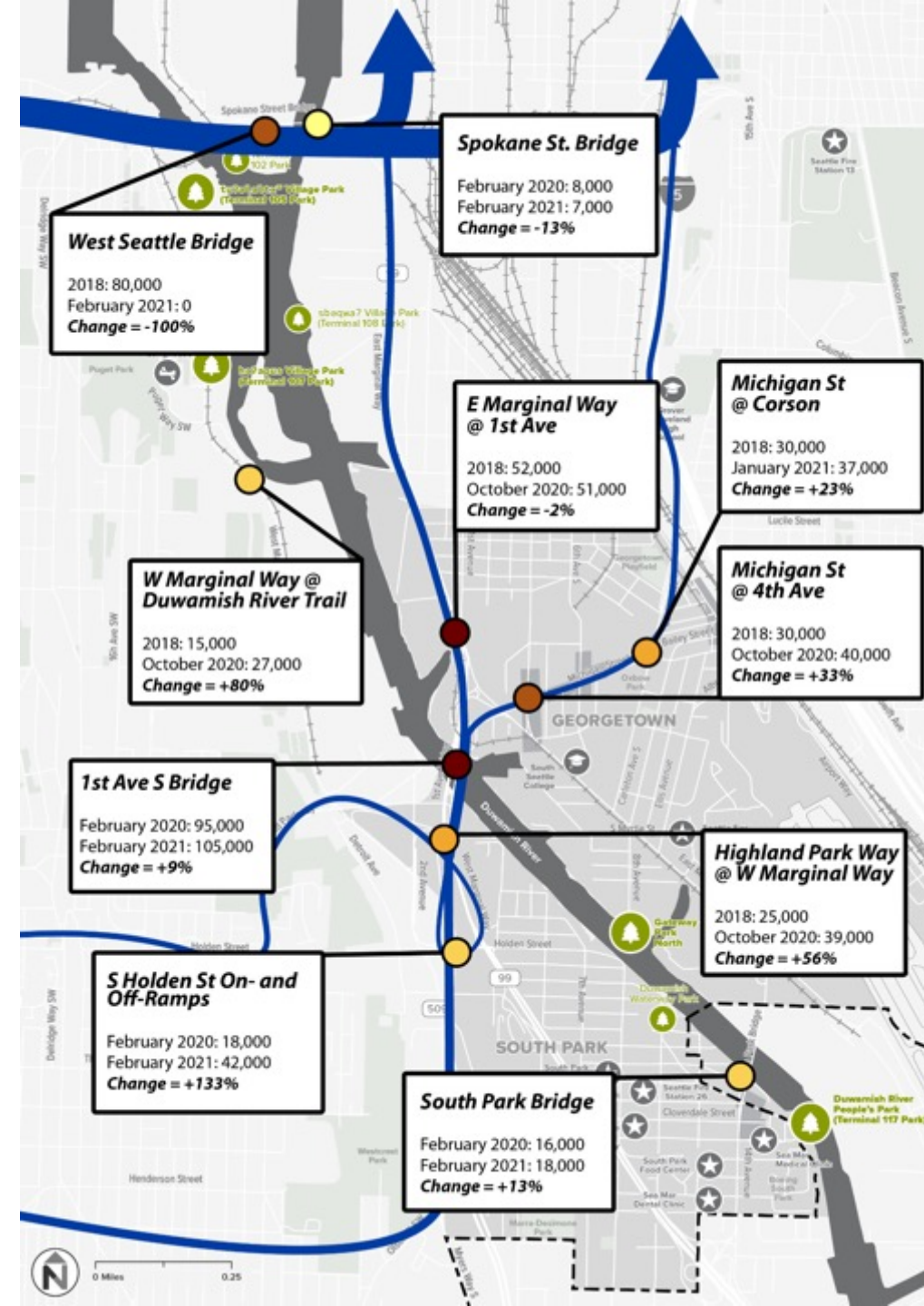
