

2020 System Evaluation





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Table of Contents

Executive Summary 1
Introduction 3
Bus Service Evaluation 5
- Crowding (Priority 1) 5
- Reliability (Priority 2) 7
- Service Growth (Priority 3) 9
- Route Productivity (Priority 4) 14

The Complete Network: Integration with Sound Transit 10
Peak Analysis 14
Flexible Services 15
METRO CONNECTS Progress Report 18
Potential Changes to the Service Guidelines and Strategic Plan 20

Figures

Figure 1. Metro Fixed Routes Needing Investment to Reduce Crowding per the Service Guidelines 6
Figure 2. Metro Fixed Routes Needing Investment to Improve Reliability per the Service Guidelines 8
Figure 3. Metro Corridors Needing Investment per the Service Guidelines (Peak Period, 5–9 a.m. and 3–7 p.m.) 11
Figure 4. Metro Corridors Needing Investment per the Service Guidelines (Off-Peak Period, 9 a.m.–3 p.m.) 12
Figure 5. Metro Corridors Needing Investment per the Service Guidelines (Night Period, after 7 p.m.) 13

Appendices

Appendix A: Methodologies and Process Descriptions 22
Appendix B: King County Low-Income and Minority Census Tracts 26
Appendix C: Route Productivity Data 27
Appendix D: Changes to Route Productivity Thresholds 37
Appendix E: Peak Route Analysis 38
Appendix F: Route-level Reliability 40
Appendix G: Route-level Ridership 41
Appendix H: Service Changes and Corridor Changes 47
Appendix I: Corridor Analysis 52
Appendix J: Investment Needs 58

Executive Summary

This report presents Metro Transit's annual assessment of the transit network as required by King County Ordinances 17143 and 18413 and Motion 13736. The report includes information about bus service, Dial-A-Ride Transit (DART), water taxi, and flexible services, all part of Metro's portfolio of mobility solutions.

In years past, Metro has used data from March through June, which reflects Metro's spring service change period. Because of the rapid and unpredicted spread of COVID-19 and its impacts on employment, travel, and transit use throughout the county, for this report Metro is using information from the September 2019 service change, spanning mid September 2019 to mid March 2020. This report therefore measures the last major service change before COVID-19 emerged. While the time period analyzed mostly reflects service metrics of pre-COVID-19 service, some limited early impacts of COVID-19 are reflected in the data due to impacts on travel that began in early March.

Findings

The 2020 data analysis found that a total investment of 438,000 annual service hours is needed to meet target service levels and improve service quality—a slight decrease from last year's number. The investments needed to reduce crowding, improve reliability, and grow service are shown below.

This year's evaluation found that service improved as a result of investments to reduce crowding and improve reliability and to improve corridors around the county to meet their target service levels. Crowding and reliability needs have decreased and service growth needs have stayed constant compared to the prior year. The decline in crowding and reliability needs also reflects the early impacts of COVID-19 on both ridership and congestion toward the end of the reporting period.

During this reporting period, Metro operated about 4.2 million annual hours of bus and DART service. The investment needs identified in this report would reduce crowding, improve reliability, and grow Metro's service network. Despite immediate impacts of the pandemic, Metro remains focused on growing its network as funding is available. To achieve the full METRO CONNECTS long-range vision and meet the demands of the Puget Sound Regional Council's Transportation 2040 plan, Metro will ultimately need to provide about 2 million more annual hours of service.

Service Investments

In fall 2019 and spring 2020, Metro invested 19,400 annual service hours in the transit system to meet needs identified in previous reports. These investments include:

- 6,700 hours to relieve crowding (Priority 1)
- 2,900 hours to improve reliability (Priority 2)
- 9,800 hours in service growth on major transit corridors (Priority 3)
- Flexible Services investments—Community Van, Community Shuttle, Community Ride, Trailhead Direct, and Via to Transit

Seattle Investments

Metro and the City of Seattle worked together to plan and implement new service funded by the Seattle Transportation Benefits District (STBD), which was approved by voters in November 2014 and expired in 2020. Seattle's investments in fall 2019 totaled 44,900 annual service hours. In accordance with the contract between Metro and Seattle, Metro assumes funding for some of Seattle's investments that are consistent with the service expansion priorities as Metro expands service. A new STBD was approved by voters in November 2020. Metro will continue to work with Seattle to implement new and continued STBD-funded service.



2020 Investment Needs



2,750 bus hours
Priority 1
(Reduce Crowding)



18,250 bus hours
Priority 2
(Improve Reliability)



417,000 bus hours
Priority 3
(Service Growth)

Flexible Services

This report includes performance data for pilot services created under Metro's Flexible Services program (formerly called Community Connections) that were in the evaluation stage between September 2019 and February 2020. The program works with local governments and community partners to develop innovative and cost-efficient transportation solutions in areas of King County that do not have the infrastructure, density, street network, or land use to support regular bus service.

Water Taxi Services

Metro's Marine Division operates water taxi services on two routes that connect Colman Dock in downtown Seattle with Vashon Island and West Seattle. Information about water taxi services is included in the Bus Service Evaluation and in the tables in Appendices C, E, F, and G.

COVID-19 and Impacts to 2020 Service

As the COVID-19 pandemic began and continued its spread in the community, Metro faced unprecedented challenges. To promote public and employee safety, and respond to ridership declines and staff availability, Metro suspended some bus, DART, flexible, and water taxi services in March and April 2020 while working to maintain and deliver a core network of services. By June 2020, some services were restored while Metro planned for a longer-term recovery in late 2020 and 2021. By September 2020, Metro was operating about 85 percent of pre-COVID service levels with plans for both some service restoration and some longer-term reductions in 2021. Decisions about service changes during the pandemic have been made based on many factors, including requirements to protect public health and safety, and information about ridership. Trends in ridership have been closely monitored and service adjusted to reflect both the delivery of a core network of services and the capacity needed to serve customers during this challenging time.

Metro continues to actively monitor ridership, productivity, equity, and other factors on an ongoing basis to inform decision-making.

Metro's Future

As this report was being written, Metro was preparing for changes in 2021 and 2022 to recover from COVID-19, restore services to meet recovering demand, and reduce and restructure parts of the transit system. These changes reflect the financial challenges Metro faces, including the loss of sales tax and fare revenues due to COVID-19 as well as a potential reduction in service funding from the City of Seattle.

