WEST SEATTLE BRIDGE CLOSURE

Transit Action Plan

FINAL

July 2020

King County METRO

Moving forward together

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Executive Summary

Background

On March 23, 2020, the Seattle Department of Transportation (SDOT) closed the West Seattle High Rise Bridge to all traffic, restricted the Spokane Street Low Bridge to allow transit, freight, non-motorized users, and emergency vehicles, and implemented detour routes for all other vehicles. The bridge is closed at least until 2022 while the City assesses and begins work to shore up cracks and increase structural stability. The bridge may ultimately be deemed unfixable, and the City announced late May the creation of a Community Task Force and Technical Advisory Panel to look at bridge replacement options.

The closure of the bridge causes impacts to 13 Metro routes that normally travel across the West Seattle Bridge. Before the state's "Stay Home, Stay Healthy" order went into place, these routes made approximately 900 daily weekday trips across the bridge, carrying around 19,000 daily passengers, with reduced trips and passengers on weekends and holidays.

A Metro team ("WSB Response Team") was formed immediately following notice of the West Seattle Bridge closure in order to develop a Metro Transit Action Plan (Plan), which would address the Peninsula's mobility needs. The goal of the Plan is to address the mobility needs of West Seattle residents, employees, and others through non-private vehicle modes that are under Metro's control, including bus (Metro Bus, Metro RapidRide, and Metro Water Taxi Shuttle), Water Taxi, Vanpool, non-motorized, and other innovative shared-ride solutions within Metro's financially constrained budget.

Within this Plan, Metro is planning for two network scenarios over two horizon periods.

Horizon Periods:

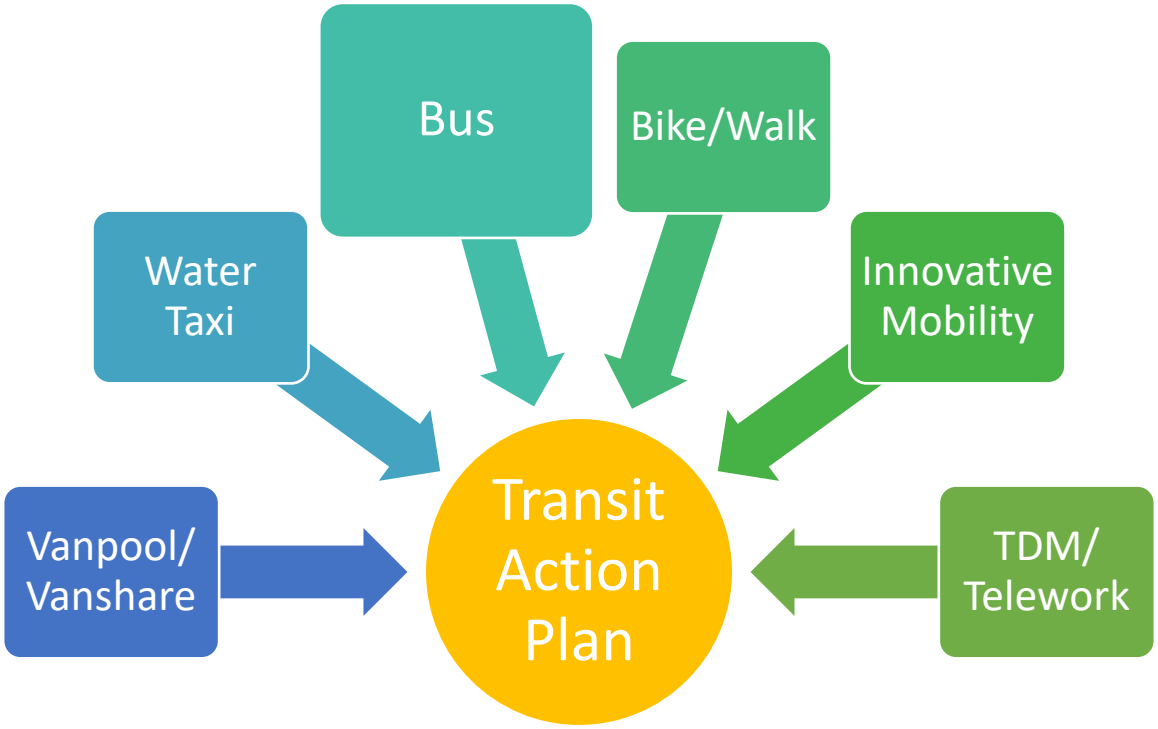
- **Current to September 2020 -** primary focus is on service reliability and accessibility, being responsive to demand while addressing physical distancing capacity limits on buses, Water Taxi, and Vanpools.
- **September 2020 Service Change through September 2021** - This period is inclusive of Metro's planned service changes that are expected to bring back additional West Seattle commuter routes and other service, and the ability to increase Vanpool and Water Taxi service.

Network Scenarios:

- **Scenario 1: Spokane Street Low Bridge is open** to fixed route and other transit solutions
- **Scenario 2: Spokane Street Low Bridge is closed** to fixed route and other transit solutions. This scenario could happen for two reasons:
    a. **Tier 1**- Short term closure due to maintenance work, low bridge malfunction, etc.
    b. **Tier 2**- Long term closure due to a West Seattle High Bridge instability or collapse, including "fall area" evacuation.

Transit Action Plan

Metro's West Seattle Bridge Closure Transit Action Plan reflects consideration of its entire mobility toolkit. In the near-term, mobility solutions must be based on financial realities, which within our current environment are highly resource constrained. Each scenario in the Plan presents options for various modes to keep West Seattle moving.



As part of this Plan, Metro has prepared a customer-focused communications plan to gain back customers (lost due to COVID,) attract new ones, and provide easy-to-use maps and other transit tools for convenient trip planning to greater Seattle and key regional destinations. This King County Metro plan has been developed in close coordination with the City of Seattle and other partners.

Introduction/Problem Statement

On March 23, 2020, the Seattle Department of Transportation (SDOT) closed the West Seattle High Rise Bridge to traffic, restricted the Spokane Street Low Bridge to transit, freight, non-motorized users and emergency vehicles, and installed detour routes for all other vehicles. Currently, the Bridge is closed indefinitely. It will remain closed until at least until 2022 while the City assesses and begins work to shore up cracks and increase structural stability. The Bridge may also be deemed unfixable, and the City announced in late May the creation of a Community Task Force and Technical Advisory Panel to look at bridge replacement options.

A Metro Core team ("WSB Response Team") was formed immediately following notice of the West Seattle Bridge closure to develop a Metro Transit Action Plan (Plan), which would address the Peninsula's mobility needs. The closure affected all WS routes that used the West Seattle Bridge (RapidRide C Line, 21, 21X, 37, 50, 55, 56, 57, 116, 118, 119, 120, 125) plus those routes that use the 1st Avenue South/South Park Bridges (60, 113, 121, 122, 123, 131, 132) which will see extremely congested conditions once traffic approaches pre-COVID levels.

The primary issue with the High Rise Bridge closure is a dramatic loss of vehicle throughput capacity (primarily general purpose traffic) into and out of the West Seattle Peninsula. On a typical day, over 80,000 vehicles (private vehicles, transit, freight, emergency, etc.) traveled across the High Rise Bridge. Approximately 900 of those trips were bus trips, which carried 19,000 riders to and from greater downtown and SODO. With the High Rise Bridge being the City's busiest single arterial combined with just one major pathway into/out of West Seattle (i.e. 1st Avenue South Bridge) for general purpose traffic (Spokane Street Low Bridge is reserved for emergency, transit and freight during daytime hours) the current roadway network cannot handle the pre-COVID baseline of trip making to and from West Seattle.

While Metro's primary mobility solutions (bus, Water Taxi, Vanpool) are the ideal modes to move residents/workers to key destinations in downtown/SODO, as well as to major transit hubs and high frequency intra-county routes to other regional destinations, the COVID pandemic has thrown a wrench into these plans for the time being; physical distancing requirements severely limit currently allowable bus, Water Taxi, and Vanpool capacities. Table 1 illustrates the wide range of allowable passenger loads based on different capacity scenarios.

Table 1. Fixed Route, Water Taxi, and Vanpool Capacity Scenarios

Capacity Scenario (Passengers)	35-foot coach	40-foot coach	60-foot coach	Water Taxi	Vanpool
COVID (limited seating)	12	12	18	86	2
Fully seated (all seats)	27	37	48-58	139	7*
Crowded (all seats + standing)	37	51	83	278	7* (no standees)

*12 & 15 passenger vans also available

Purpose of Plan

This Plan is inclusive of two horizon periods that describe Metro's mobility solutions for those traveling to and from West Seattle:

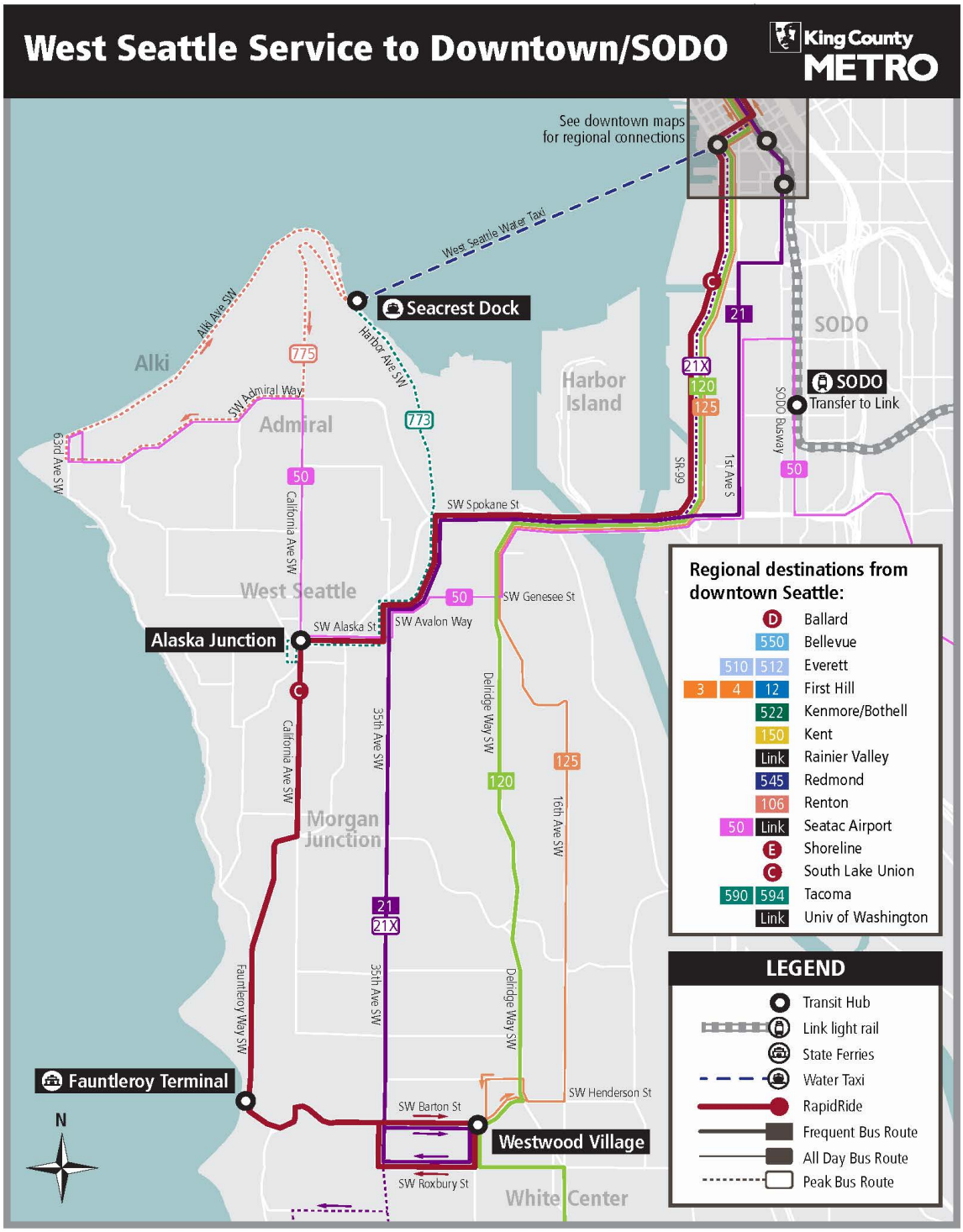
1. **Current to September 2020 -** primary focus is on service reliability and accessibility, and still being responsive to demand while addressing physical distancing capacity limits on buses, Water Taxi, and Vanpools. Figure 1 illustrates the current West Seattle service serving downtown/SODO for routes that use the Spokane Street Bridge (formerly West Seattle Bridge)
2. **September 2020 Service Change through September 2021** - This period is inclusive of Metro's planned service changes that are expected to bring back additional West Seattle commuter routes and enable an increase to Vanpool and Water Taxi service. (See details in Mobility Action Plan section below.) Such changes will meet the increased demand for service that is expected as residents begin to return to work and resume normal activities. This period assumes residents are returning to work and increasing congestion; and that attitudes toward transit continue to trend positive, attracting lost customers and new ones in search of travel time-competitive and more reliable alternatives to driving

As part of this Plan, Metro has prepared a customer-focused engagement plan to gain back lost customers, attract new ones, and provide easy-to-use maps and other tools to plan convenient trips on transit to greater Seattle and key regional destinations.

This Plan has been closely coordinated with the City and other partners, as well as all affected Metro divisions.

Finally, this Plan is a living document and is subject to change/be updated as conditions change – either societal or financial– during this highly uncertain time.

Figure 1. Current West Seattle Bus and Water Taxi Service to Downtown/SODO as of July 2020



Mobility Planning for 2021 and Beyond

Over the course of 2020, Metro will work with the City of Seattle to identify third party funding for increased service and/or capital facilities to meet current and projected demand. Due to the expiration of the Seattle Transportation Benefit District (STBD) effective January 1, 2021, and significant sales tax revenue declines and farebox losses due to the COVID pandemic, resources available for Metro mobility solutions are very financially constrained. Additional funding would need to come from the City of Seattle or other third party sources to enhance or add services beyond what is contained in this Plan.

As of the time of publication, Metro and the City of Seattle have identified five high-visibility mobility improvements that the two agencies will jointly plan for based on potential availability of third party or other funding. These concepts, including detailed descriptions, annual costs, and transportation benefit will be developed over the course of summer 2020 and would be ready to implement upon a return of demand and identification of funding.