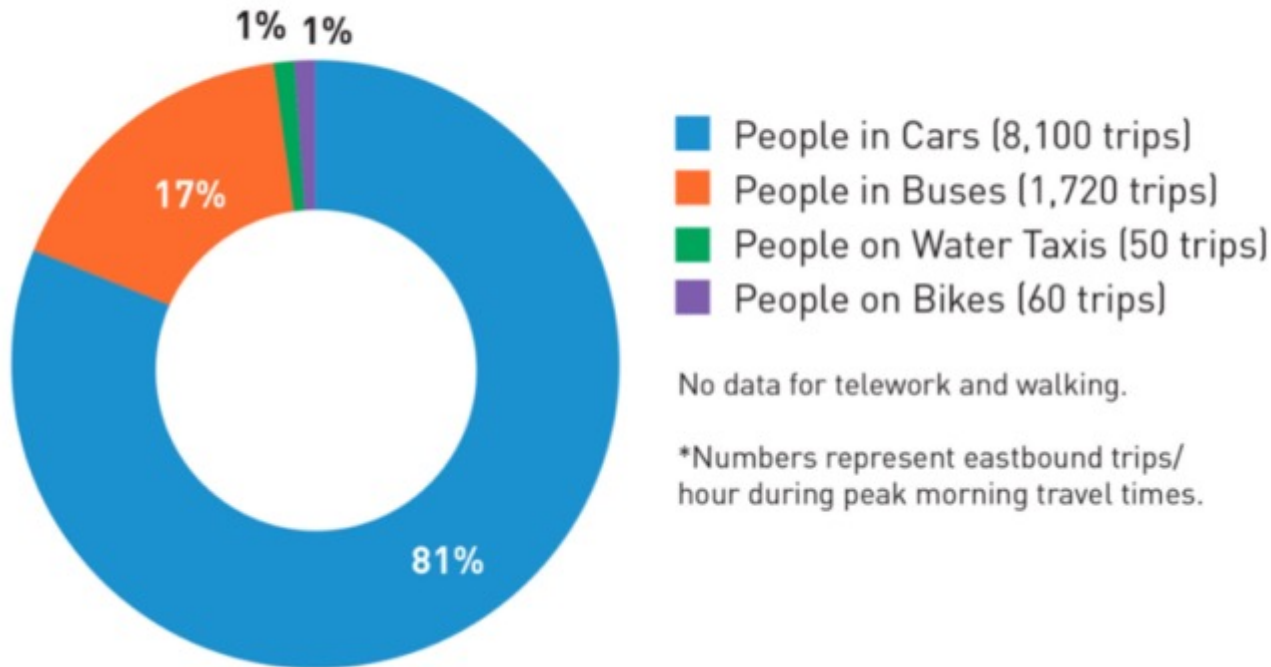