Plans for 2021 and 2022 will focus on recovering and stabilizing from COVID-19, within Metro's proposed budget and adjusting to a continuation of the STBD but at a lower funding and service level. Plans will be developed using quantitative and qualitative information consistent with Metro's guiding policies. Metro is anticipating policy updates in 2021, and planning work will be shaped by anticipated updates. The planning work will emphasize the principles of equity, social justice, and addressing climate change while integrating Metro's long-range vision—METRO CONNECTS—and advancing Metro's Mobility Framework.

Metro had to immediately suspend and reduce service after COVID-19 emerged, and now faces significant financial constraints. However, Metro will continue to monitor the need for service investments to best serve communities throughout King County, including measuring performance to Service Guidelines standards and target service levels.



Introduction

What is the System Evaluation?

This report is a snapshot of the health of the Metro Transit system: the bus service, DART, water taxi, and flexible services. It is based on the Service Guidelines, which established criteria and processes for analyzing and planning changes to the transit system. The King County Council adopted the guidelines (Ordinances 18301 and 18413), and required Metro to produce an annual evaluation of the transit network (Ordinances 17143 and 18413 and Motion 13736). The report contains the following:

- Bus service service evaluation
- Flexible services evaluation
- METRO CONNECTS progress report
- Potential changes to the Service Guidelines and Strategic Plan for Public Transportation.

Reducing crowding and improving reliability—the primary service quality indicators—are Metro's top two investment priorities because they directly affect the quality of service. Improvements in these areas help retain current riders and attract new ones.

The third priority is to invest in growing the system. More service supports better mobility options and helps Metro meet demand, reach climate action goals, and help the region's economy to continue growing without expanding roadways.

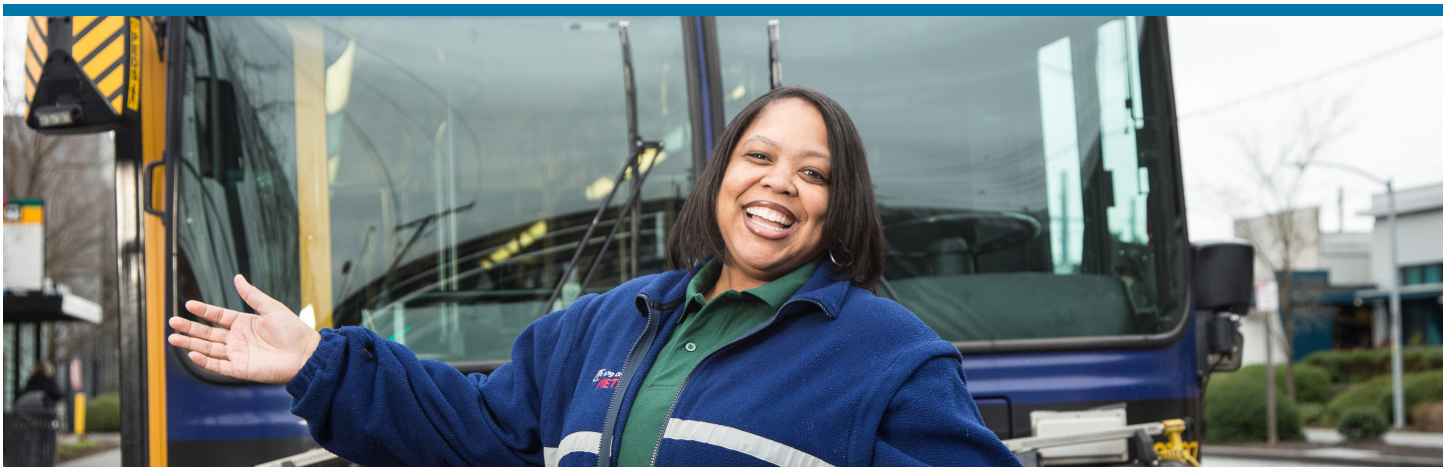
The fourth investment priority is to provide highly productive routes that carry the highest number of riders per hour and per mile of service across the county.

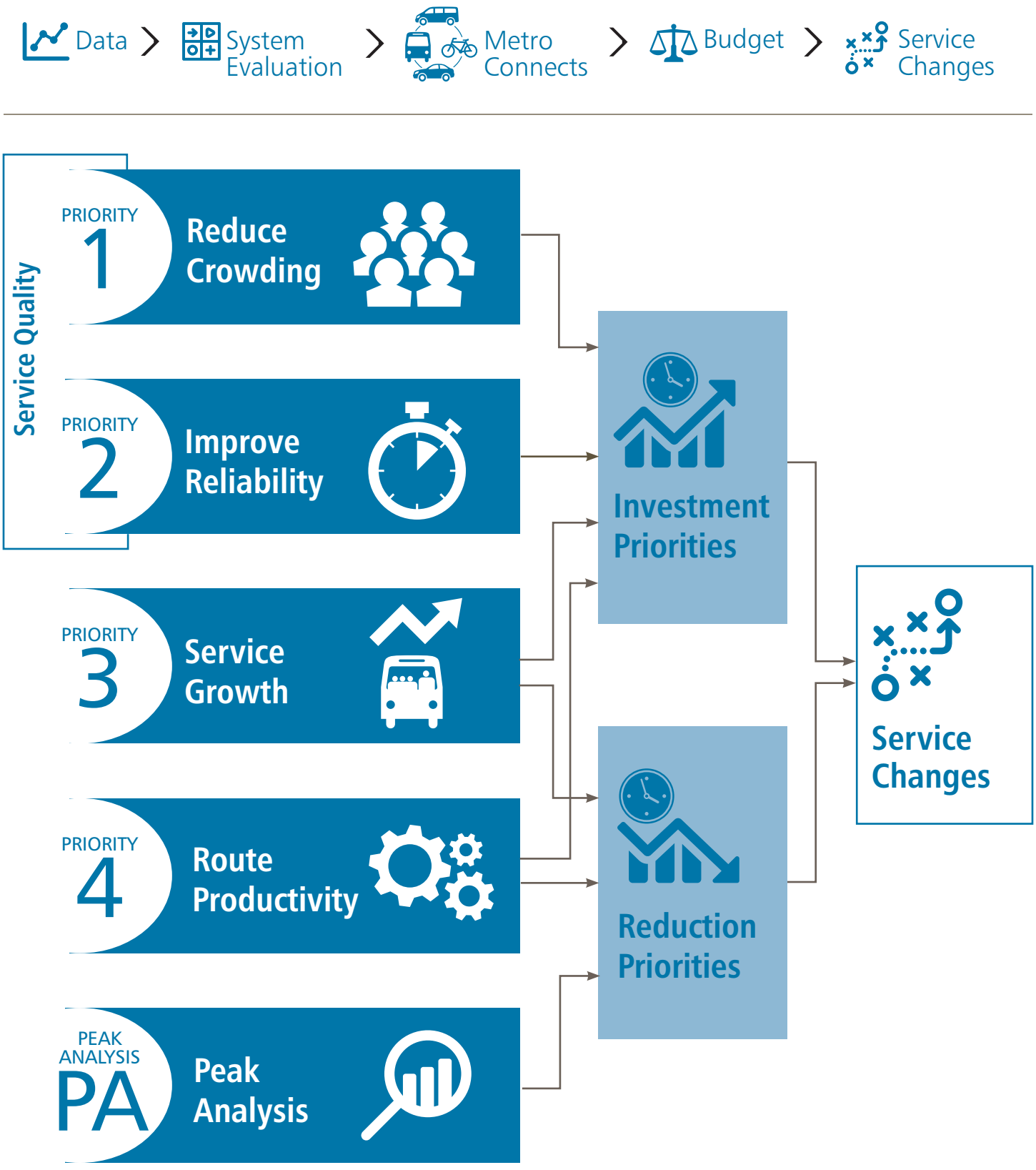
How Does Metro use the System Evaluation Report?