High-Visibility mobility service improvements:

1. Water Taxi service upgrades: up to two boats all-day (peak, off peak, weekend) year round, roughly corresponding to the 5am-9pm daily period when SOVs are not allowed on the low bridge
2. Route 773/775 Water Taxi shuttle improvements: new route(s) and/or substantially increased frequency
3. RapidRide C Line service frequency upgrades: add additional peak and off peak trips
4. All day fixed route service between Admiral and Downtown: such as and all day Route 56, which historically provided this all-day service until 2012)
5. Route 50 service frequency upgrades: add additional peak and off peak trips as far east as Sodo Station

Goals & Objectives

The goal of this Plan is to address the mobility needs of West Seattle residents through non-private vehicle modes that are under Metro's control, including fixed route (Metro Bus, RapidRide, and Water Taxi Shuttle), Water Taxi, Vanpool, non-motorized, and other innovative shared-ride solutions. Within Metro's financially constrained budget, Metro will strive to offer the best network and mobility solutions that meet the greatest percentage of travel needs in affected corridors.

Specific objectives include:

- Between West Seattle and downtown Seattle/SODO, provide fast, reliable, comfortable mobility options (bus and Water Taxi) including convenient transfers to intracity and regional destinations that are travel time competitive with (or better than) driving alone
- Offer non-bus mobility solutions (such as Vanpool, shared employer shuttles) to destinations not well served by traditional transit
- Ensure trip-making by transit within West Seattle is comfortable, reliable, and continues to serve key destinations and make key connections

Hierarchy of West Seattle customer focus priorities:

1. Meeting the needs of Metro's current customer base (those most reliant on transit and others who have chosen to continue to ride)
2. Gaining back lost customers as activities and work patterns rebound from COVID
3. Attracting new customers who previously drove with more convenient, reliable, and time-competitive mobility services

Should funding become available, Metro and the City of Seattle would engage in a transparent process to determine the best use of those funds to address demand/supply issues, as well as looking to fill key mobility needs currently not served by the fixed route system or Water Taxi.

Challenges/Opportunities

The West Seattle Bridge closure presents Metro with a number of opportunities and challenges to meet the transit needs of West Seattle residents. The COVID pandemic has further complicated the planning process due to unprecedented uncertainty regarding transit capacity, travel demand patterns, and funding levels.

1. Service cuts due to reduced funding affect capacity and customer experience
2. High level of uncertainty surrounding COVID, economic recovery, physical distancing, new outbreaks, and other factors affecting:
    a. Timetable for reducing social distancing requirements
    b. Customer attitudes to riding transit/crowding
3. Post-COVID baseline telecommuting
    a. Telecommuting is more likely to replace transit trips than it is to replace car trips
4. Traffic congestion/bottlenecks
    a. Responsive to delays with new speed and reliability improvements to be implemented in partnership with SDOT
5. Introduction of a vaccine could result in more of a "flip of the switch" with regards to returning to normal, though telework will have likely become more normalized, thus affecting the former peak commute demand profile
6. Supplemental service additions provide the ability to respond in real time to customer demands
7. Equity and social justice concerns regarding an increase of West Seattle service at the expense of other county needs

Travel Markets

Outside of intra-peninsula travel, the West Seattle transit market has been heavily focused on the commute market to/from the CBD and SODO. Transit has been the preferred solution for many West Seattle travelers to reach greater downtown, SODO, and South Lake Union as final destinations, or as a transfer location to access any number of key intracity and regional destinations (e.g. the University District and University of Washington, First Hill, Capitol Hill, Mt. Baker, Bellevue, etc.).

Figure 2 & Figure 3 illustrate intensity of boardings and alightings in West Seattle and downtown/SODO through a heat map visualization. While this information confirms pre-existing planning knowledge, it also highlights the significant concentration of West Seattle ridership traveling to the downtown core and SODO, underscoring the importance of the existing Metro Bus and RapidRide network to serve

current customers, gain back lost customers, and attract new ones whose destinations are easily reached via a one or two seat ride.

Figure 2. Ridership Density – Daily Boardings in West Seattle and alightings in downtown/SODO

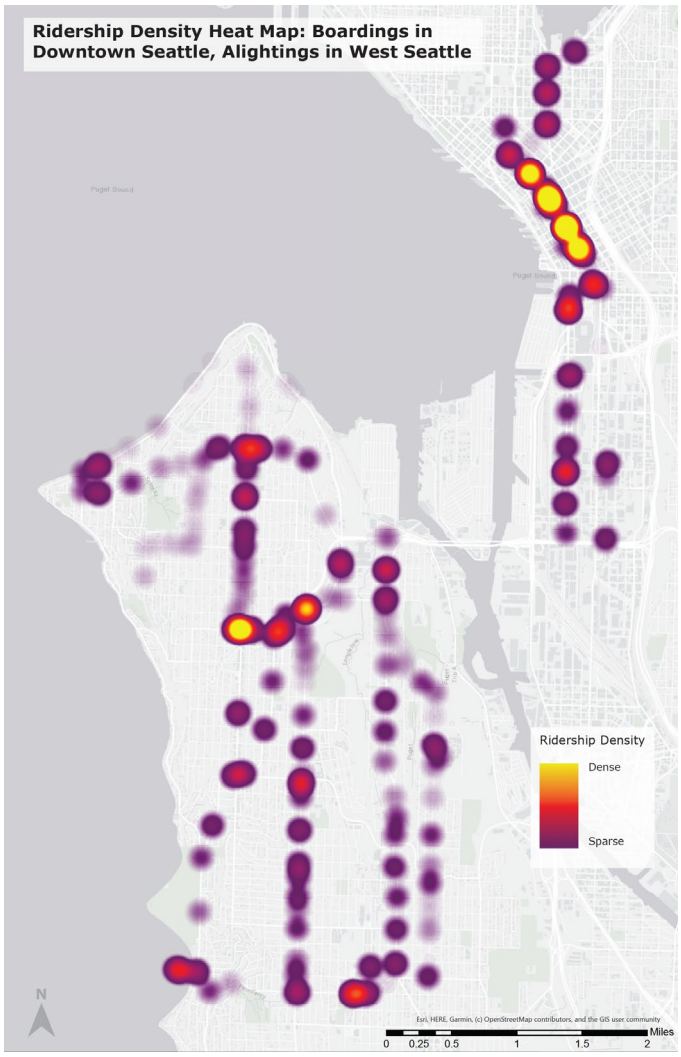
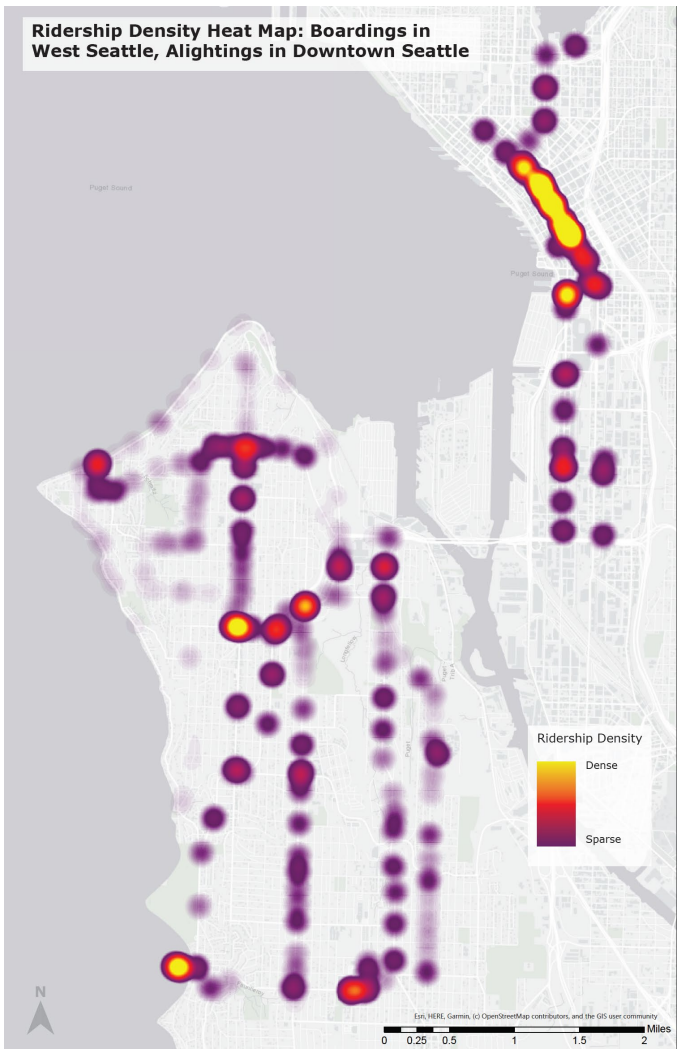


Figure 3. Ridership Density – Daily Boardings in downtown/SODO and alightings in West Seattle



Teralytics (cell phone O/D)

Through cellphone analysis of West Seattle origin/destination (O/D) patterns, conducted by Teralytics during the a.m. commute period (defined as 5-9 a.m.), the data clearly shows that the strongest travel demand flows between West Seattle markets, the CBD, and SODO, with lesser (but still notable) demand to South Lake Union, SeaTac, and Southcenter. The following figures (Figure 4 to Figure 19) use line thickness to represent the highest demand flows. These flows are shown at the Census Tract level.