WEST SEATTLE BRIDGE CLOSURE IMPACTS

Most people accessing the West Seattle peninsula drove prior to the bridge closure.

Source: [Reconnect West Seattle Implementation Plan](#)

How People Got Around in 2019



WEST SEATTLE BRIDGE CLOSURE IMPACTS

After the West Seattle Bridge (WSB) closure:

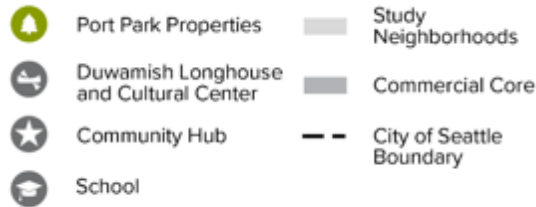
- The Duwamish Valley's limited local streets carry people accessing West Seattle:
 - S Michigan St
 - West Marginal Way
 - Highland Park Way SW
 - S Cloverdale St and South Park Bridge
 - East Marginal Way

Post-West Seattle Bridge Closure Travel

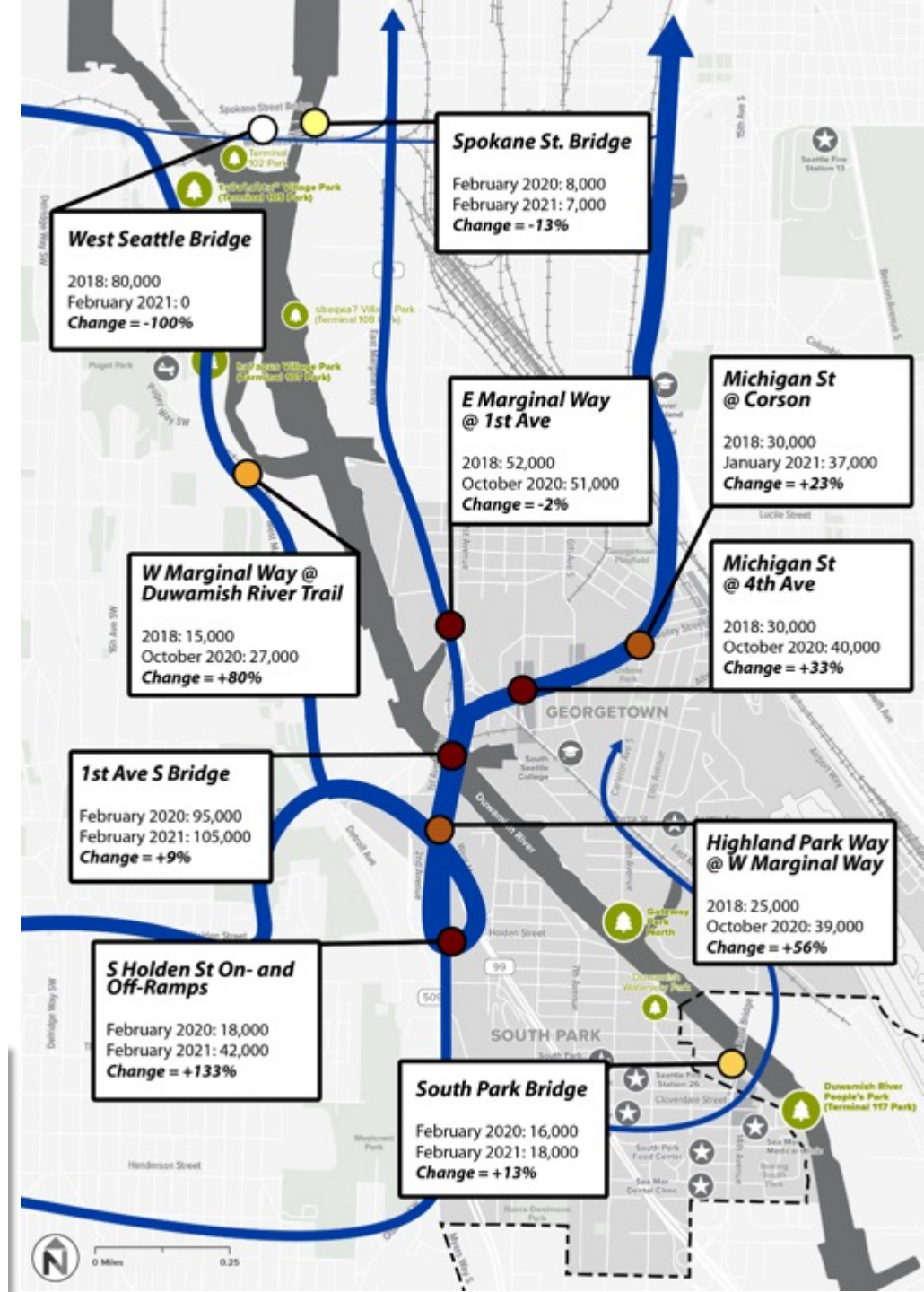
Average daily travel after bridge closure (Oct. 2020 or Feb. 2021)*



*Volume data not available for all points in Feb. 2021



Source : City of Seattle



WEST SEATTLE BRIDGE CLOSURE IMPACTS

Key intersections along WSB detour route are carrying significantly more traffic:

- Highland Park Way SW/W Marginal Way
- Holden St SR 509 on-/off-ramps
- S Michigan St/4th Ave S
- South Park Bridge

People bicycling must pass through these intersections, too.