Metro analyzes transit system data to inform decisions about adding, reducing, or changing service and to continuously improve the transit system. The data reveal how well different services are performing, where problems exist in the system, and where more service should be provided. This information, combined with input from customers, operators, and partners, is used to develop proposals to change service. Metro takes these proposals to the public, gathers and incorporates feedback, and submits final plans for approval by the King County Council. After the approved service changes have been made, the cycle begins again.

How Can Transit Customers use the System Evaluation Report?

Riders can find their route(s) on the maps throughout this report and in the appendices, and can see how the route data compares to other routes in the system. They will be able to tell at a glance if there are identified problems on a route (such as crowding), and what is needed to fix those problems. Keep in mind that this report provides a snapshot in time; some problems come and go, and Metro uses the latest available data to make service change proposals.




Data
System Evaluation
Metro Connects
Budget
Service Changes
Service Quality
PRIORITY 1
Reduce Crowding
PRIORITY 2
Improve Reliability
PRIORITY 3
Service Growth
PRIORITY 4
Route Productivity
PEAK ANALYSIS PA
Peak Analysis
Investment Priorities
Reduction Priorities
Service Changes

Bus Service Evaluation

Investment need



2,750 bus hours

Crowding (Priority 1)

What is Crowding?

- The vehicle's average maximum load is more than the crowding threshold for the type of vehicle.
- The average passenger load is more than the number of seats for 20 or more minutes.
- Trips must be crowded consistently for several months to be identified for investment.

Findings

The system evaluation found that an investment of 2,750 bus hours is needed to reduce crowding. Metro identified six routes that have chronically crowded trips, a decrease from last year's 19. Two of these six routes are new to the list. All identified routes have 20-minute standing passenger loads.

What's Been Done

Between fall 2018 and spring 2019, 6,900 hours were added to the transit system to reduce crowding. These investments were based on the 2019 system evaluation and the latest available data.

What's Next?

As a result of the COVID-19 pandemic, ridership declined dramatically at the end of the reporting period, and no trips or routes exceed the non-COVID crowding thresholds as of summer 2020.

However, to support the safety of operators and customers, Metro instituted passenger load limits to support social distancing. As the pandemic continues, Metro has begun measuring crowding relative to new social distancing standards, and will continue to measure crowding relative to those limits as long as they are in place.

In order to best accommodate customers, Metro is also adding temporary supplemental trips to provide more capacity where needed rather than adding trips on an ongoing or permanent basis. Metro will continue to review crowding data and make adjustments as conditions change over time.

Metro will also continue to monitor trends in workplaces, reopening, and employees returning to central workplaces to understand when and where to expect ridership growth and crowding.