Figure 4. AM Peak Trips to/from Census Tract 53033009900

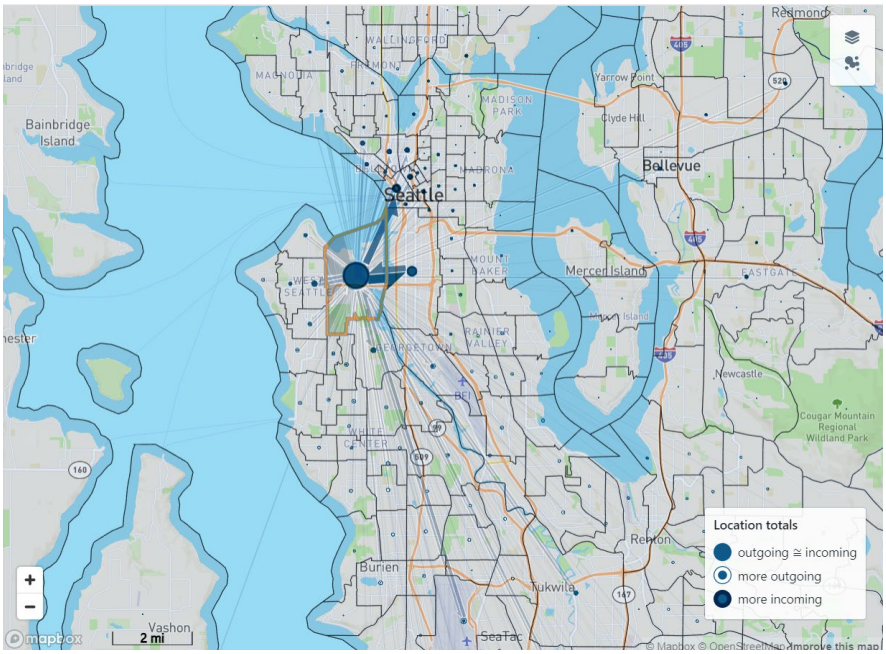


Figure 5. AM Peak Trips to/from Census Tract 53033009600

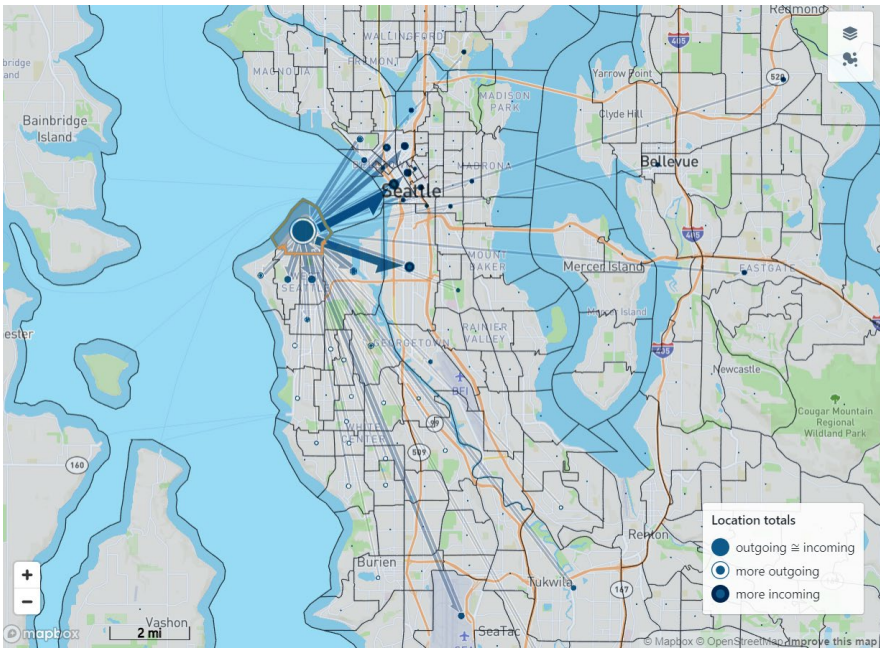


Figure 6. AM Peak Trips to/from Census Tract 53033009701

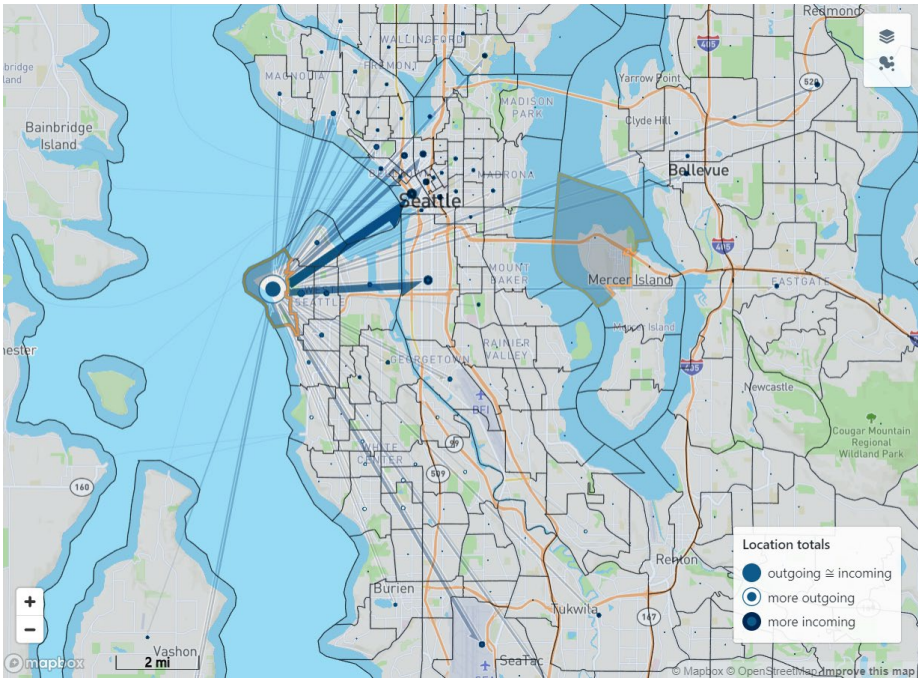


Figure 7. AM Peak Trips to/from Census Tract 53033009702

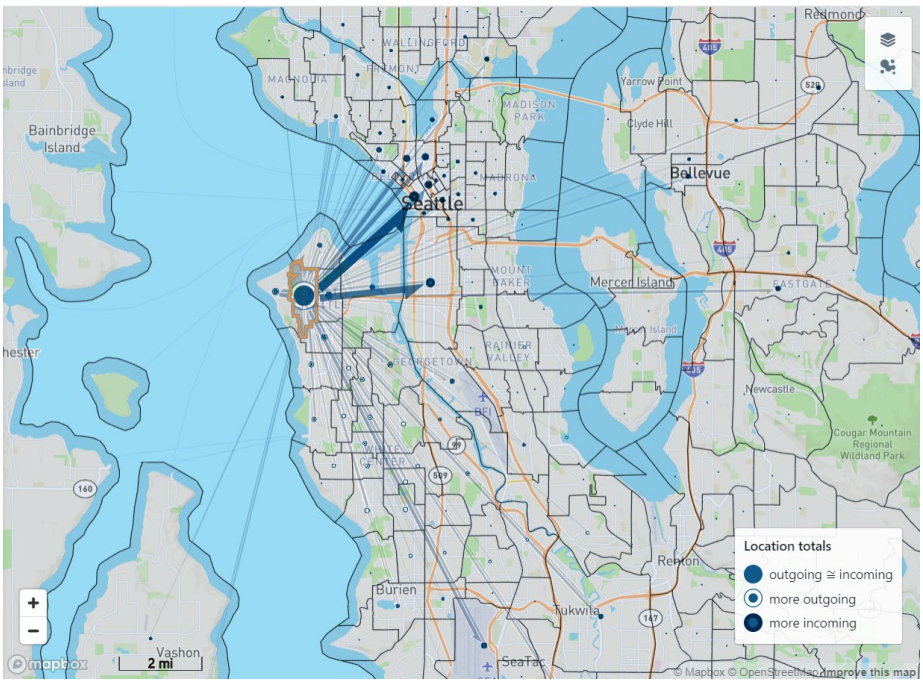


Figure 8. AM Peak Trips to/from Census Tract 53033009800

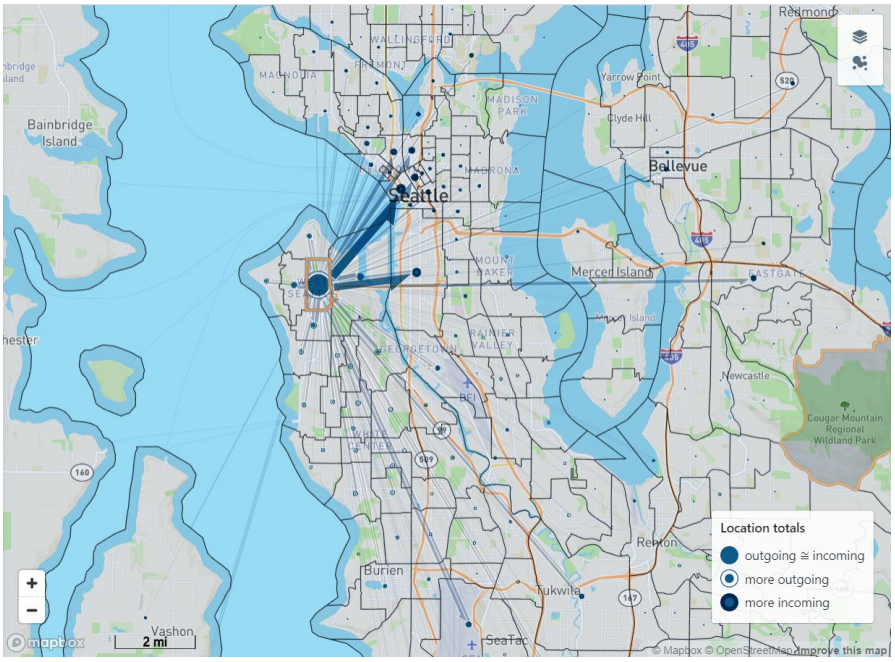


Figure 9. AM Peak Trips to/from Census Tract 53033010500

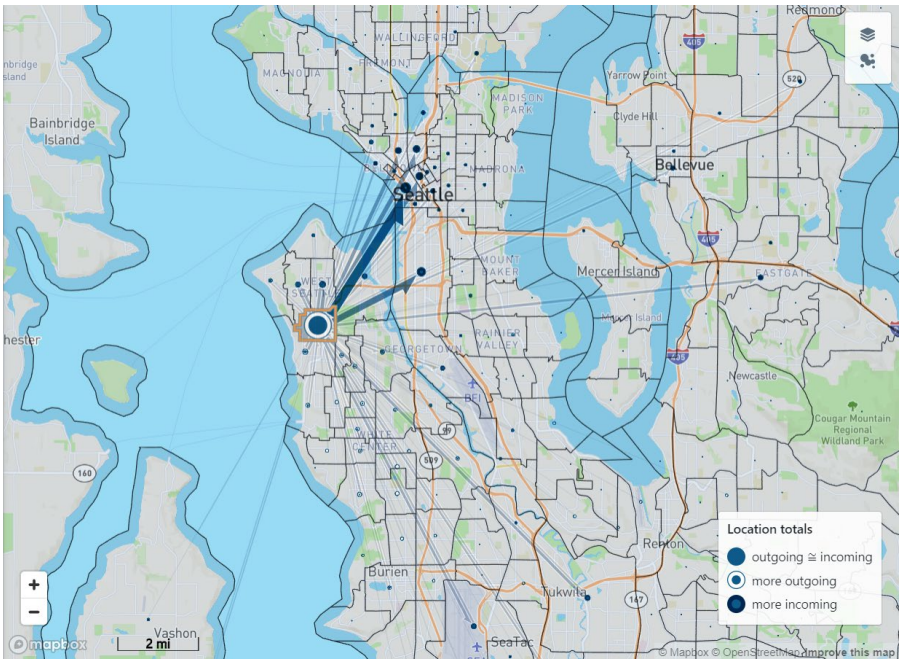


Figure 10. AM Peak Trips to/from Census Tract 53033010600

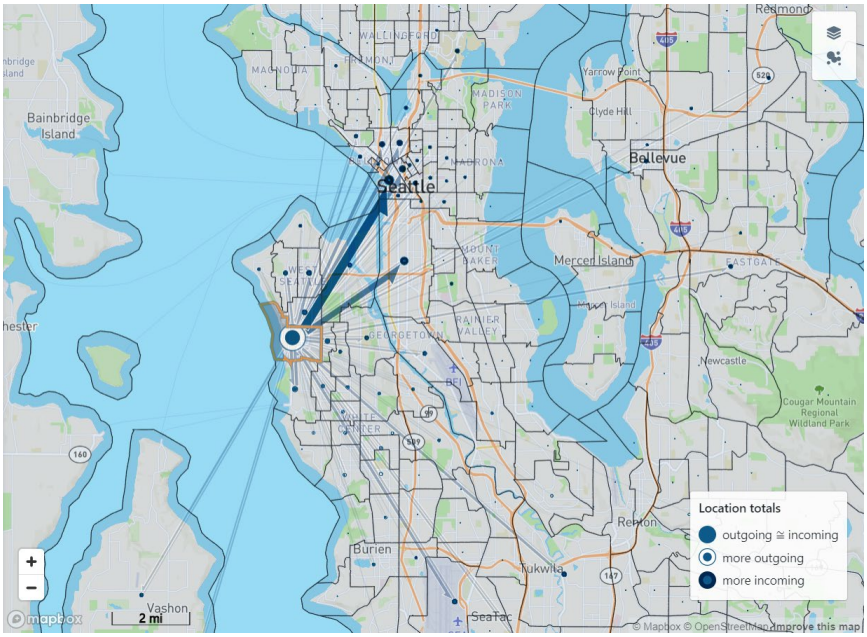


Figure 11. AM Peak Trips to/from Census Tract 53033010702

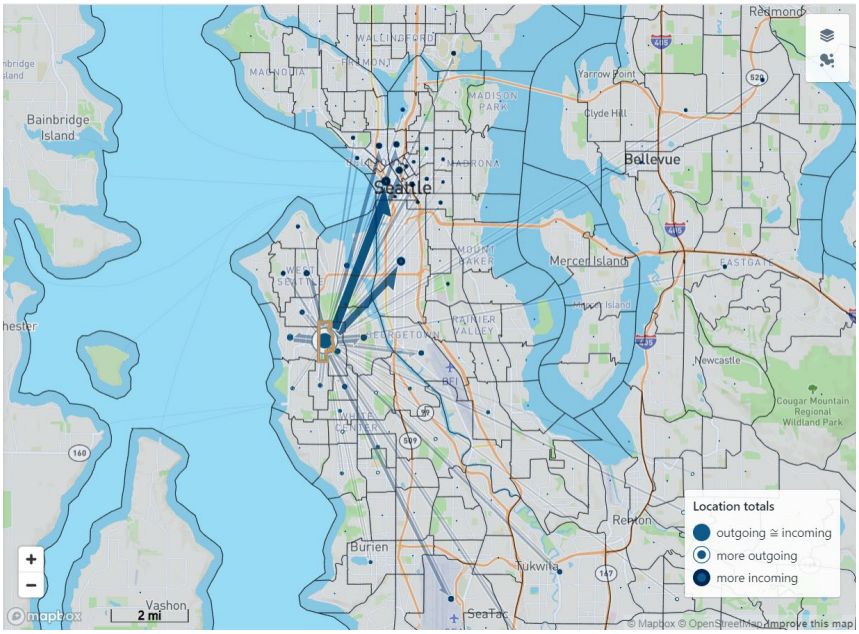


Figure 12. AM Peak Trips to/from Census Tract 53033010701

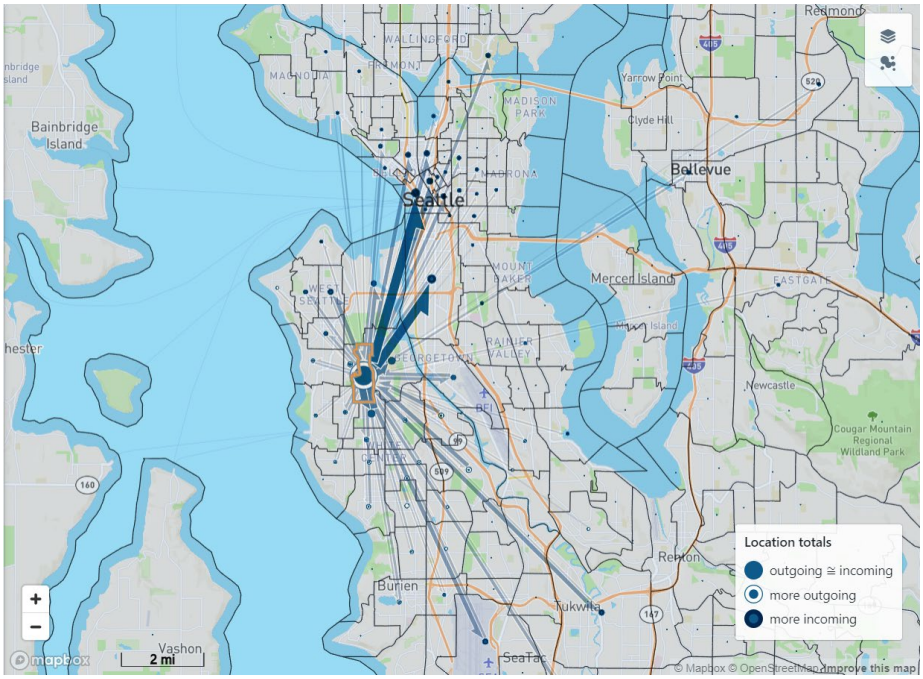


Figure 13. AM Peak Trips to/from Census Tract 53033010800

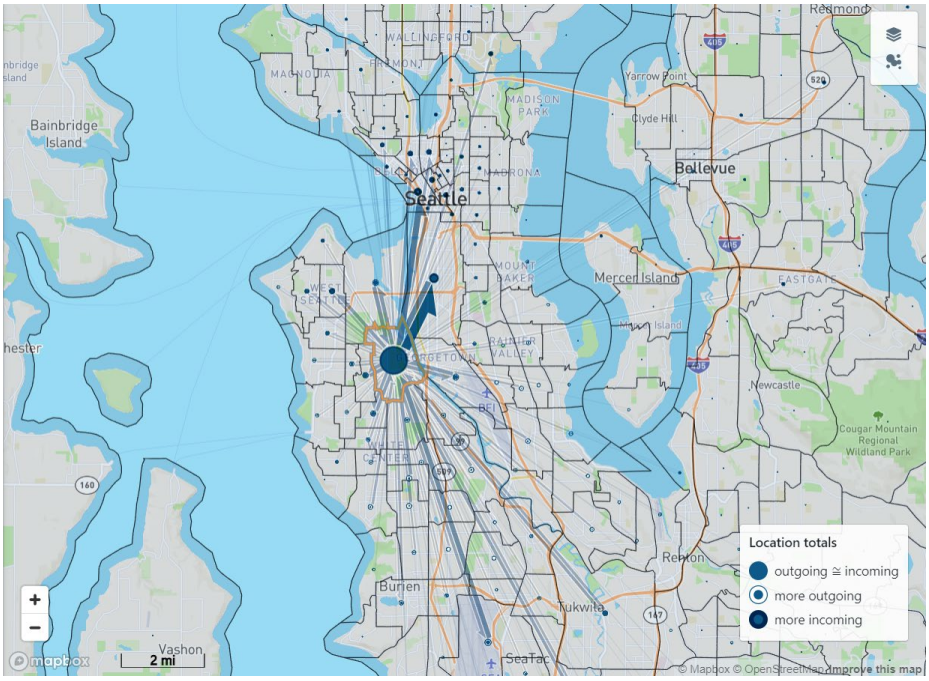


Figure 14. AM Peak Trips to/from Census Tract 53033011200

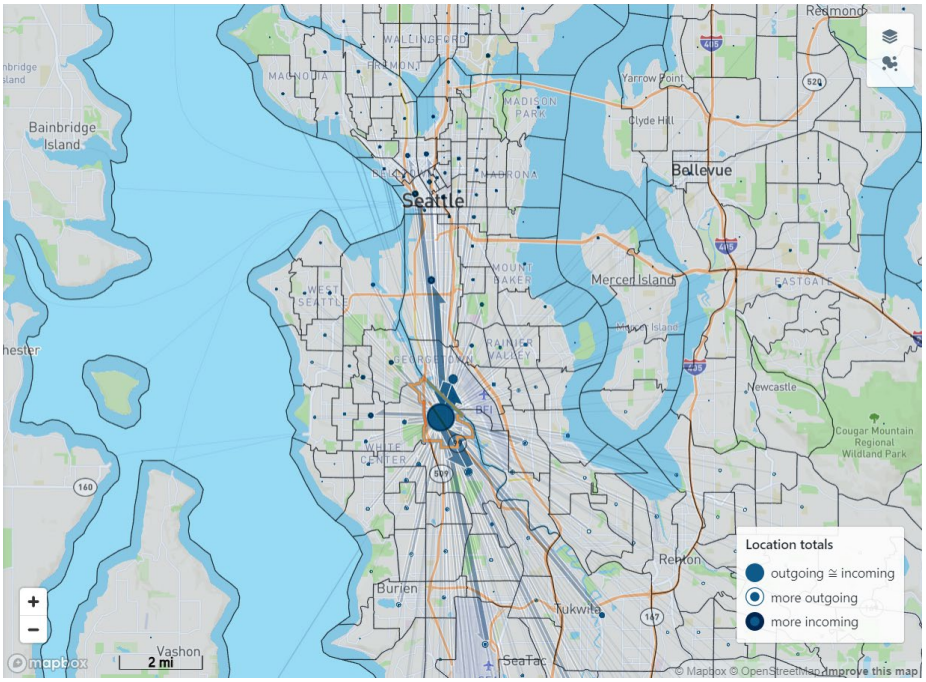


Figure 15. AM Peak Trips to/from Census Tract 53033011300

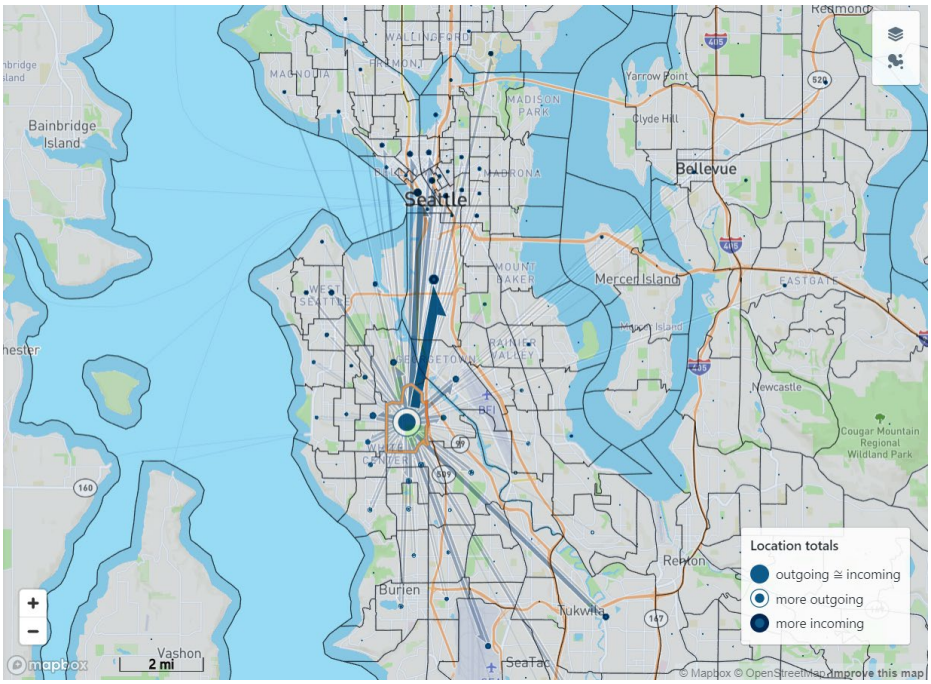


Figure 16. AM Peak Trips to/from Census Tract 53033011401

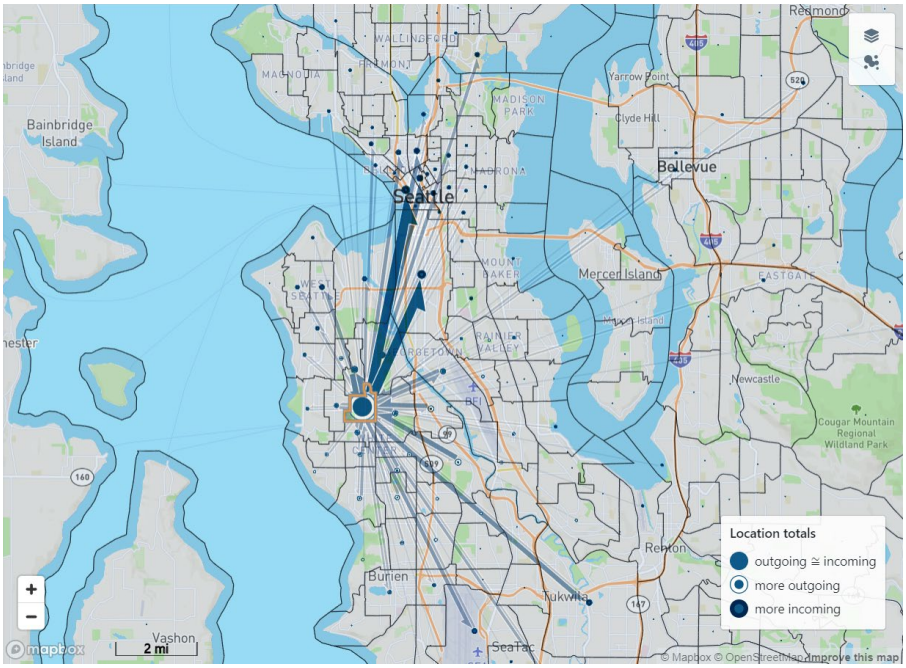


Figure 17. AM Peak Trips to/from Census Tract 53033011402

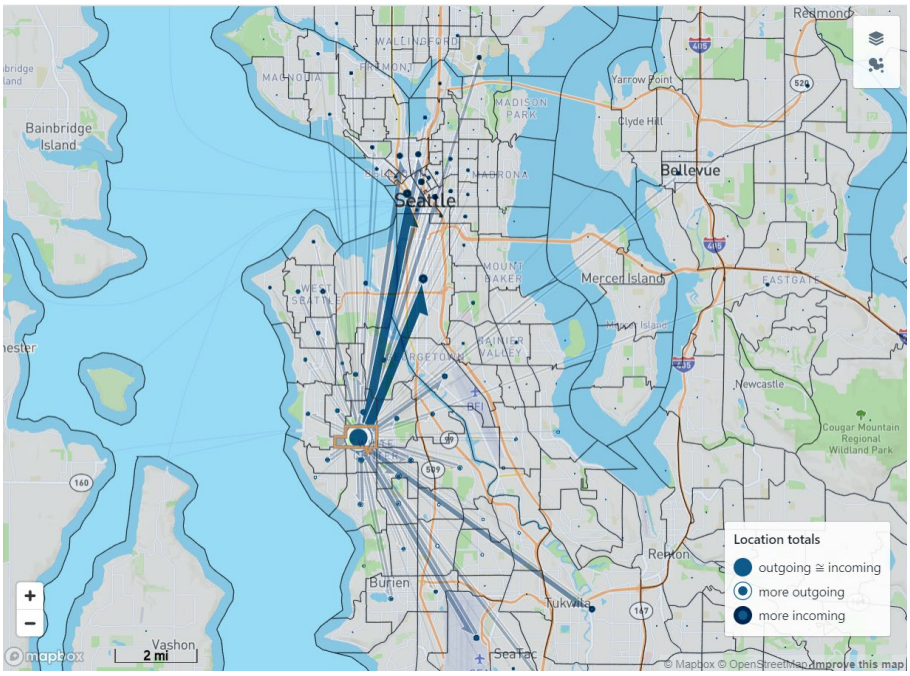


Figure 18. AM Peak Trips to/from Census Tract 53033011500

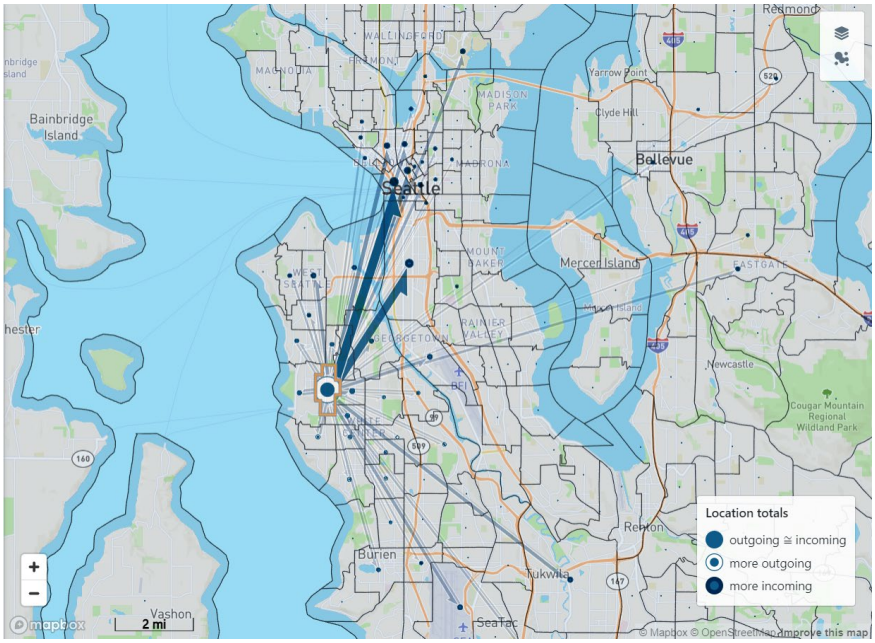
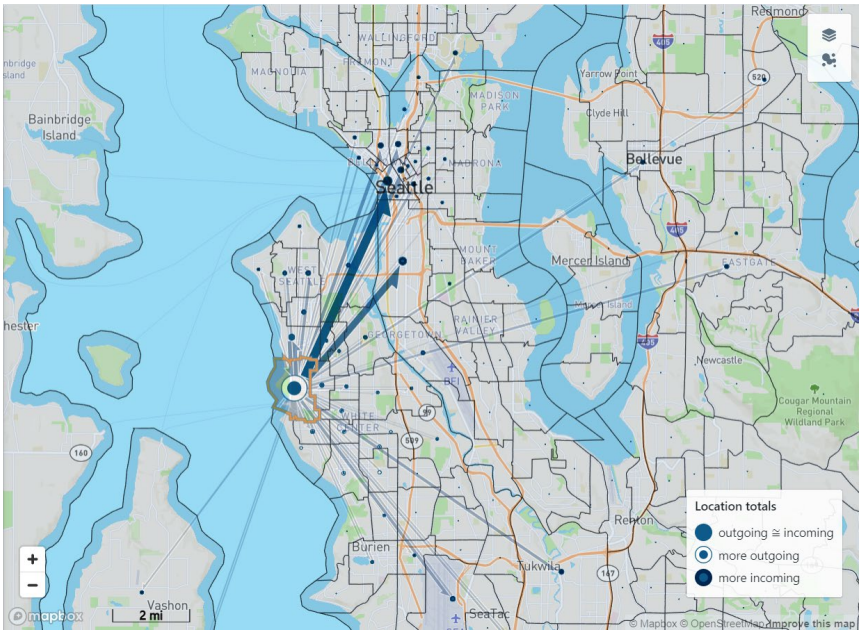


Figure 19. AM Peak Trips to/from Census Tract 53033011600



Data Analytics

The Response Team commissioned development of a performance monitoring dashboard (utilizing Microsoft Power BI) specifically to aid in West Seattle Bridge response planning. Route level ridership and bridge screenline load trends (i.e. bus occupancy crossing the Duwamish River to/from West Seattle) help us understand when demand is increasing and additional capacity is needed. Travel time analyses of running times between West Seattle and downtown/SODO help us understand reliability and travel time variability over the course of the day.