Change in West Seattle Bridge Closure Travel Volumes

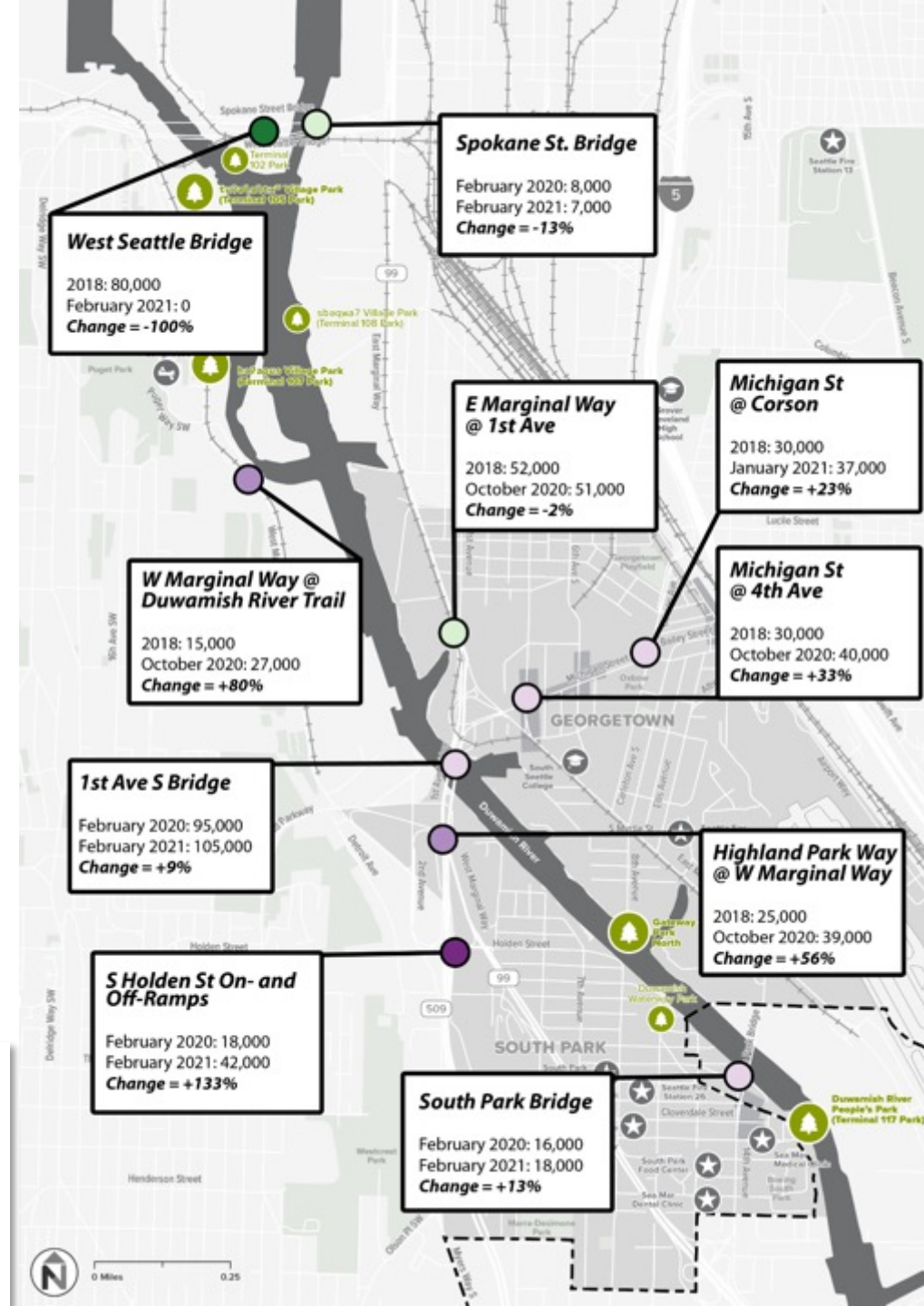
Average daily travel change from before the bridge closure (2018 or Feb. 2020) to after (Oct. 2020 or Feb 2021)*



*Volume data not available for all points immediately before the bridge closure. Percentage change includes reductions in travel during the COVID-19 pandemic.

- Port Park Properties
- Duwamish Longhouse and Cultural Center
- Community Hub
- School
- Study Neighborhoods
- Commercial Core
- City of Seattle Boundary

Source : City of Seattle



WEST SEATTLE BRIDGE CLOSURE IMPACTS

- Many of the Duwamish Valley's limited local street connections are **key bicycling routes**.
- **It was already hard enough** to bike in the Duwamish Valley.
- We must **protect and enhance routes** for people making the choice to bike