Of the 5 routes that received investments in March 2019

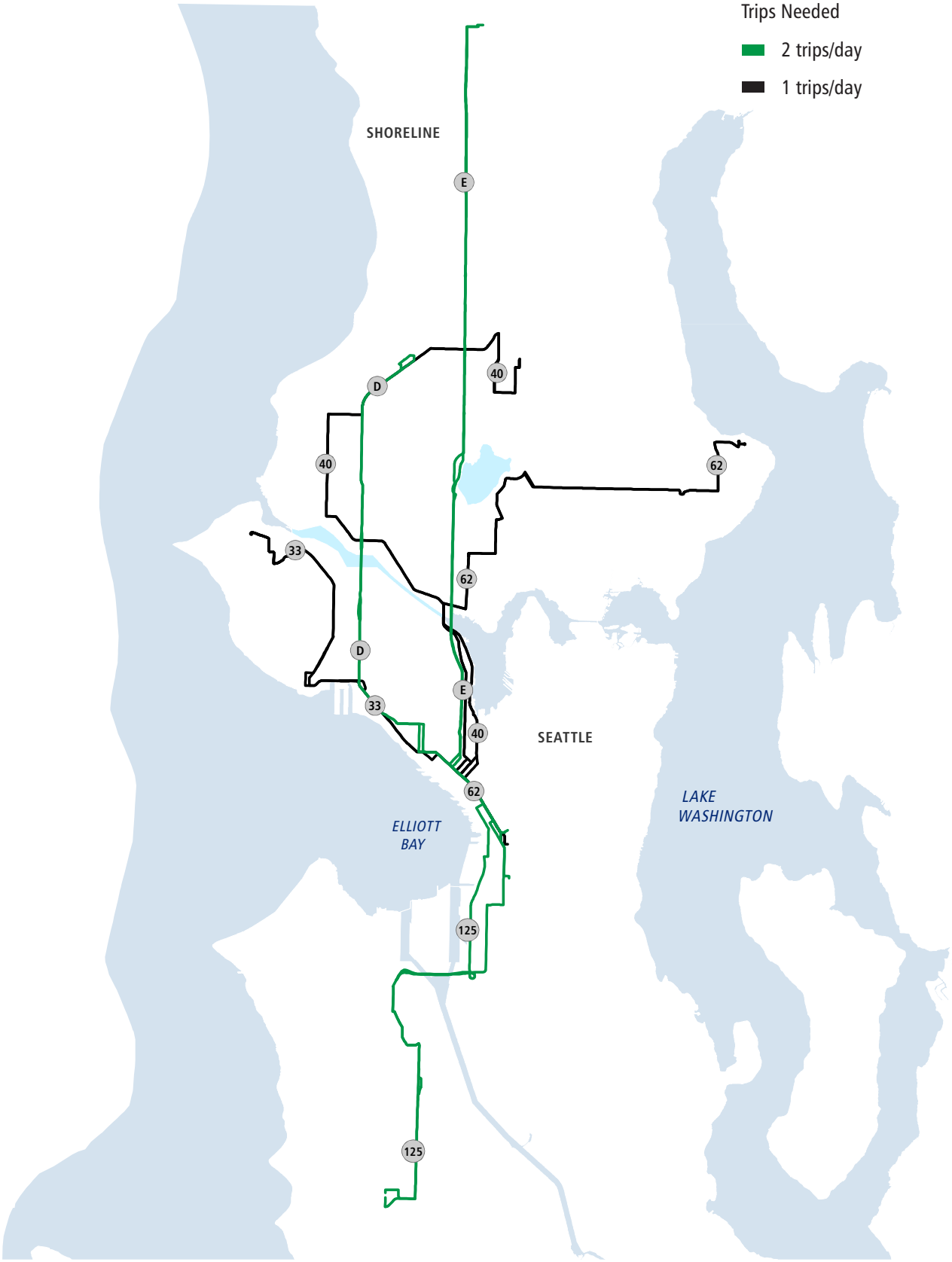


3 are no longer chronically crowded



2 saw a decrease in crowding (but still need more investment)

Figure 1. Metro Bus Routes Needing Investment to Reduce Crowding per the Service Guidelines



Reliability (Priority 2)

Investment need



18,250 bus hours

What is Reliability?

In a transit context, reliability refers to the extent to which buses arrive on time. Metro considers routes whose buses arrive late more than 20 percent of the time all day, or more than 35 percent of the time during the afternoon peak period, to be candidates for investment. Metro can invest by adding running time to schedules, but also partners with cities on infrastructure improvements. These improvements help buses move faster and more reliably, saving money and providing a better customer experience.

Findings

The system evaluation found that 18,250 additional bus hours are needed to improve reliability. The investment need decreased from last year's figure by about 6,200 annual hours. This report lists 61 routes needing investment;19 of them are new to the list. Eighteen routes that were on last year's list are now within standards, but the rest have new or outstanding needs.

See Appendix F for route-by-route reliability numbers.

- **South county routes**
  Routes 119, 154, 156, 159, 186, 190, and 193X are new to the list. Most of them slipped just outside of the standard this year, so their investment needs are relatively small.
- **East county routes**
  Routes 218, 226, 235, 257, 268, 303X, 316, and 330 are new to the list, most of them just slightly outside of the standard.
- **Seattle routes**
  Routes 1, 50, and 77X are new to the list. One RapidRide line, the E Line, continues to be out of standard on weekdays.

What's Been Done

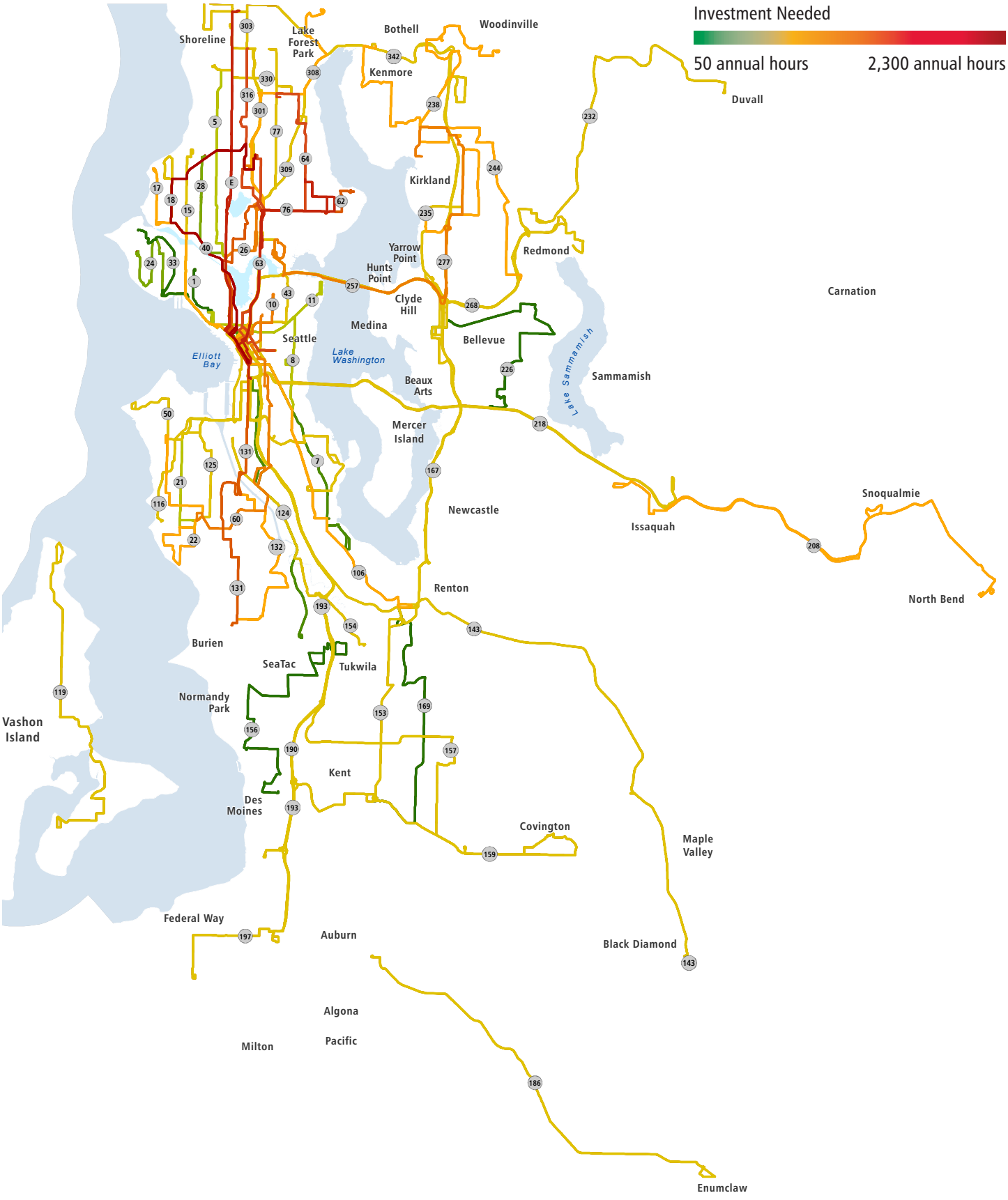
In September 2019, Metro invested about 2,800 hours directly in service schedules to improve reliability.