Once traffic starts to return to pre-COVID levels, the ability to analyze travel time reliability by segment by time of day will help Metro and SDOT identify where transit priority improvements are needed to keep buses moving and on time. Finally, this tool assesses bridge openings and their associated delay.

Partner Agency Coordination

Since bridge closure, SDOT began hosting interagency coordination calls – first bi-weekly, then weekly – with representatives from SDOT, the Port of Seattle, WSDOT, WSF, ST, SFD, SPD, USCG, and Metro to share information and coordinate on key issues and upcoming SDOT/WSDOT work that could affect other partners. In addition, an emergency planning task force was set up to host a series of meetings on the High Bridge collapse scenario, including notification and evacuation plans.

Following these initial interagency meeting series, SDOT also set up an agency coordination meeting structure similar to that which earlier had enabled successful Alaskan Way Viaduct (AWV) replacement. These meetings typically occur bi-weekly, though some are weekly, and include:

- Executive oversight
- Interagency leadership team
- Traffic & Operations
- Communications group
- Performance monitoring
- Marine Operations/Waterborne
- Service Development with SDOT Transit & Mobility

Planning Scenarios

Within this plan, Metro is planning for two network scenarios over two horizon periods. The network planning scenarios hinge on whether the Spokane Street Low Bridge is open and accessible to transit. In terms of horizon periods, this Plan accounts for 1) current operations and service ramp ups through summer 2020 and 2) September 2020 service change through approximately September 2021 (when Metro's next fall service change will occur). This Plan may be updated during the second horizon period due to the current uncertainty surrounding funding and demand. On a systemwide level, Metro is anticipating additional service cuts in March 2021 and September 2021, while the City of Seattle has just announced a Seattle Transit Benefit District replacement which would dedicate resources to transit improvements in West Seattle.