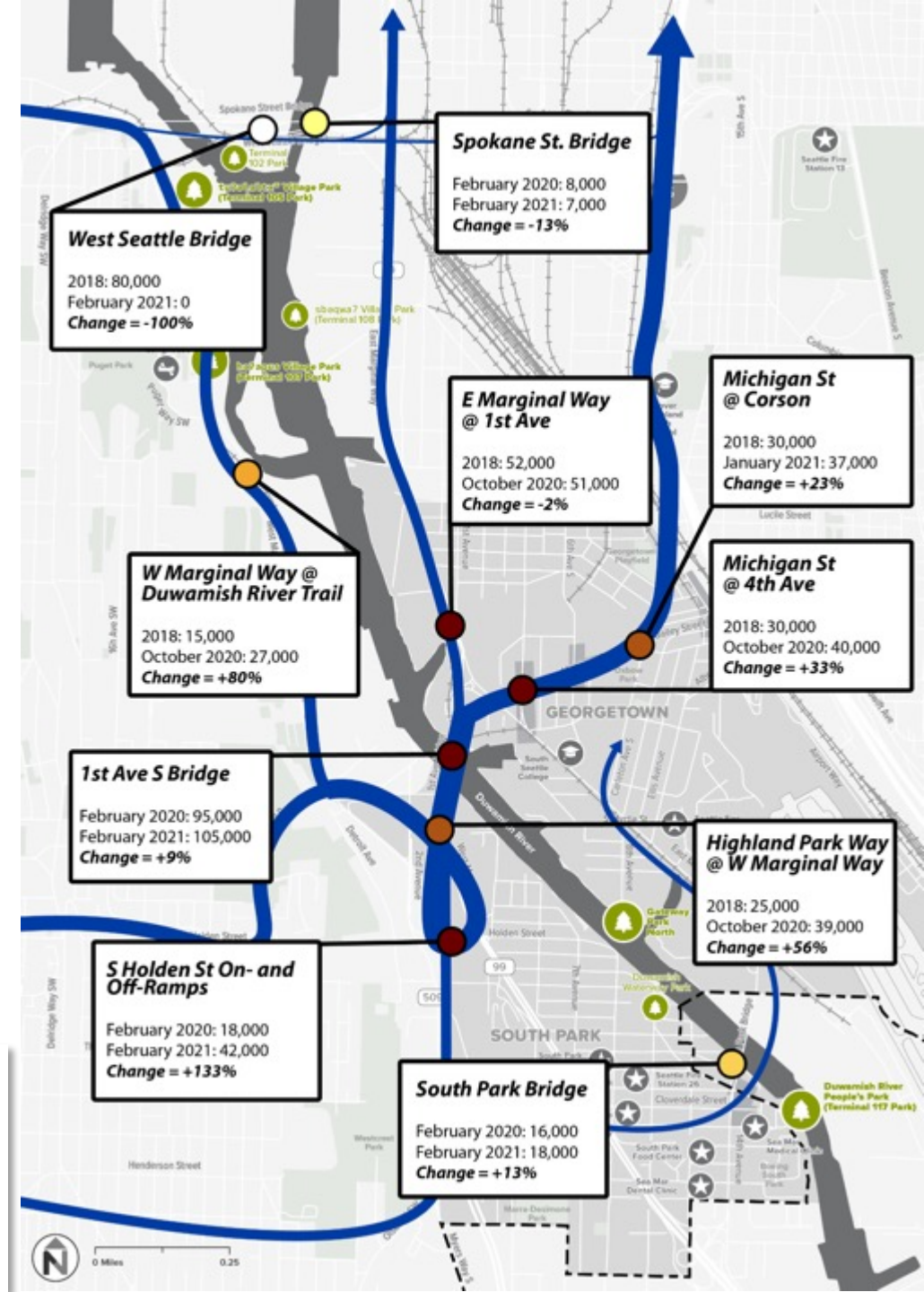
Post-West Seattle Bridge Closure Travel

Average daily travel after bridge closure (Oct. 2020 or Feb. 2021)*



*Volume data not available for all points in Feb. 2021

Source : City of Seattle

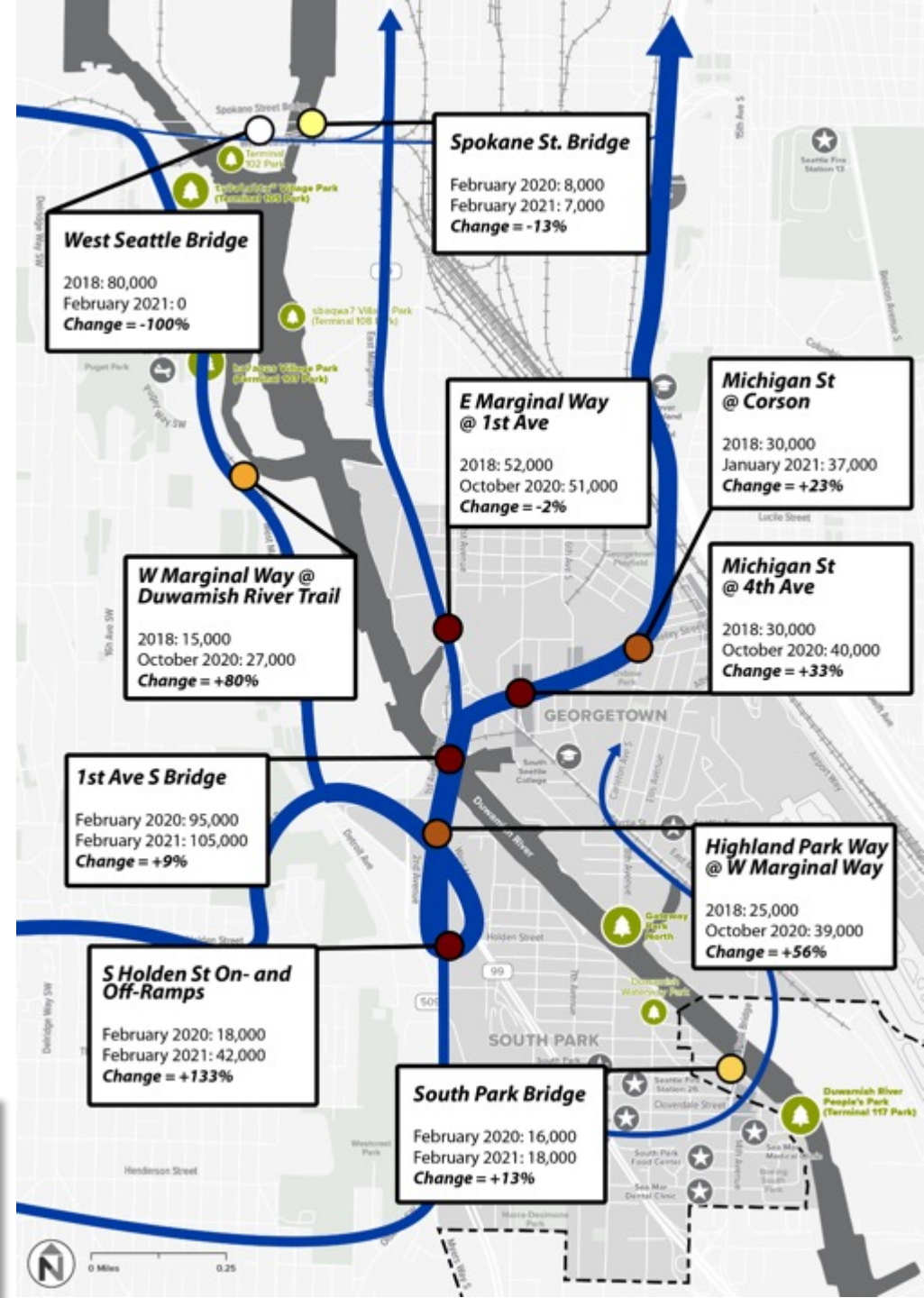


WEST SEATTLE BRIDGE CLOSURE IMPACTS

The West Seattle Bridge closure and detour **disproportionately impacts the Duwamish Valley:**

- Greater risk to health and public safety
- Already has higher rates of asthma and lower life expectancy.
- South Park: 63% residents of color, 40% speak a language other than English at home

Source: [Reconnect West Seattle, SDOT](#)





Jen & Oliver



Stanley



Horace

PERSONA JOURNEYS

Persona Journey Introduction

PERSONAS ILLUSTRATE TYPICAL TRIPS BETWEEN DUWAMISH VALLEY DESTINATIONS

- Green to red illustrate low to high levels of stress along the journey based on barriers or conflict points



- 1, 2, 3... indicate steps of the journey



Jen & Oliver



Horace



Stanley



Jen & Oliver

Georgetown ► Duwamish River People's Park

- 1 2 Jen and Oliver leave their home near **Eddy St & Flora Ave** in Georgetown and turn onto **Ellis Ave at Eddy St and Albro Pl.**
- 3 They take the **unprotected bike lane** down **Ellis Ave.**
- 4 5 They turn onto **E Marginal Way** and bike on the **sidewalk** instead of the bike lane.
- 6 7 They bike to **16th Ave** but have to backtrack to **14th Ave** to cross the street at a **crosswalk**. They ride to 16th in the **unprotected bike lane**.
- 8 They walk their bikes across the **bridge**.
- 9 They stop by the **Bookmobile at South Park Plaza**.
- 10 11 They ride in the **street on Dallas** to read in the **Duwamish River People's Park** before heading home.