What's Next?

As a result of the COVID-19 pandemic and declines in overall travel and traffic congestion, reliability improved substantially following the period analyzed in this report. During the pandemic, early operations have been a challenge because of lower congestion, lower ridership, and the suspension of fare payment, which speeds up boarding. Metro has maintained operations using pre-COVID schedules because of timing and the pace of changes as well as the expectation that congestion will return. If lower congestion persists in the long term, Metro will monitor routes and adjust schedules to reflect the new conditions.

Future reliability remains a concern as the pandemic progresses. In many cities as well as King County overall, automobile travel has returned more quickly than transit travel. This can have particularly negative impacts on travel times and travel speeds if auto travel rebounds more rapidly or if people switch from taking other modes to driving alone. Metro will continue seeking opportunities to provide transit-supportive infrastructure to allow for fast and reliable travel even as travel demand returns to higher levels.

Figure 2. Metro Bus Routes Needing Investment to Improve Reliability per the Service Guidelines



Service Growth (Priority 3)

Investment need



417,000 bus hours

What is Service Growth?

The Service Guidelines include criteria for determining target service levels—how often buses should arrive throughout the day on major transit corridors in Metro's existing system. The target service level analysis is based on a combination of land-use productivity, social equity factors, and how well each corridor connects growth centers in the county. The gap between how much service Metro currently provides and how much service is needed constitutes the investment needed to meet target service levels. This year's analysis used data from mid September 2019 through mid March 2020. Summaries of the analysis and the investment need for each corridor are in Appendices I and J.

Findings

Based on pre-COVID conditions, Metro needs to grow service on 55 corridors, more than last year's 53. The total Priority 3 investment need, 417,000 bus hours, is close to last year's need. Metro has invested 9,800 new service hours in Priority 3 needs since last year's system evaluation. See the maps on the following pages for depictions of needs by time period.

What's Been Done

In September 2019 and March 2020, Metro invested about 9,800 hours in corridors. Together, these hours grew service on Routes 105, 164, 183, 346, 675, and 906.

What's Next?

In 2019 and 2020, Metro made a significant investment to meet Priority 3 needs in the area of the Renton, Kent, Auburn Area Mobility Plan project. This included investments on Routes 101, 105, 107, 150, 164, 183, and 906.

As King County continues to have longer-term growth, investments in Priority 3 remain important, regardless of the immediate impacts of COVID-19. Metro plans to continue working with the public and with private partners to expand mobility where possible.

Table 1: Summary of Typical Service Levels

Service Level	Service Level: Frequency (minutes) and Time Period			Days of Service	Hours of Service
	Peak	Off-peak	Night		
Very frequent	15 or better	15 or better	30 or better	7 days	16–24 hours
Frequent	15 or better	30	30	7 days	16–24 hours
Local	30	30–60	--*	5–7 days	12–16 hours
Hourly	60	60	--	5 days	8–12 hours
Peak-only	8 trips/day minimum	--	--	5 days	Peak
Flexible Service	Determined by demand and community collaboration process				

* Night service on local corridors is determined by ridership and connections made



The Complete Network: Integration with Sound Transit

Metro and Sound Transit continue joint planning with jurisdictions to create an integrated network that gives riders the best possible transfers when Link light rail is extended to Northgate and Overlake. Their coordinated work will maximize the total regional investment in transit service.

In 2021, Sound Transit will open three new Link stations in north Seattle, extending from the current terminus at University of Washington – Husky Stadium to Northgate Transit Center. To prepare for the extension of Link to Northgate, respond to changing mobility needs, and improve mobility and access for historically underserved populations, Metro is currently engaged in the North Link Connections Mobility Project in north King County, serving the north Seattle, Shoreline, and North Shore communities. The project will result in an updated mobility network that integrates with and complements Link.

Metro is working in coordination with Sound Transit, the Seattle Department of Transportation, the University of Washington, Community Transit, and many other partners. The integration of Metro's current bus service mobility options with Link will offer current and future Metro customers fast, frequent, and reliable connections to jobs, education, and other opportunities that advance social equity for all.

Table 2 lists key corridors in King County where Sound Transit is the primary provider of two-way, all-day transit service. As Link service continues to expand, Sound Transit will become the high-capacity transit provider in more corridors. As services are introduced and modified, Metro and Sound Transit will continue to integrate them to maximize mobility.

Table 2. Corridors Served Primarily by Sound Transit

Between	And	Via	Major Route
Woodinville	Downtown Seattle	Bothell, Kenmore, Lake Forest Park, Lake City	522
UW Bothell	Bellevue	Totem Lake	535
Redmond	Downtown Seattle	Overlake	545
Bellevue	Downtown Seattle	Mercer Island	550
Issaquah	Downtown Seattle	Eastgate, Mercer Island	554
Burien	Bellevue	SeaTac, Renton	560
Auburn	Overlake	Kent, Renton, Bellevue	566
SeaTac	Federal Way	I-5	574
Federal Way	Downtown Seattle	I-5	577/578
Angle Lake	University District	SeaTac, Rainier Valley, downtown Seattle, Capitol Hill	Link light rail

Figure 3. Metro Corridors Needing Investment per the Service Guidelines (Peak Period, 5–9 a.m. and 3–7 p.m.)