Network Planning Scenarios

2. **Scenario 1: Spokane Street Low Bridge is open** to fixed route and other transit solutions (e.g. Vanpool), providing a reliable, comfortable, and time competitive trip into greater downtown/SODO and other regional locations. This scenario represents current operations.
3. **Scenario 2: Spokane Street Low Bridge is closed** to fixed route and other transit solutions. This scenario could happen for two reasons:
    a. **Tier 1**: Short term closure due to maintenance work, low bridge malfunction, etc. Tier 1 assumes the Chelan 5-way intersection (at the EB Spokane Street Low Bridge approach) and West Marginal Way are open to all traffic. See Tier 1 reroutes below.
    b. **Tier 2**[1]: Long term closure due to a West Seattle High Bridge instability or collapse, including fall area evacuation. Tier 2 assumes access to West Marginal Way is restricted for an indefinite period of time. See Tier 2 reroutes below. Once West Marginal Way is reopened Metro would revert back to Tier 1 reroutes.

Horizon Planning Periods

1. **Current to September 2020:** This period is inclusive of current operations and Metro's June 22 service ramp up (see details in Action Plan Section below). It is presumed to coincide with Phases 1-3 of the State of Washington's 4-Phase reopening plan.
    a. During this period, Metro is assuming that 1) customer demand will continue to be well below baseline, 2) physical distancing combined with other COVID prevention measures will remain in place and 3) prevention measures will limit capacity aboard Metro's mobility services
2. **September 2020 Service Change through September 2021:** This period is inclusive of Metro's planned service change that will bring back additional West Seattle commuter routes, ability to increase Vanpool and Water Taxi service (see details in Action Plan Section below) to meet demand that is assumed to increase as residents begin to return to work and more normal activities. This period also assumes significant service hour cuts across Metro's network, including in West Seattle, compared to service one year prior due to loss of City-specific transit funding (Seattle Transit Benefit District) as well as direct losses to Metro's operating budget resulting from a decrease in fare and sales tax revenues.
    a. During this period, it is currently unknown whether available capacity will be able to meet demand within West Seattle. There are a high number of variables factoring into this equation, most notably physical distancing requirements, but also including customer confidence to return to transit, return to office work versus telecommuting, etc.

Supplemental Service Adds

Leading up to and following the September 2020 service change, Metro will continuously monitor demand, as well as available resources in order to be responsive, within financial and operational constraints, to changing travel patterns and needs of West Seattle residents.

[1] Tier 2 reroutes would be implemented as soon as SDOT emergency operations notified Metro's Transit Control Center and existing traffic within the fall zone was cleared.

Currently Metro monitors passenger loads daily and identifies trends in which routes and trips experience crowding beyond COVID-based thresholds. Overcrowding is tracked using per vehicle-based crowding thresholds for social distancing (e.g. 12 passengers on 40', and 18 passengers on 60' coaches). Service Development and other teams support the effort. Additional trips are then deployed as needed, and as possible within workforce and budget constraints. The typical turnaround is approximately one week, but we have the ability to move faster if needed, and because these added trips are not published publicly, we do not need to add extra time for customer communications.

In general this turnaround time is needed to distinguish between trends and one-off occurrences. We will be further identifying resources available in Metro's upcoming 2021/2022 budget, but do currently have the ability to add service to quickly meet demand.

Metro Service Change Process

Significant changes requiring an ordinance involve significantly longer lead time in order to be approved by King County Council (KCC 28.94.020). Changes requiring an ordinance include creating or deleting routes, changing route numbers, any stop change that moves location by more than ½ mile, and any single or cumulative change that is larger than 25% of the total service hour investment on the route. Permanent administrative changes still require significant lead time, but less than an ordinance.

General timing:

- March Service Change
  - Ordinance – Changes need to be known and vetted by mid-May prior
  - Administrative – Changes need to be known and vetted by end of September prior
- September Service Change
  - Ordinance – Changes need to be known and vetted by mid-December prior
  - Administrative – Changes need to be known and vetted by mid-April prior

Any "new" resources should be planned to fit within those decision timeframes, but the scale of the change would determine what timeline is needed – ordinance versus administrative. Under emergency circumstances, Metro has the ability to respond quickly and implement service changes outside of the standard Council process, until the emergency is over or Council has approved changes by ordinance.

Reroutes for Low Bridge Closures

For Scenario 2, Metro would need to implement either short term (Tier 1) or longer term and more disruptive (Tier 2) reroute scenarios. Metro's System Impacts team is responsible for designing and implementing these short notice/temporary reroutes. Their Tier 1 and Tier 2 plans are summarized below.[2]

[2] Added Resource Needs: All route revisions described herein are implementable with minimal advance notice. Running times and coach requirements under Tier 1 and Tier 2 would vary significantly from normal and are necessarily unknown as are traffic conditions. Extra coaches would be added as needed and as possible. Extra coaches and schedule revisions would be implemented more formally, based on conditions, via biweekly service revision.

Tier 1—Loss of access to the lower bridge, access to surrounding area remains

While this would result in longer travel times for Metro customers, zero existing stops in West Seattle would be closed under this scenario. All routes into downtown Seattle/SODO will follow the posted reroute from the Chelan 5-Way Intersection:

1. Turn onto southbound West Marginal Way
2. Follow interchange onto northbound 1st Avenue South Bridge
3. Depending on the route to proceed onto northbound SR99 or 1st Avenue South
4. Continue regular service route

For buses heading towards West Seattle from southbound 1st Ave South or southbound SR99:

1. Continue southbound on their pathway to East Marginal Way South
2. Continue across the 1st Avenue South Bridge and take interchange to northbound West Marginal Way
3. Continue westbound to Chelan 5-Way intersection
4. Follow posted reroute via Delridge Way or Southwest Spokane Street

Tier 2—Loss of both bridges and surrounding area

This is a much more complex reroute scenario since access to West Marginal Way would be lost, requiring major changes to route structure, including new pathways, and some doubling back of routes to reach the 1st Ave South Bridge. Metro will strive to maintain as many existing stops as possible, though some will be temporarily closed in a Tier 2 reroute scenario. Tier 2 reroutes would be very disruptive to customers and require additional resources from Metro's operating budget. Metro would only employ Tier 2 until West Marginal Way reopens (e.g. 5 days after initial collapse/evacuation) and then transition back to Tier 1. Table 2 summarizes by route the Tier 2 reroutes:

Table 2. Tier 2 Metro Reroutes with High Bridge Collapse/Loss of West Marginal Way

Route	Service Description
C Line	Heading toward downtown will layover at Seacrest Dock. Proceed via California Way SW – California Ave SW – SW Admiral Way to SW Avalon Way, then proceed via "regular route" southbound to Westwood Village, then proceed to SW Roxbury St – 1st Ave South Bridge – E Marginal Way to SR-99 and regular route to CBD/SLU.
21, 21X	Heading toward downtown Seattle will layover near 35th Ave SW & SW Alaska St, serve 35th Ave SW to Westwood Village, continue east via SW Roxbury St to 1st Ave South Bridge, north to 1st Ave South and regular route to CBD.
37*, 55, 56, 57	West Seattle terminals remain as normal. Serve regular route in northern West Seattle, then proceed to 35th Ave SW – SW Roxbury St – 1st Ave South Bridge to regular route to CBD. In outbound direction, Routes 56 and 57 travel north on Delridge Way SW to SW Spokane St to access SW Admiral Way.

Route	Service Description
50	Layover at normal point at Alki. Serve regular route to Delridge Way SW, then proceed south on Delridge Way SW to 35th Ave SW – SW Roxbury St – 1st Ave South Bridge to regular route in SODO and beyond.
116*	Layover at Fauntleroy ferry dock. Proceed north via Fauntleroy Way SW to SW Avalon Way, then via Harbor Ave SW to Seacrest dock. Continue in service via California Way SW – southbound California Ave SW – SW Admiral Way – SW Avalon Way to southbound Fauntleroy Way SW back to Fauntleroy ferry dock.
118X*, 119X*	From Fauntleroy ferry dock, proceed directly via SW Roxbury St to 1st Ave South Bridge and CBD.
120	Towards Downtown: From southern terminal, proceed by regular route to SW Roxbury Street (Riders can transfer at SW Roxbury to a direct route to downtown.) Proceed by regular route to northbound Delridge Way SW, then turn around at Spokane St and return via southbound Delridge Way SW to SW Roxbury St – 1st Ave Bridge – regular route to CBD. Riders can transfer at SW Roxbury Towards Burien: Regular route to SR-99, then continue to 1st Ave South Bridge – SW Roxbury St to SW Roxbury St & 15th Ave SW. Turn to southbound 15th Ave SW and proceed on regular route to Burien. To access Delridge, riders must transfer to inbound 120 or 50.
125	Operate within West Seattle as a shuttle loop from southern terminal at Westwood Village, north via 16th Ave SW to Delridge Way SW & SW Spokane St, then turn around via Spokane St and proceed south via Delridge Way SW to terminal at Westwood Village. Routes heading from downtown Seattle to West Seattle will travel the same pathway in reverse, except as noted above. These reroutes may be updated in the future to correspond with Service Planning concept updates.

** Routes will remain suspended with the September 2020 Service Change*

Action Plan

The Plan comprises Metro's entire mobility toolkit. Solutions must be based on financial realities, which within the current pandemic environment are highly resource constrained. Metro's action plan includes the following modes to keep West Seattleites moving:

- **Bus** – Inclusive of Metro all-day, peak-only, Water Taxi Shuttle, and RapidRide C Line bus service
    - This is the primary mode for residents from throughout the West Seattle Peninsula to make all-day connections to downtown/SODO for work, school, shopping, entertainment, etc., usually with a one seat ride. All fixed route service connects conveniently to intracity and regional destinations via an additional transit trip.
    - Fixed route also provides intra-West Seattle mobility to major destinations, as well as to the south to places such as Burien, South Center, and SeaTac.
- **Water Taxi** – Inclusive of Metro's service between northeast West Seattle (Seacrest Park) and Pier 50 in Pioneer Square (downtown), as well as Vashon Island considerations

    - Accessed via park and ride, Metro shuttles, or non-motorized means, the West Seattle Water Taxi provides service to Pier 50 in Pioneer Square. Due to Seacrest Dock's location on the northeast side of the peninsula, it is an attractive mode for commuters who live in the Admiral, Alki, and other neighborhoods in the north part of the Peninsula. Pier 50 also provides numerous intracity and regional destinations via short walk and/or an additional transit trip.
- **VanPool/Vanshare** – Inclusive of Metro's vanpool and vanshare programs
    - This program is ideally suited for employees traveling to destinations not easily served by bus
- **Bike/Walk** – Metro is highly supportive of biking and walking for intra-West Seattle and cross Duwamish travel, and encourages SDOT to accelerate delivery of all-ages-and-abilities, low street bike infrastructure in West Seattle, SODO, South Park and Georgetown to help achieve mode goals.
- **Innovative Mobility –** On demand shared rides (e.g. privately provided Uber/Lyft), shared employer shuttles, and other mobility solutions that don't fit into the other buckets above.

Each mode and current planned service, service flexibility to meet demand as it changes, and planned September service changes are explained in detail below.

Fixed Route (Metro Bus, RapidRide) – Scenario 1

Current West Seattle reroutes in place use the Spokane Street Low Bridge (Scenario 1). Post-COVID social distancing requirement reductions, traffic increases, returning ridership demand, and transit vehicle volumes will significantly impact the capacity, speed, and reliability of transit trips. Metro's goal is to develop range of mobility options for fast, reliable service between West Seattle and downtown that is travel time competitive (or better) than driving.

Current to September 2020 Horizon Period

Table 3 highlights Metro's fixed route service plan through the September 2020 service change. Fixed route service includes every All-Day route operating between West Seattle and downtown/SODO. Peak commuter routes serving the Admiral area (55, 56, & 57) will not be resumed until the September 2020 service change.

Table 3. Current Service Plan (June 22 to September 20, 2020)

Route	Service Description
C Line	Current reroute (I.e. Spokane Street Bridge pathway, no other routing or stop changes in West Seattle/downtown)
21	Current reroute
21X	Current reroute (Resumed June 22)
50	Current reroute
120	Current reroute
125	Current reroute (Resumed June 22)
773/775 Shuttles	Current routing (Resumed June 22)
Water Taxi	Regular commute service (aka winter schedule 6 RT peak am/pm)
22, 37, 55, 56, 57, 113, 116, 118X, 119X, 121, 122, 123	Maintain route suspension
60, 128, 131, 132	Current routing (Monitor for potential reroute/transit priority need)

September 2020 to September 2021 Horizon Period

Table 4 highlights Metro's fixed route service plan beginning with the September 2020 service change, on Monday, September 21. Most all-day route in West Seattle will operate without temporary reductions or suspensions. Due to reduced funding from the Seattle Transportation Benefit District (STBD), many routes will operate at reduced service levels compared to pre-COVID levels.

Peak period service that is currently suspended will resume at reduced service levels due to reduced STBD funding on the following routes:

- Admiral, Alaska Junction, Genesee Hill, Alki (55, 56, 57)

Service suspensions will continue on several West Seattle routes:

- Peak-only downtown-bound Vashon and Fauntleroy service (116, 118 Express, 119 Express)
- Peak-only Alki bus service (37)
- Route 22 service in Arbor Heights, Gatewood, and Alaska Junction (intra-West Seattle)

Additional supplemental service will be available to deploy and quickly respond to crowding issues on West Seattle service as it arises.