Horace

Georgetown ► Gateway Park North

- 1 Horace leaves his home near the **5th St and Brandon St.**
- 2 He bikes in the street on **Brandon St., 6th St., and Orcas St.** to Corson Ave.
- 3 He turns onto **Corson** and rides on the **sidewalk** where he nearly runs into a pedestrian.
- 4 He turns onto **East Marginal Way**. He bikes on the **sidewalk** for the one block to **Carleton Ave.**
- 5-6 He crosses the street at the **crosswalk** and turns down **8th Ave.**
- 7 He shares the street with Recology garbage trucks on **8th Ave.** until he gets to to **Gateway Park North.**



Stanley

Duwamish River People's Park ▶
tuʔəlaɫx^w Village Park

- 1 Stanley bikes from his home near the **Duwamish River People's Park**.
- 2 He takes **Cloverdale to 8th Ave** and then zig zags through the neighborhood to get onto the **Duwamish Trail from Portland St**.
- 3
- 4
- 5 He follows the **Trail** along **W Marginal Way**, which takes him across 1st Ave and under Highway 509. He continues along the **Trail** and makes a right to continue on **W Marginal Way**.
- 6
- 7 He follows the Trail into **həʔapus Village Park** and takes the paths to continue north.
- 8 When the trail ends, he chooses to ride in the road instead of crossing over the sidewalk trail.
- 9
- 10 He makes a right into the driveway to **tuʔəlaɫx^w Village Park** and hangs out with his friends before heading home.
- 11



ACCESS & MOBILITY NEEDS

DESTINATIONS & CONNECTIONS

IMPORTANT DUWAMISH VALLEY DESTINATIONS FOR MULTIMODAL CONNECTIONS

- Connections between and within Georgetown and South Park
- Travel between Duwamish Valley and surrounding neighborhoods
 - Southeast Seattle and the Central District
 - Admiral, especially from South Park

KEY DESTINATIONS:

PARKS & OPEN SPACES

- Port Parks
- Georgetown Playfield
- South Park Playground

NEIGHBORHOOD COMMERCIAL HUBS

- 14th/Cloverdale, South Park
- Michigan St, Georgetown
- Airport Way, Georgetown

CIVIC & CULTURAL CENTERS, SERVICES

- Duwamish Longhouse
- South Park Community Center
- South Park Library
- SeaMar Clinics
- South Park Food Center

SCHOOLS

- South Seattle College
- Concord International
- Mercer MS, Cleveland HS, Rising Star ES, Denny MS and Chief Sealth HS