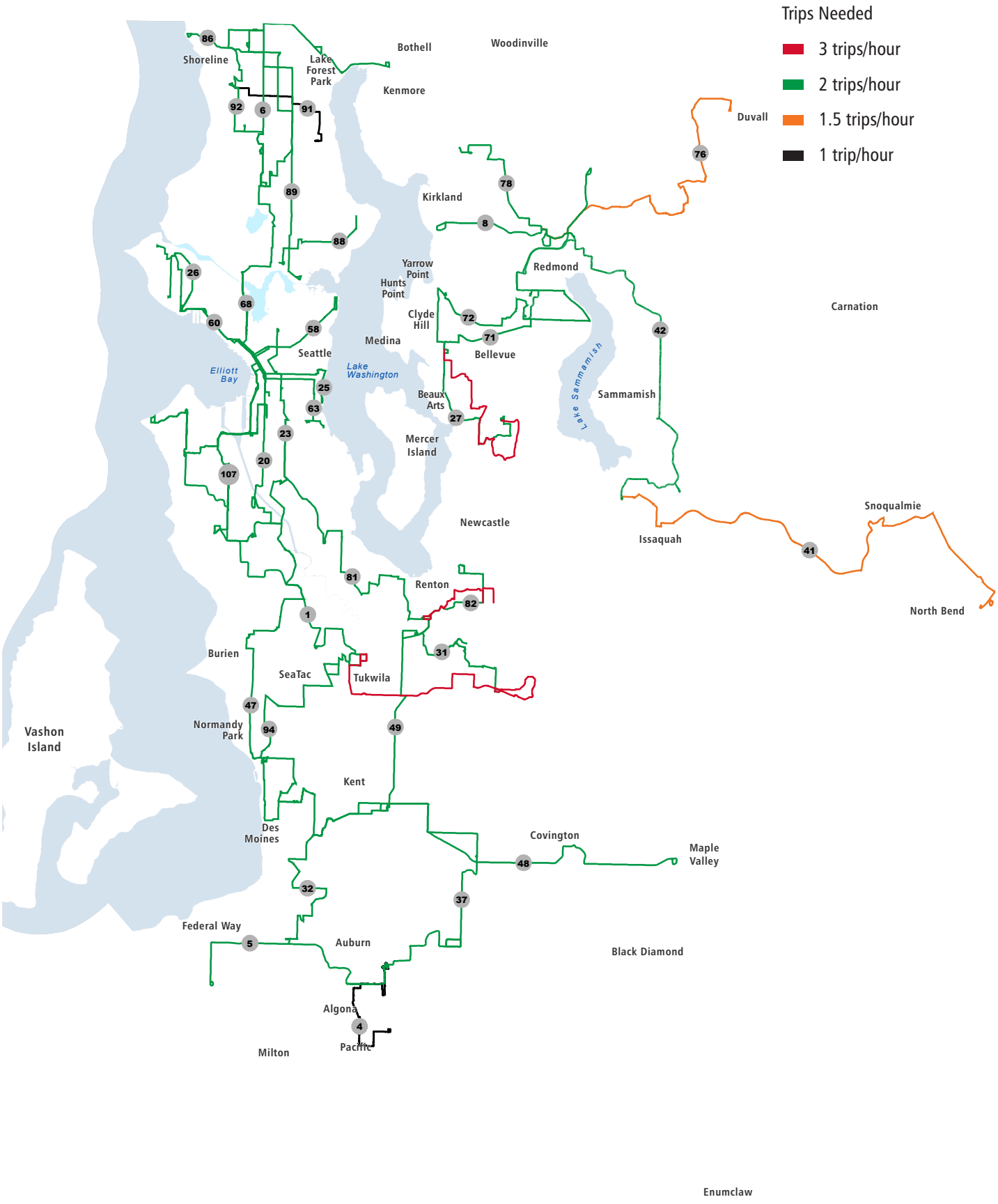


Figure 4. Metro Corridors Needing Investment per the Service Guidelines (Off-Peak Period, 9 a.m.–3 p.m.)