Table 4. September 2020 Service Plan

Route	Service Description
C Line	Current reroute *(I.e. Spokane Street Bridge pathway, no other routing or stop changes in West Seattle/downtown)*
21, 21X	Current reroute
22	Suspend/delete as part of systemwide reductions
37	Suspend/delete as part of systemwide reductions. Existing Water Taxi shuttle 775 provides service between Alki and Seacrest Dock. Passenger crowding will be monitored to identify need for increased service frequency.
50	Current reroute Lander St bridge opening, likely fall 2020, will provide a faster, more direct connection to SODO Link Station via Lander Street rather than Holgate Street
55	Current reroute (resume service)
56	Current reroute (resume service)
57	Current reroute (resume service)
60	Monitor for transit priority need
113	Suspend/delete as part of systemwide reductions
116	Suspend/delete as part of systemwide reductions, with the C Line providing connections between Fauntleroy and Downtown Seattle. Monitor C Line capacity and travel times to assess need for express service on this connection.
118X, 119X	Suspend/delete as part of systemwide reductions, with the revised C Line providing connections between Fauntleroy and Downtown Seattle. Monitor C Line capacity and travel times to assess need for express service on this connection.
120	Current reroute
121, 122, 123	Suspend/delete as part of systemwide reductions
125	Current reroute
131, 132	Monitor for transit priority need
773	Increase shuttle frequency as necessary to meet crowding needs, as funding allows.
775	Increase frequency as necessary to meet crowding needs, as funding allows.

Fixed Route (Metro Bus, RapidRide) – Scenario 2

While High Bridge instability or collapse is an unlikely scenario, it remains a possibility until stabilization work can be completed in summer 2020. This scenario assumes the loss of the Spokane Street Low Bridge requiring all vehicle trips, bus included, to funnel through the 1st Ave South Bridge to reach downtown/SODO. If this scenario was to occur, it would generate demand far above supply. Travel time and reliability of the West Seattle Bridge routes (C Line, 21, 21X, 50, 55, 56, 57, 120, 125) as well as those routes that use the 1st Ave S./South Park Bridges (60, 131, 132) would be significantly affected.

As a result, for residents of the northern part of the West Seattle peninsula, Water Taxi would become an increasingly attractive mode – the Scenario 2 fixed route plan reflects a proposed restructure that

moves many more customers to Seacrest for a water crossing into downtown. Table 5 presents the concept plan for Scenario 2.

Table 5. Scenario 2 Service Plan (Long Term Closure of Spokane Street Low Bridge)

Route	Service Description
C Line	Reroute to 1st Ave Bridge from Westwood Village via SW Roxbury Street Reorient West Seattle terminal to turnaround at 35th St SW and SW Avalon Way. Transfers to Seacrest Dock available at 35th and Avalon, via Routes 21 and 773. Layover would need to be secured for the West Seattle terminal (potential location on Oregon Street).
21	Reorient Route 21 to operate southbound on 35th Ave inbound to DT Seattle, accessing 1st Ave South Bridge via SW Roxbury Street West Seattle terminal at Seacrest Dock (pending confirmation of layover and turnaround, see notes at end of document). If Seacrest terminal is not a viable option, layover at Alaska Junction may be available (Oregon St)
21X	Reinvest resources into Routes 21 Local.
22	Suspend/delete as part of systemwide reductions
37	Suspend/delete as part of systemwide reductions. Increase frequency on existing Water Taxi shuttle 775 service between Alki and Seacrest Dock, as funding allows. Passenger crowding will be monitored to identify need for increased service frequency.
50	Eliminate western portion of the Route 50. Eastern portion would truncate at SODO, and would evaluate extension to the Alaskan Way waterfront if additional resources are available. Rationale behind this change is that Route 55 would provide faster connectivity to downtown during the midday, serves the highest density areas of north West Seattle, provides transfer opportunities (C Line, 21) to frequent West Seattle Service, and provides additional capacity for the connection between Alaska Junction and downtown. Connections to SODO would be made by Route 56 or via transfer to Route 21. Connections to Link would be made via Route 55, 56, or C Line at Westlake or University Street Stations.
55	Extend Route 55 span to all-day, reroute on E Marginal Way to access 1st Ave South Bridge.
56	Reorient to SODO link station, reroute on E Marginal Way to access 1st Ave South Bridge.
57	Suspend Route 57. Replace with new peak-only shuttle Route 757, reoriented to Seacrest Dock.
60	Transit speed and reliability improvements may be needed if South Park bridge crossing is impacted significantly by additional vehicle volumes.
113, 121, 122, 123	Suspend/delete as part of systemwide reductions

Route	Service Description
116	Suspend/delete as part of systemwide reductions, with the revised C Line providing connections between Fauntleroy and Downtown Seattle. Monitor revised C Line capacity.
118X, 119X	Suspend/delete as part of systemwide reductions, with the revised C Line providing connections between Fauntleroy and Downtown Seattle. Monitor revised C Line capacity.
120	Reroute Route 120 to 1st Ave South bridge via SW Orchard St/Dumas Way SW/SW Holden inbound to DT Seattle. Delridge Way SW north of SW Orchard St would be no longer be served by Route 120. Reroute captures 80% of normal ridership. New all-day, 2-way shuttle 725 would operate connecting North Delridge (between SW Andover St and SW Orchard St) to Seacrest dock. South end of shuttle routing would operate in a large loop on Delridge Way SW and 16th Ave SW, via 23rd/21st/Dawson at the north, and Orchard/Dumas/Austin to the south.
125	Route would be suspended. New all-day, 2-way shuttle 725 would operate connecting South Seattle College and 16th Ave SW (between Delridge Way and SW Austin St) to Seacrest dock. South end of shuttle routing would operate in a large loop on Delridge Way SW and 16th Ave SW, via 23rd/21st/Dawson at the north, and Orchard/Dumas/Austin to the south. South of SW Austin Street, service would be provided by Route 128 on 16th Ave SW. Connection between Westwood Village and South Seattle College would be via transfer from 120 to 725.
128	Monitor for transit priority need
131, 132	Monitor for transit priority need
725	New all-day, 2-way shuttle 725 would operate connecting North Delridge (between SW Andover St and SW Orchard St) to Seacrest dock. South end of shuttle routing would operate in a large loop on Delridge Way SW and 16th Ave SW, via 23rd/21st/Dawson at the north, and Orchard/Dumas/Austin to the south. Connections to routes 120 and 128 at south end.
757	Replace with new peak-only shuttle Route 757, reoriented to Seacrest Dock. Pathway would continue north on California Way from Admiral/California intersection, to Seacrest Dock.
773	Increase shuttle frequency (inclusive of Scenario 1 changes), as funding allows. If Route 21 is unable to terminate near Seacrest Dock, additional frequency may increase travel demand for Route 773.
775	Increase frequency as necessary to meet crowding needs, as funding allows.

March and September 2021 Service Cuts

Metro is planning for further service reductions to occur in 2021. As a result of reduced revenue for transit due to economic conditions and the December 31, 2020 expiration of current Seattle

Transportation Benefit District funding levels, further trip and thus capacity reductions are likely to occur.

Transit Priority Improvements

SDOT has implemented a number of improvements to facilitate reliable transit pathways during bridge closure:

1. Allowed transit to use the 1st Ave South on-ramp (bypassing lower Spokane Street/BNSF tracks(Metro request/SDOT implemented)
2. Re-channelized and retimed the Chelan 5-way intersection @ EB entrance to Spokane Street Bridge
3. Created transit only lane on the Spokane Street Bridge approach (EB) @ Chelan 5-way intersection
4. Re-channelized Delridge to continue TO lane north of Andover to low bridge slip lane
5. Uniformed police are directing traffic 6-9a.m., 4-6p.m., ticket enforcement is also occurring 9a.m.-4p.m.

To continue to achieve fast, reliable service between West Seattle and downtown/SODO, Metro will monitor segment delay via our data analytics tool (Power BI), field work, and operator/customer reports to identify additional transit priority improvements beneficial to fixed route service and vanpools. For example, one concept improvement already identified by the task force is a continuous eastbound curb-running transit-only lane from the Spokane Street slip ramp (West Seattle Bridge entrance) to the Chelan 5-way intersection (which would improve speed and reliability for C Line, 21, 21X, 55, 56, and 57).

Customer Bus Stop Needs

Due to the nature of the reroute to the Spokane Street Low Bridge, no existing stops within West Seattle or downtown/SODO have been temporarily suspended. To the customer traveling intra-peninsula or to/from downtown/SODO the route structure remains essentially unchanged. The only change the customer experiences is the pathway crossing the Duwamish.

Harbor Island

Metro has coordinated with Port of Seattle and Northwest Seaport Alliance to add long term temporary bus stops on Harbor Island. Specifically, in late June, Metro installed a new stop pair on SW Spokane St in the vicinity of SW Manning Street. These stops provide reasonable walking access to Marina employers as well as industrial employers to the immediate north. Metro expects to activate these stops in September, 2021, in conjunction with other restored services as part of the fall service change. If demand warrants, based on on-going conversations with Port of Seattle and Northwest Seaport Alliance, these stops could be activated sooner.

Pioneer Square (Alaskan Way/S Jackson Street)

The future stop pair in the vicinity of Alaskan Way and S. King Streets is planned for 2021 opening for many West Seattle routes, including the C Line in order to facilitate better access to Pioneer Square stadiums, employment, housing, restaurants, bars, shopping, and other entertainment. Metro should continue to work with SDOT and WSDOT in a strong effort to fast-track this project and open it as soon as is feasible to help mitigate the loss of the West Seattle Bridge.

Park and Ride Enhancements

Metro currently operates two permanent and two leased park and ride lots within West Seattle. Permanent lots are available for use by travelers 24 hours/day. Leased lots are available Monday-Friday during business hours. In all, these lots provide 158 park & ride spaces. The lots and locations are:

- Southwest Spokane Street Park & Ride – 25 spaces (permanent lot)
- Olson Place & Myers Way Park & Ride – 100 spaces (permanent lot)
- Sonrise Evangelical Free Church – 10 spaces (leased lot)
- Holy Family Church – 23 spaces (leased lot)

Steps could be taken to expand park & ride capacity serving West Seattle transit routes by:

- **Reconfiguring existing lots to yield more spaces.** In particular, additional parking spaces could be striped at the Spokane Street park & ride
- **Leasing additional parking capacity, concentrated around major bus transfer points.** An initial analysis identified up to 93 locations throughout West Seattle that could be appropriate for leasing, including lots serving commercial properties, churches, public parks and residential complexes. This analysis identified up to:
    - 550 spaces within walking distance of Seacrest Park
    - 375 spaces within walking distance of bus stops at the Admiral Junction
    - 430 spaces within walking distance of bus stops at the Alaska Junction
    - 130 spaces within walking distance of bus stops at the Morgan Junction
    - 315 spaces within walking distance of bus stops and the ferry dock at Fauntleroy
    - 1200 spaces within walking distance of bus stops at Westwood Village
- **Partnering with technology platforms that match drivers with reserved parking spaces.** Metro's Innovative Mobility group is in talks with Spot Hero and other companies that allow travelers to reserve and pay for parking spaces operated by private owners ranging from retailers to residential property managers. This model could be adapted to help travelers access transit, and could potentially be used to offer TDM incentives

Fixed Route Concept Planning for 2021 and Beyond

As King County and City of Seattle move away from COVID lockdowns, and travel behavior begins its long road towards normalcy, Metro will monitor demand in relation to capacity and be responsive to travel behavior changes – within its financial constraints – through supplemental service adds.

Should funding become available for fixed route, Metro would engage in a community-driven effort, together with SDOT, to identify greatest needs, which could involve increased frequencies (capacity) on the existing network, route restructures to better meet current travel patterns, and/or new routes or mobility services to provide new connections to key destinations.

Funding, productivity, engagement equity, tradeoffs compared to other countywide needs, and ability to serve priority populations will all be taken into account upon commencement of this planning effort.

Water Taxi (Scenarios 1 & 2)

King County Water Taxi typically provides weekday peak only ("winter schedule") and daily service with peak/off-peak trips ("summer schedule") between West Seattle and downtown Seattle (Pier 50). It provides a 10 minute trip across Elliott Bay and has a loyal following, particularly among some Alki,

Admiral, and Alaska Junction commuters. In the warmer months when tourists descend on Seattle, the Marine Division increases service to off-peak and weekend hours to capture that latent demand.

Table 6 and Table 7 highlight the various service levels that the Marine Division could implement with either existing funding or additional funding, during either the Winter or Summer budgeted seasons. The Summer service plan typically lasts between April and October, but due to reduced demand, Water Taxi will remain on a "Winter Full" (highlighted in blue in the table) through spring 2021. In spring, Water Taxi plans to move to the "Summer Full" service plan (highlighted in blue in the table).

Costs and capacities are described in the following section. Marine is nimble in its ability to ramp up service in a real-time manner to meet additional demand; however most scenarios are funding-dependent as noted below. For either the Winter or Summer budgeted seasons, Water Taxi could add a second boat to the commute period to increase trips and capacity.

Table 6. Water Taxi Service Levels – Winter Season (Typically mid-October through mid-April)

Service Plan	# Boats	Commute Period Trips	Off-Peak & Weekend Trips	Notes
Winter Reduced	1	2 AM/PM	None	COVID/Stay at Home Service plan (March - June 21, 2020)
Winter Full	1	6 AM/PM	None	Implemented with June 22 service change; in operation until further notice or April 2021 when service plan switches to Summer Season. **Budgeted.**
Winter Full + Extra Commute	2	11 AM/PM	None	This service plan adds peak capacity over Winter Full by adding a second boat. **Requires additional budget.**

Table 7. Water Taxi Service Levels – Summer Season (Typically mid-April through mid-October)

Service Plan	# Boats	Commute Period Trips	Off-Peak & Weekend Trips	Notes
Summer Full	1	6 AM/PM	Midday M-F – 5 RT Saturday 15 RT Sunday 11 RT Fri/Sat 4 night RT Summer only	This service plan adds off-peak service over Winter Full. **Budgeted**. This service plan would implemented in mid-April 2021.
Summer Full + Extra Commute boat	2	11 AM/PM	Midday M-F – 5 RT Saturday 15 RT Sunday 11 RT Fri/Sat 4 night RT	This service plan adds peak weekday capacity over Summer Full by adding a second boat. **Requires additional budget.**
Summer Full with 2 Boats	2	11 AM/PM	Midday M-F – 10 RT Saturday 30 RT Sunday 21 RT Fri/Sat 8 night RT Summer only	This service plan adds all-day capacity over Summer Full by adding a second boat. **Requires additional budget.**

Seacrest Dock (West Seattle Side) Limitations

Currently, a maximum of 3 trips per hour (20-min headways) can serve Seacrest Dock. This is the primary limiting factor, aside from additional third party funding, in providing higher levels of waterborne transportation beyond this frequency. A second boat serving Seacrest (year round) for commute only service would require additional annual funding and could be quickly incorporated into either the winter or summer schedule with King County vessels and crew.