BARRIERS

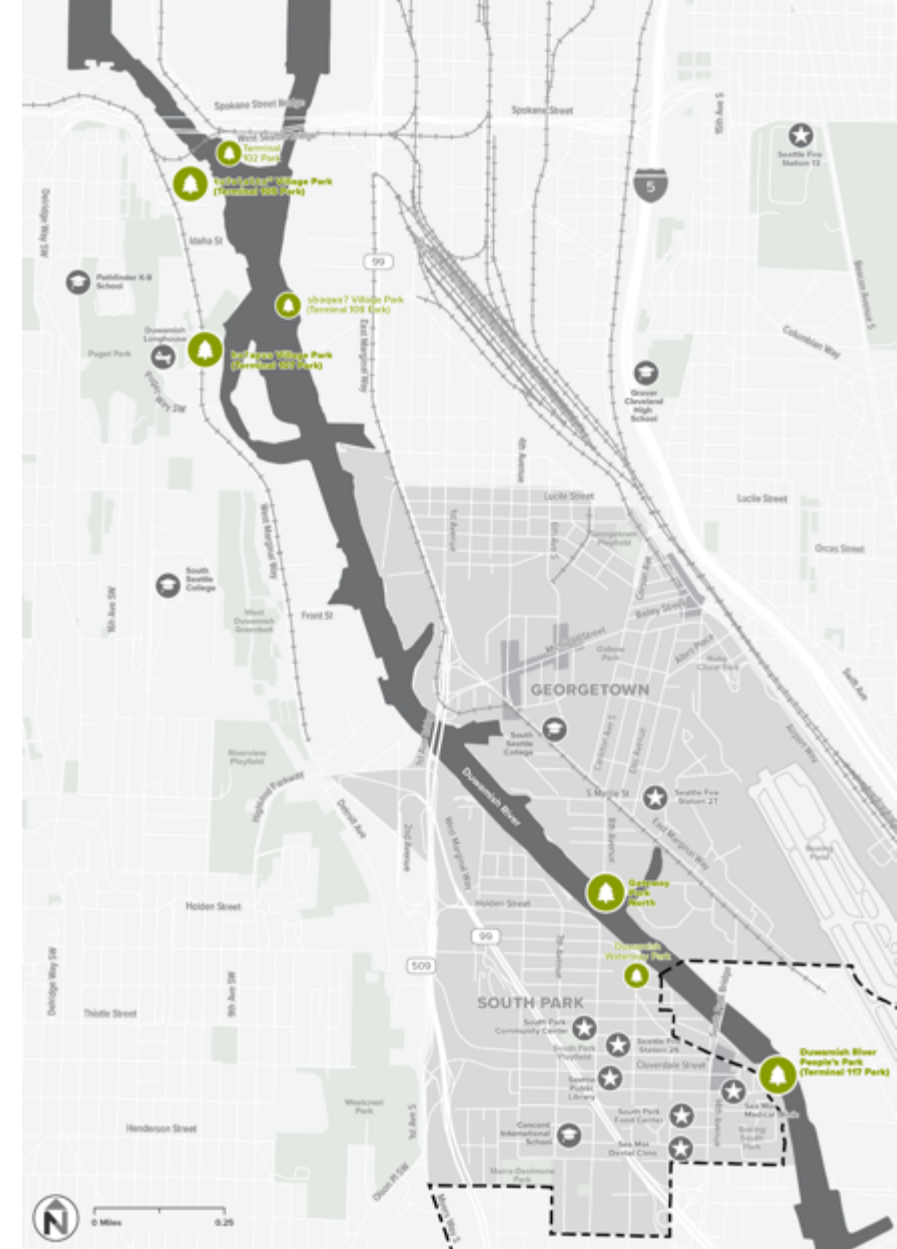
BARRIERS COMPOUND TO LIMIT MULTIMODAL TRAVEL

- Freeways divide and isolate
- Topography. “Short distance, but no way to get there”
- Busy streets with freight traffic
- Lack of all ages and ability facilities
- Long distances between safe street crossings
- Disconnected facilities
- “Even the locals have to use maps”
Need for wayfinding.
- Lack of transit service
- Railroad track crossings
- Sidewalks are uplifted, lack curb cuts and are disjointed.
- No sidewalks in industrial areas means a lot of Georgetown lacks sidewalks

Assets to Leverage

DUWAMISH VALLEY IS RICH WITH COMMUNITY ASSETS

- Shoreline and river access
- Duwamish Valley Trail and 1st Ave Bridge Trail
- Historic Georgetown Business District
- South Park Library and Community Center
- Seamar Clinic and Neighborcare Dental
- Georgetown Playfield and South Park Playground
- Duwamish Longhouse and Cultural Center



Duwamish Valley & Port of Seattle Access and Mobility Study

Full Map

- School
- Community Hub
- Commercial Core
- Port Park
- Duwamish Longhouse and Cultural Center
- City of Seattle Boundary

BICYCLING NEEDS

CONNECTED, ALL AGES AND ABILITIES BIKE FACILITIES

- Neglected and fragmented bike infrastructure isolates the Duwamish Valley and makes it difficult to access Port Parks

IMPORTANT AREAS AND PROJECTS TO STUDY FURTHER:

- Corson Ave. S.
- Connecting the Duwamish Trail to the Green River Trail and the Alki Trail
- Georgetown to South Park Trail
- Georgetown to Downtown connections
- S Lucile St. Between 12th and 15th and/or Albro Pl. S.
- S Cloverdale St.



Bicycle Infrastructure

Full Map

Protected Bike Lane

Multi-Use Trail

Neighborhood Greenway

Stay Healthy Street

Bike Lane

Proposed Trail Connection

Port Park Properties

Duwamish Longhouse and Cultural Center

Community Hub

School

Study Neighborhoods

Commercial Core

City of Seattle Boundary

NEXT STEPS

- **Identity solutions and develop projects** with SDOT, Port of Seattle, and King County Metro
- **Share findings** with Duwamish Valley community and organizations to gather feedback
- Coordinate with [Reconnect West Seattle](#) to **mitigate the impacts** of the West Seattle Bridge closure and detour
- Fund and implement the [Georgetown to South Park trail](#)



Thank you! Questions?

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