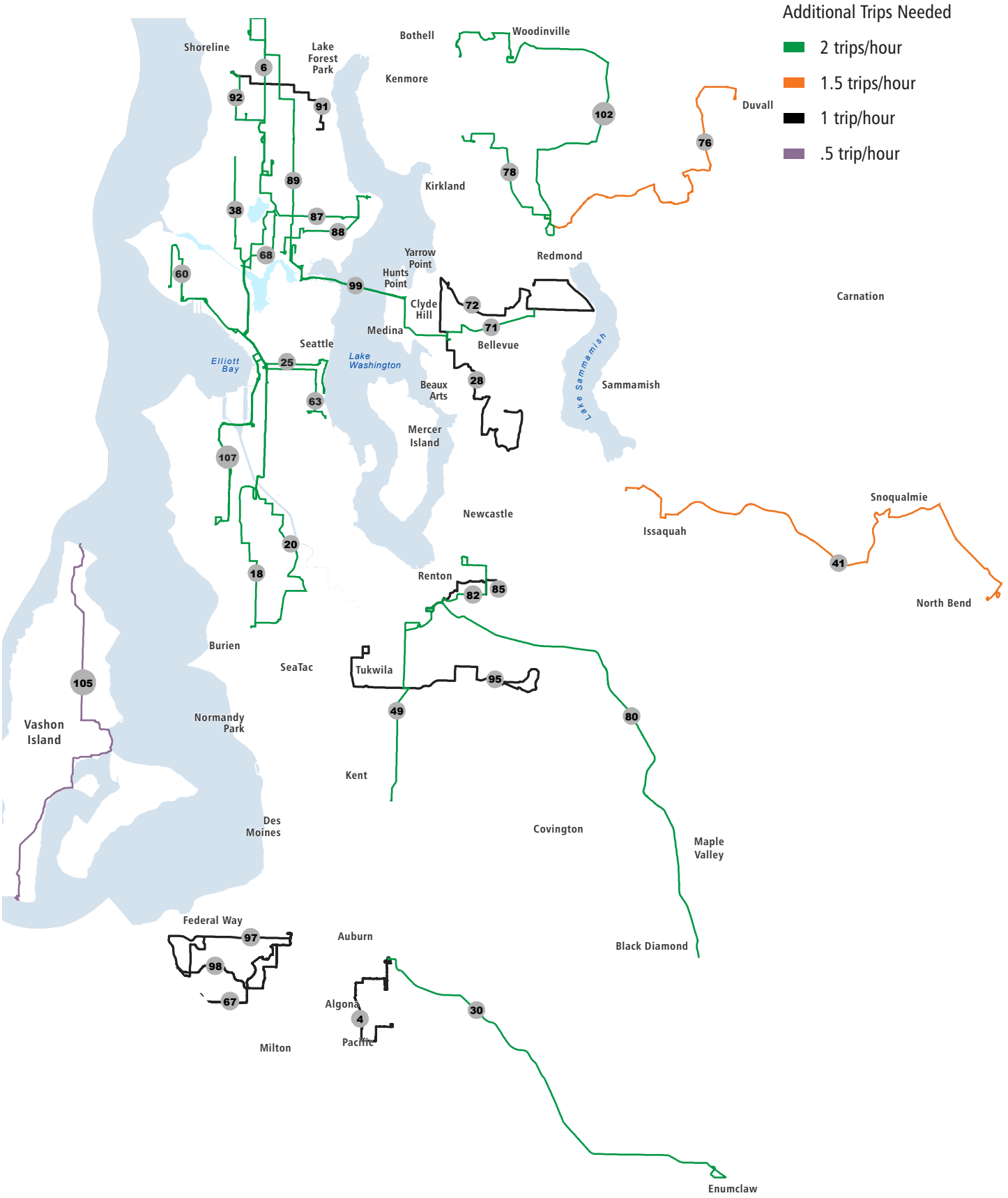
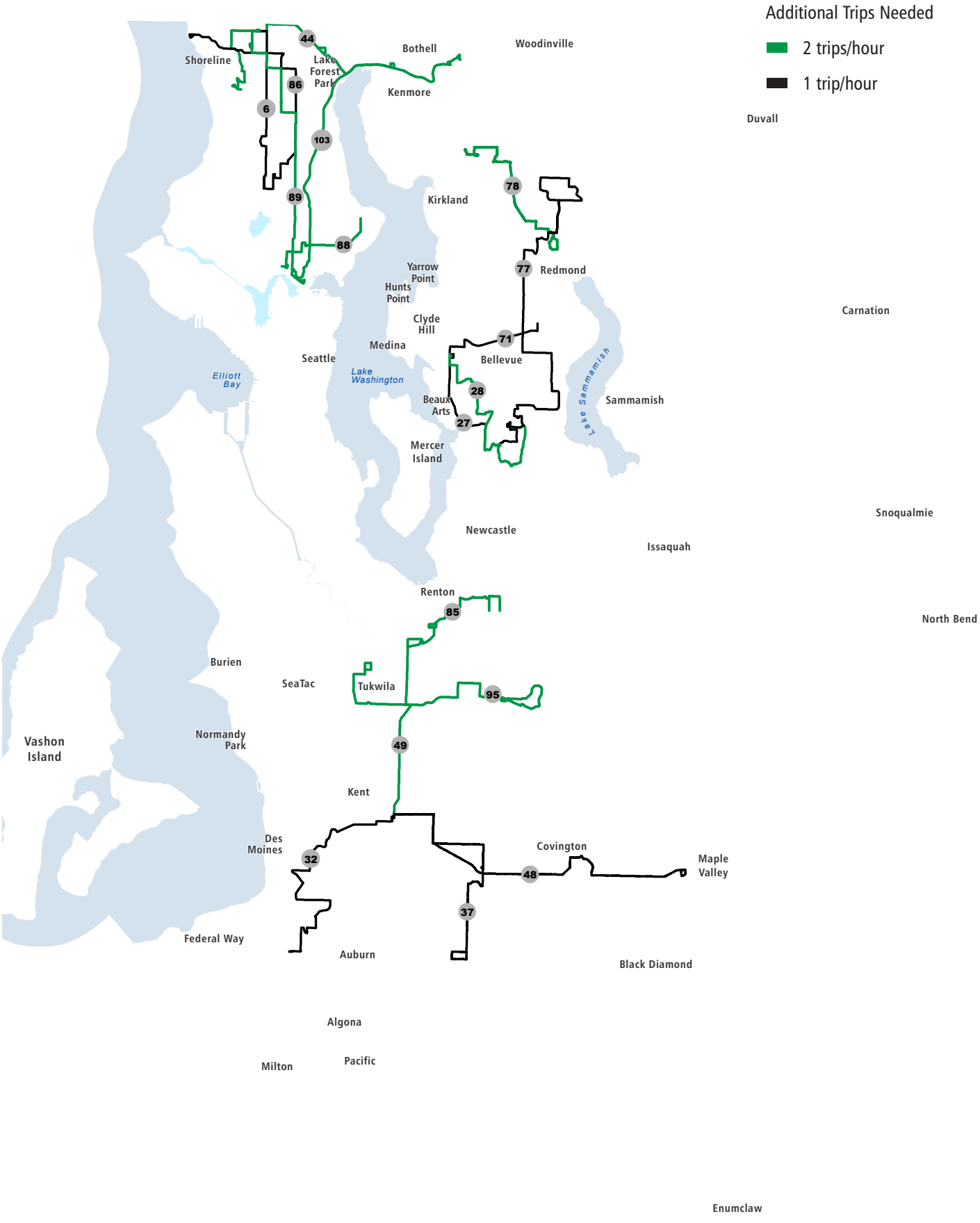


Figure 5. Metro Corridors Needing Investment per the Service Guidelines (Night Period, after 7 p.m.)



Route Productivity (Priority 4)



What is Productivity?

Productivity is a measure of efficiency and an indicator of how much demand there is for service. High productivity indicates high demand for transit, so the region has an interest in meeting that demand and helping it grow even more. Much of the transit service growth envisioned by METRO CONNECTS will happen on routes and in areas that are highly productive. See Appendix A for more about how Metro measures productivity.

Route productivity statistics (Appendix C) inform decisions about service investments, restructures, and reductions. Routes in the top 25 percent are eligible for investment, and routes in the bottom 25 percent are eligible for reduction when the budget requires service reductions. The bus service system is divided into three service types (urban, suburban, and DART/shuttles), and each route is compared only to other routes of the same service type. See Appendix A for definitions of these categories.

- **Suburban routes** remained generally flat, though there are indications of strengthening productivity in the off-peak.
- **Urban routes** saw small decreases in productivity at peak times but a strengthening of productivity during off-peak times.

See Appendix C for route-by-route productivity data and Appendix D for changes to the thresholds designating the top and bottom 25 percent of routes by service type.

Peak Analysis



What is Peak Analysis?

Peak-only services are routes, including local express routes, that run only during the morning and afternoon peak periods on weekdays. Peak-only services add to the all-day network and provide more service at times of peak demand, usually in one direction.

In addition to being evaluated for crowding and reliability, peak-only routes undergo a peak analysis. It compares each route that operates only in the peak period to an underlying local alternative, if one exists. Routes are measured in two metrics:

- **Travel time:** Is the peak-only route 20 percent faster than the local alternative?
- **Ridership:** Does the peak-only route have 90 percent of the local alternative's ridership during the peak hours?