Additional West Seattle Capital Facilities to Support 3 or More Boat Operations

Adding a third boat or more would require significant capital investment in either temporary or permanent new dock space, with additional parking, shuttles, O&M requirements, permitting, etc. High level conversations between SDOT, Metro, Port of Seattle, and private vessel operators have occurred as part of this action planning process in order to identify potential locations, both on the West Seattle and downtown sides, for new or existing dock space.

Funding, timing, and actual need (demand) that would exceed what Water Taxi is able to provide via three trips per hour from Seacrest has yet to be discussed. As an example, a three boat scenario is shown below in Table 8, assuming a temporary float also at Seacrest. This could increase peak capacity by 200%.

Table 8. Water Taxi Three Boat Scenario Concept

Service Plan	# Boats	Commute Period Trips	Off-Peak & Weekend Trips	Notes
Winter Full + Extra Commute w/2 Boats	3	16 AM/PM	None	This service plan adds peak capacity in Winter Season by adding a third (leased) boat. **It requires significant additional budget and capital improvements.**
Summer Full + Extra Commute w/2 Boats	3	16 AM/PM	Midday M-F – 5 RT Saturday 15 RT Sunday 11 RT Fri/Sat 4 night RT Summer only	This service plan adds peak capacity in Summer Season by adding a third (leased) boat. **It requires significant additional budget and capital improvements.**

Vanpool (Scenarios 1 & 2)

As a nimble and reliable option for more than 40 years in Seattle, Metro Vanpool remains an ideal mode for some West Seattle commuters to traverse and maneuver through short and long-term bridge closures. In addition to the 48 public transit vans currently operating (pre-COVID) for West Seattle commuters, Metro plans to increase Vanpool use through targeted commuter and employer marketing, as well as seek funding relief for non-subsidized riders. Commuters and parents may tap into the region's largest ride matching and commute trip reduction platform to increase Vanpool and SchoolPool ridesharing.

With public commuter vans able to use the lower bridge, Vanpool speed and reliability increases and becomes travel time-competitive or better, with SOVs to reach destinations not well-served by fixed route transit. This allowance is an invaluable recruiting tool to enable Metro to surge Vanpool interest and formations.

Table 9 describes Metro's available (i.e. currently budgeted) Vanpool and Vanshare supply to help meet mobility needs of West Seattle commuters who are unable to use the bus or Water Taxi to conveniently reach their employment destination. As soon as demand warrants, Metro can increase supply.

- Vanpool – There are 62 (110-48) additional vans available for traditional vanpool (assuming all 48 vanpools pre-COVID return to operation).
- Emergency Vanpool Formations – There are 30 vans currently available for use
- Vanshare – There are 20 vans currently available for use.

Table 9. Metro Vanpool West Seattle Service Plan

Service Level	Commute Period Trips	Off-Peak & Weekend Trips	Scenario 1 or 2 Applicability	Initial/ Ongoing Costs	Notes
Traditional Vanpool – *48 commuter vans already deployed - 110+ van available capacity*	Available for all am/pm commutes & flexible for # of days-per-week & compressed work schedules	Early am/late pm & weekend shifts can be accommodated	Ability to use lower bridge makes vanpools most desirable. Detour will reduce vanpool efficacy.	Employer subsidy will cover vanpool fares. Set vanpool promotion grant funding already approved.	Quick deployment **note: lower ridership expected during COVID-recovery efforts.*
Emergency Vanpool Formations	Available for essential workers with commutes impacted by transit cuts & reductions.	*no additional miles/use allowed – fare free through Phase 4 or until >transit capacity*	Scenario 1 or 2	n/a – funding via federal COVID relief. No fares through Phase 4.	For essential workers impacted by transit cuts
Traditional Vanshare	Available am/pm commutes	n/a	Scenario 1 or 2		Modified vanshare mileage o.k. for WSB users

Vanpool - Other Near-Term Actions & Activities

In addition to allowing public transit Vanpools to use the lower bridge, another way to jumpstart formations for commuters heading to Downtown Seattle would be for SDOT to provide free or additionally subsidized, current permit parking for West Seattle Metro vanpoolers.

In 2017, permit parking for vanpools jumped from $20 to $2,400 per year in the Central Business District downtown. Special-use street parking permits for West Seattle vanpoolers to form Metro vans and be able to park for free (or via the 2016 $20 sticker price per year) would be a boon for vanpools while the West Seattle Bridge is closed. This could be a special permit coordinated with Metro Transit teams for verification of vanpools with 5+ rideshare commuters and for areas that are not easily reached by fixed route transit.

Additional concepts that would require funding include:

- Vanshares to Water Taxi terminal
- Vanshares from south P&Rs – East Marginal Way; 1st Avenue South
- Vanpools from south P&Rs – East Marginal Way; 1st Avenue South

Vanpool - Long Term Concepts

If funding becomes available, longer term concepts could include commuter van "sug" lines and active transportation connections. Slug lines could be volunteer or paid driver scenarios – both scenarios could include multiple pickup points to take commuters to cross-bridge key employment centers not easily connected by bus or Water Taxi transit. Active van connections could allow for bicyclist to cross the bridge and take vans the rest of the way to work – either with larger capacity bike racks (standard bike racks hold two bikes) or secure bike lockers.

Non-motorized & Other Innovative Mobility

Most of these additional mobility concepts are unfunded and would require third party funding to implement:

- ***Add secure bike parking -*** Add West Seattle for on-demand bike lockers. Explore potential for staffed facilities at major transfer locations. Metro could provide some funding for on-demand bike lockers at key locations to support first/last mile connections to transit. Potential locations include Alaska Junction, Spokane Street P&R, Seacrest Dock, and Westwood Village. Most locations will rely on significant coordination from City departments to authorize locations. Metro does not have funds or mechanisms to implement staffed parking
- ***Shared employer shuttles*** - Participation in a shared employer shuttle program to provide service to the Water Taxi or destinations outside of West Seattle for employers with significant concentrations of employees in West Seattle who are not well connected via bus. These shuttles wouldn't require additional public funding (employers would be responsible for funding). The City and TMAs like Commute Seattle could play a useful role in facilitating negotiations and planning with any interested employers
- ***On-demand flexible feeder-to-fixed service*** – Via-like service to fixed route hubs, including Seacrest dock if Water Taxi frequency is increased by adding a second or third vessel to the route
- ***Hub-based incentive programs*** – Incentive programs to bring customers to fixed-route hubs, via micromobility (bike/scooters) and any other Mobility-on-Demand platforms, if extant and applicable.

Costs, Capacities, and Operational Requirements

The City of Seattle's West Seattle Mobility Action Plan contains mode shift goals for the highest peak AM hour (i.e. 8-9 a.m.). In this report, the City reassigns all auto trips that exceed capacity to other modes, as shown in Figure 20. This section describes the passenger capacities and costs associated with different fixed route, Water Taxi, and Vanpool service levels, and compares those capacities to targets set by SDOT.

Figure 20. SDOT 2021 Goal Mode Share of Reallocation of Baseline Car Trips (Source: Reconnect West Seattle)

	2019 Baseline Trips[2]	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[3]	--	--	10%	1,000	+1,000
Walk[4]	--	--	5%	500	+500
Total	9,930	100%	100%	10,000	--

Fixed Route (Scenario 1)

Capacities and associated resource needs shown below in Table 10 is based on the following 4 service scenarios:

- **Pre-COVID Service Levels + Enhancements -** Pre-COVID service levels on West Seattle Bridge routes (Fall 2019), PLUS additional service on routes providing primary connections to areas of West Seattle. To reach these service levels, an additional investment of 102,000 annual service hours would need to be funded by the City (above planned September 2020 service)
- **Pre-COVID Service Levels-** Pre-COVID service levels on West Seattle Bridge routes (Fall 2019). To reach these service levels, an additional investment of 43,000 annual service hours would need to be funded by the City (above planned September 2020 service)
- **September 2020 Service Change (Planned)-** Service level estimates planned for implementation in September 2020
- **Current (June 22) with COVID Suspensions-** Current service levels, reflecting service increases implemented on June 22

Costs to deliver service in service scenarios is estimated in annual service hours, due to variability in cost calculation methods and in direct costs of operating different bus sizes/types.

Table 10. Fixed Route Capacities and Resource Needs

Service Scenarios	Annual Service Hour Needs	AM Peak Capacity (peak direction, 5AM-9AM)			Daily Capacity (both directions)		
		COVID Distancing	*All Seated*	*No Distancing*	*COVID Distancing*	*All Seated*	*No Distancing*
Pre-COVID Service Levels + Enhancements	421,000	3,100	9,900	14,000	17,600	54,900	78,200
Pre-COVID Service Levels	362,000	2,700	8,400	11,900	14,400	45,100	64,200
September 2020 Service Change (Planned)*	319,000	2,300	7,400	10,500	13,300	41,700	59,400
Current with COVID Suspensions (June 22)	309,000	2,100	6,600	9,400	12,300	38,500	54,800

*September 2020 capacity impacted by reductions in funding from the City of Seattle's Transportation Benefit District and Metro service suspensions

Water Taxi

Water Taxi capacities and cost impacts for each service scenario are shown below in Table 11 and Table 12. The Winter service plan reflects service Monday to Friday for commute-only time periods. Winter service was resumed on June 22, 2020 and is expected to continue until mid-April, 2021. Summer service is expected between mid-April, 2021 and mid-October, 2021 (when Water Taxi then returns to Winter service). The Summer service plan adds off-peak weekday service and late-night Friday and weekend service for the boat serving West Seattle. Both of these service scenarios are budgeted for the 2020/2021 periods.

The two other scenarios shown in the tables reflect a second or third boat for the Monday to Friday commute only time periods. Costs shown are annualized and could be implemented for part or all of a fiscal year, as demand warrants.

Demand-Based Service Recommendation

When demand warrants, Metro suggests adding a second boat to the West Seattle-Pier 50 route as it represents a cost-effective way of increasing commute period passenger capacity by nearly 50% and can be accomplished using the Division's backup vessel. However, this improvement would require unidentified funding to implement. Depending on when demand returns, this second vessel could be added during either the Winter or Summer budgeted seasons.

Table 11. Water Taxi Capacity Commute Capacity and Funding Impacts

Scenario from West Seattle	Service Description	# Boats	Commute direction capacity (3 hrs)			Annual Funding Impact
			@33%	@50%	@100%	
Winter Reduced (COVID reductions)	March – June 22 M-F Commute only 2 roundtrips AM/PM	1	182	278	556	*Budgeted*
Winter Full or Summer	Winter (Effective June 22. 2020, typically Oct – April) Summer (scheduled for mid-April 2021) 6 roundtrips AM/PM	1	546	834	1668	*Budgeted*
Winter Full or Summer with second boat	Adds second vessel, year-round (or part year) weekday commute only	2	796	1209	2418	*Requires Additional Funding*
Winter Full or Summer with third boat	Adds second vessel, year-round (or part year) weekday commute only	3	1046	1584	3168	*Requires Additional Funding, including capital facilities*

Table 12. Annual Water Taxi Costs

Scenario from West Seattle	Service Description	Waterborne Service Costs*	Support Service Costs**	Total Costs
Winter Reduced	March – June 21 M-F Commute only 2 roundtrips AM/PM	*Budgeted*	*Budgeted*	**Budgeted**
Winter Full	Effective June 22 M-F Commute only 6 roundtrips AM/PM	*Budgeted*	*Budgeted*	**Budgeted**
Summer	M-F Commute, Off-peak service and Weekend service F-S late nights (summer only)	Budgeted	Budgeted	**Budgeted**
Winter Full or Summer with second boat	Adds second King County vessel - M-F Commute only +5 roundtrips AM/PM	$1,261,000	$2,255,000	$3,516,000
Winter Full or Summer with third boat***	Adds third leased vessel (on top of second King County vessel M-F Commute only +5 roundtrips AM/PM	$3,494,000	$2,715,000	$7,209,000

***Waterborne Service Costs** includes crew, maintenance, shoreside labor, fuel, short-term backup vessel and annual leased vessel (for third vessel), and insurance costs.

****Support Service Costs** includes shuttles, parking lot, lighting, traffic staff, advertising, supplies.

*****This does not include the capital costs required to add an additional float in West Seattle. A total of 16 round trips in the AM/PM commute period*

Vanpool

For Vanpool, commute capacities are shown below in Table 13.

Table 13. Vanpool Capacities

Service Level	Commute Capacity*
Traditional Vanpool – *48 commuter vans already deployed - 110+ van available capacity*	105+ vans w. available capacity for 525 – 1,000+ commuters* - multiple-sized vehicles available
Emergency Vanpool Formations	30 vans available – capacity for 90 - 210 commuters*
Traditional Vanshare	20+ vans available – capacity 50 – 115*

Metro Capacities and SDOT AM Peak Targets

Table 14 compares estimated AM peak hour capacities on Metro's fixed route, Water Taxi, and Vanpool services to the City's desired mode split. The City is targeting 4,000 transit trips in the AM peak hour to meet their goals – it is apparent that physical distancing and attitudes towards transit will be the primary determinant in Metro's ability to meet this projected demand. Further, Water Taxi, at full capacity can only serve 556 customers per peak hour without additional funding.

Table 14. Metro Peak Hour Capacities vs. SDOT Targets

Service Scenarios	Annual Service Hour Needs/Costs above budget	AM Peak Hour Capacity (peak direction) in Passengers			SDOT Targets
		COVID Distancing	*All Seated*	*No Distancing*	
Bus: Pre-COVID Service Levels + Enhancements	+101,000 hours	775	2,475	3,500	3,000
Water Taxi commute service with two boats	$1,261,000*	265	403	806	1,000
Vanpool (125+ vans available today)	Budgeted (via employer subsidy)?	296**	1,165 **	1,165 **	N/A
Totals		***1,336***	***4,043***	***5,471***	***4,000***
Bus: Pre-COVID Service Levels	+53,000 hours	675	2,100	2,975	3,000
Water Taxi commute service with one boat	Budgeted	182	278	556	1,000
Vanpool (125+ vans available)**	Budgeted	296**	1,165 **	1,165 **	N/A
Totals		***1,153***	***3,543***	***4,696***	***4,000***
Bus: September 2020 Service Change (Planned)	Budgeted	575	1,850	2,625	3,000
Water Taxi commute service with one boat	Budgeted	182	278	556	1,000
Vanpool (125+ vans available)**	Budgeted	296**	1,165 **	1,165 **	N/A
Totals		***1,053***	***3,293***	***4,346***	***4,000***

***Waterborne Service Costs** includes crew, maintenance, shoreside labor, fuel, short-term backup vessel and annual leased vessel (for third vessel), and insurance costs. Does not include support costs

**Pre-COVID 48 commuter vans operating from West Seattle – average 7 per van (all sizes) total capacity available is 432. 125+ additional commuter vans currently available- 7, 12 & 15 pax vanpool available – social distancing 2, 3, & 4-pax respectively; Full capacity for 100 7-pax (700); 20 12-pax (240); & 15 15-pax (225) - fleet available today.

Communications Plan

The purpose of this communications plan is to identify key messages, audiences, and communications tools and strategies to ensure clear, transparent communication throughout the closure of the bridge. This communications plan will be closely coordinated with our City partners and will be updated periodically as the plan moves forward.

Goals and Objectives

- **Create early awareness among transit customers and travelers**
- **Manage expectations and prepare customers** so they know what travel delays they will face, what travel options are available, and what programs are possible to help avoid taking commute trips
- **Rebuild customer confidence in using transit** post-COVID in West Seattle

Strategies and Tactics

- **Distribute and promote online information:** Create awareness by informing the public about the closure through online and print communications products and distribution via trusted public agencies and community organizations. Promote travel alternatives, options and connections during the closer
- **Encourage media coverage:** SDOT and Metro (including Water Taxi) to convey the travel alternatives and information resources available to customers across the region.
- **Demonstrate:** Show government agencies are closely coordinating efforts, investing expertise, time and tax dollars to keep people and the economy moving during the closure.

Current Key Messages as of Publication

- Metro reduced service in West Seattle and throughout the county to respond to decreased ridership and revenue and to preserve our workforce for a ramp-up after this COVID-19 chapter closes
- While it is good news is that we implemented a service increase on June 22 and are able to add supplemental bus service as needed, future service levels are uncertain and Metro knows that transit will be acritical part of keeping West Seattle moving while the bridge closure is addressed
- Our plans preserve the West Seattle transit network with the same stops and same destinations in Downtown Seattle, SODO, and elsewhere. The only change our bus riders would see other than added travel time is a different pathway across the Duwamish River
- At this point (mid-July), bus ridership is currently down around 65%, with crossings between West Seattle and downtown/SODO down by 80% largely as a result of the commute-heavy nature of the West Seattle market, and Water Taxi ridership has been down as much as 85%. We've not seen any clear impact of the bridge closure on West Seattle route ridership to date as many commuters continue to telework in response to COVID-19
- Metro will continue to implement smart service modifications or additions as our region moves through the four phases of the "Stay Home, Stay Healthy" order and the region returns to more normal travel patterns

- We're also finalizing plans for this fall's twice-annual service change. Due to the budget-constrained environment brought on by the COVID-19 crisis, September's service change still won't restore the service levels which were in place before COVID-19. Metro and City of Seattle are committed to providing mobility options in all parts of the region, including West Seattle

Specific anecdotes

- We've created maps by region to show how West Seattle residents can connect to destinations throughout the region by transit with a good degree of convenience, including leveraging the new transit hub area at Colman Dock. To start, we're focused on preserving West Seattle's transit network, but we will monitor travel patterns as residents of West Seattle and surrounding areas identify and settle into a "new normal" over the next several months
- Our planning process looks at options to apply if, for any reason, the low bridge was also not available, whether for a few hours or an extended amount of time. To get people where they need to go, we're looking at how we could refocus one or more of our major routes to bring more people north to Seacrest Dock and use the 1st Avenue South Bridge to the south
- Metro's Water Taxi team is taking several pages out of the viaduct closure playbook from the winter of 2019, and there's also the possibility of increasing bus service that feeds the Water Taxi
- It's important to note that there isn't a dedicated budget for any modifications which would incur added costs. Most adjustments would involve third-party funding or re-allocation of Metro resources

Communication Tools and Audiences

Table 15. Communication Tools and Audiences

TOOLS	PURPOSE	AUDIENCE
Printed materials (e.g., fact sheets)	• Share project updates. • Promote upcoming opportunities to share feedback through online platforms or in-person events.	All key audiences
Rider outreach, e.g. bus posters, rider alerts (posted *at* bus stops) & Transit Alerts – digital communications	• Alert existing riders of changes and encourage them to sign up to stay informed. Figure 21, Figure 22, Figure 23 highlight the Seattle and regional connections West Seattle residents can make from downtown using buses or Water Taxi	Current customers
Media, social media, and blog posts	• Create and share blog posts and press releases with local media outlets to inform them of project design updates and promote engagement activities. Blog platforms include Metro Matters and Captain's Blog. • Create organic social media copy to share on both King County Metro's and Water Taxi's platforms	All key audiences with an emphasis on people who have been historically underserved
Paid media	• If possible, develop in-language ads for distribution through ethnic media channels	All key audiences, with a focus on tech-savvy users and media
Website and e-mail updates (Transit Alerts), customer tools & customer information center	• Provide information about current project status. Develop web link to share • Provide education on how to get in, out of and around West Seattle using transit • Encourage to sign up for rider alerts and project updates	All audiences, dependent on public signing up for e-mail updates
Community briefings and roundtables	• Provide general information at key decision points and when changes are planned • Alert the surrounding community of key information, upcoming milestones, and opportunities to stay connected • Build rapport with community leaders, learn individual perspectives • Engage interested and concerned community members in one-on-one dialogue to address concerns, share	Community groups and organizations within the project area

TOOLS	PURPOSE	AUDIENCE
	project information, and establish relationships	
Community partner Outreach	• Share updates • Learn about transit, bike and other mobility needs and priorities in the community • Build relationships between Metro and CBOs	Community-based organizations and groups
Elected official and board/committees Briefings	• Provide a briefing to County Councilmembers, County staff, and City of Seattle representation • Inform elected officials of progress at key milestones and seek input	• King County Councilmembers and staff • Seattle City Councilmembers and staff • KC Executive and staff • Seattle Mayor and staff • Seattle CM Herbold • King County CM McDermott • Executive Constantine • State legislative delegation: Senator Nguyen, Reps Fitzgibbon and Cody, US Rep Jayapal
Agency and partners Meetings	• Hold regular meetings • Coordinate communications efforts • Coordinate with appropriate staff to ensure elected officials are properly briefed • Keep partners apprised of changes	• SDOT • Port of Seattle • Coast Guard • Seattle Fire • Seattle Police • Sound Transit • WSDOT • WSF

Figure 21. Customer Information – Downtown Seattle Connections to Greater Seattle and North King County

Figure 22. Customer Information – Downtown Seattle Connections to East King County

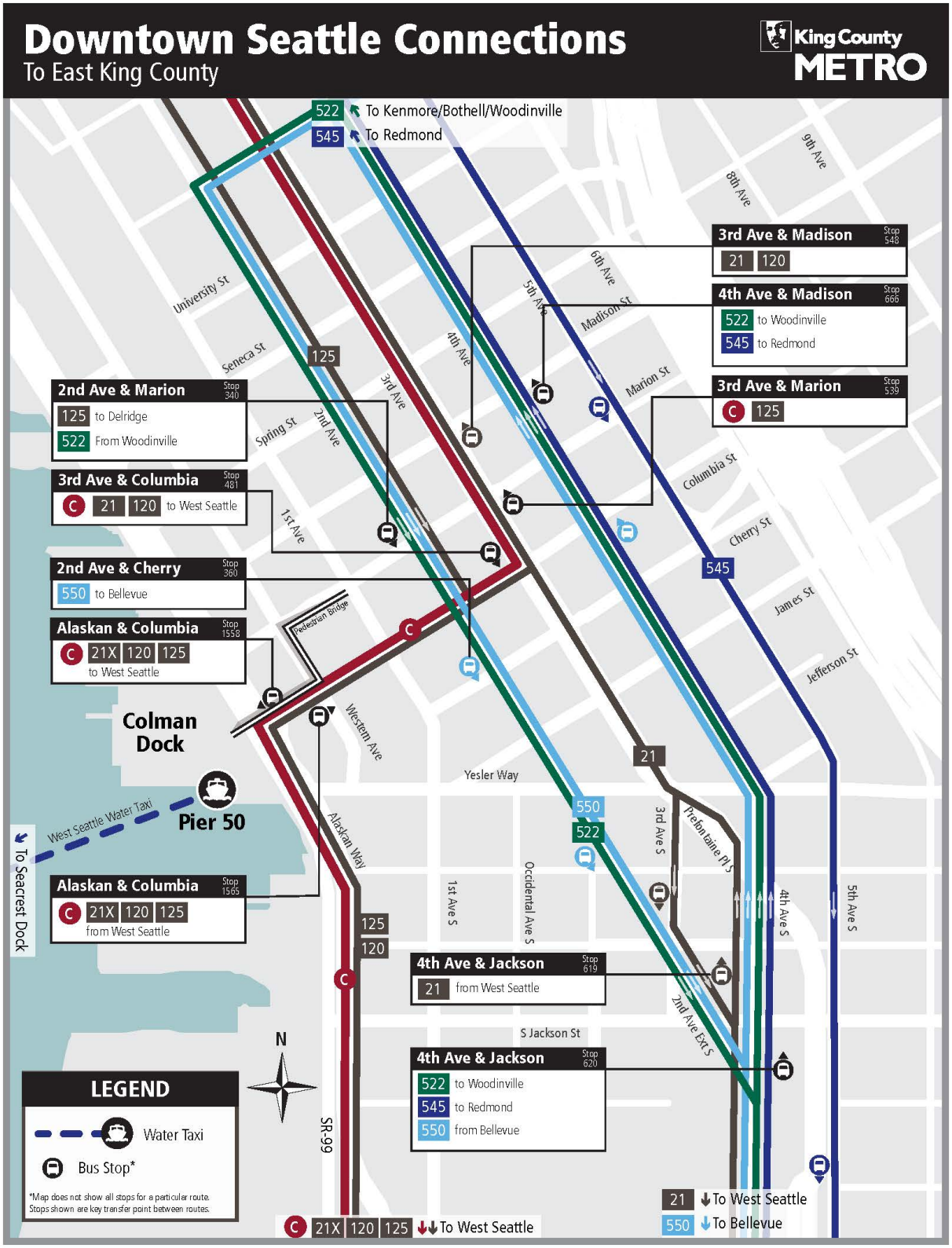
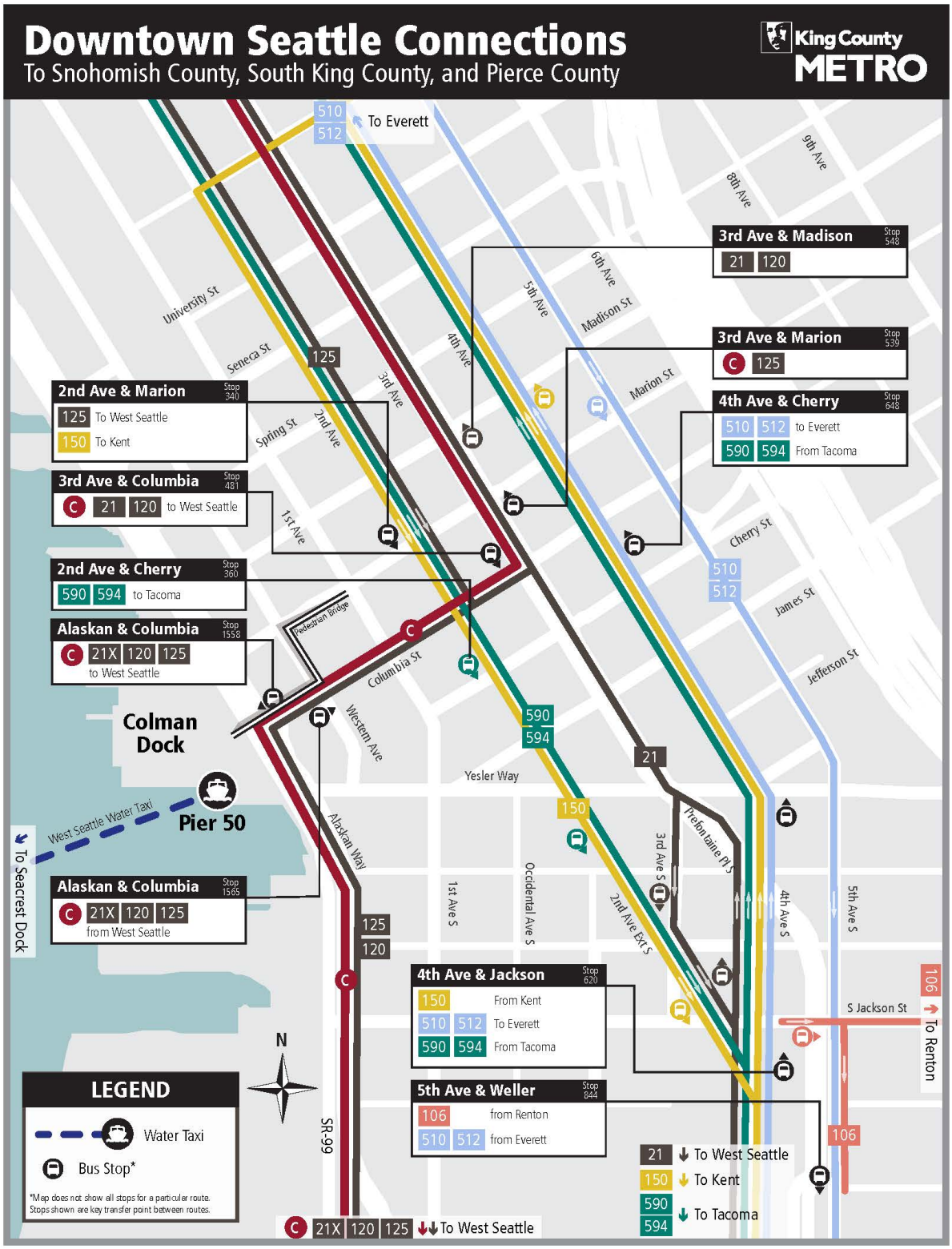



Figure 23. Customer Information – Downtown Seattle Connections to Snohomish, South King County, and Pierce County