Peak-only routes incur additional operating costs because they require an increase of the fleet and spend a higher-than-average amount of time deadheading (traveling without passengers from the base to the first bus stop, and from the last bus stop back to the base). To justify these additional costs and avoid being assigned top priority for reduction when Metro must reduce service, low-performing peak-only routes must meet at least one of the criteria above. (High-performing peak-only routes are excluded from the top priority for reduction, like all other high-performing routes.) The Service Guidelines provide more information about how Metro uses peak-only metrics when reducing service.

This year, 51 of the 64 peak-only routes analyzed met at least one of the criteria, leaving nine routes that failed both. See Appendix E for the complete results of the peak analysis. However, these metrics are under review as part of Metro's policy update efforts.



Flexible Services

Metro's Flexible Services program (formerly Community Connections) develops and advances projects that build Metro's understanding and experience with new, innovative mobility solutions. These projects complement bus service in communities that lack the land use, density, or topography to support a productive bus service network.

A defining feature of the Flexible Services program is the ability to launch, test, and refine innovative service solutions in partnership with communities. These services leverage Metro's long-standing success in both DART and ridesharing services in combination with emerging mobility technologies. In addition to the current pilot services described below, Metro is continuing to develop new products and services through ideas that emerge from community partnerships and needs, as well as emerging national and international best practices for mobility services.

Pilot Services

- **Community Ride:** Reservation-based or on-demand services for local trips, or connecting to bus service.
- **Community Shuttle:** Metro routes with flexible service areas, provided through community partnerships.
- **Community Van:** Metro vans for local group trips requested by the community and scheduled by a community transportation coordinator to meet local needs.
- **Feeder to Fixed Route:** Users can hail trips to and from a transit hub, on demand, using a phone or mobile app.

Pilot Service Performance

Metro collects and analyzes ridership data for pilot services deployed through the Flexible Services program. Pilot services in operation during September 2019 to February 2020 are listed in Table 3. Please see Appendix A for the method used to develop performance measures.

Table 3: Data for Pilot Services in Operation October 2019–February 2020 – Period Averages

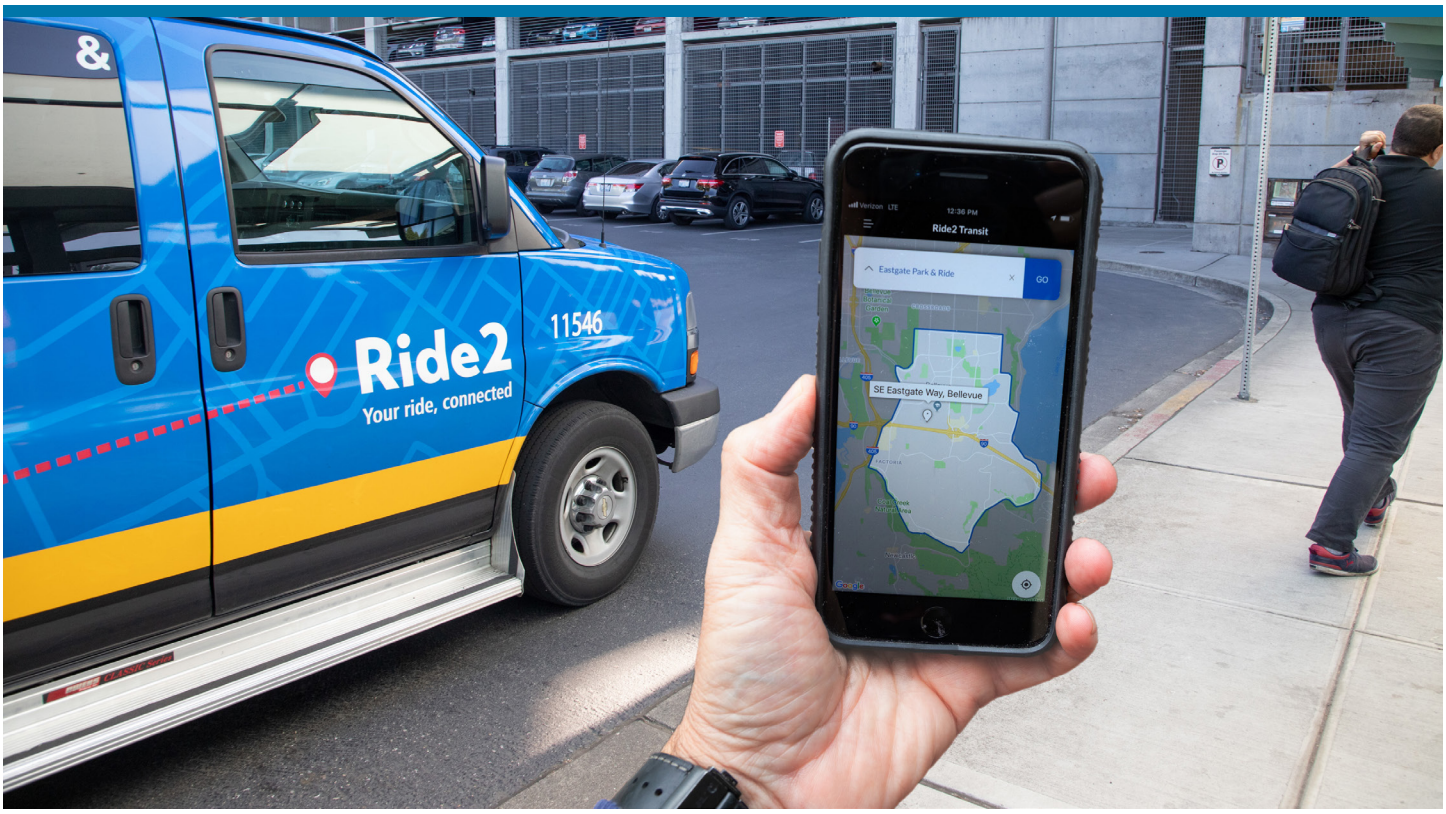
Service	Average Daily Ridership	Cost per Boarding
Snoqualmie Community Shuttle (Route 628)	61	$25.15
Mercer Island Community Shuttle (Route 630)	213	$4.20
Burien Community Shuttle (Route 631)	51	$13.97
Des Moines Community Shuttle (Route 635)	106	$15.35
Black Diamond – Enumclaw Community Ride	18	$61.64
Normandy Park Community Ride	6	$59.37
Shoreline – Lake Forest Park Community Ride	9	$49.04
Sammamish Community Ride	20	$87.70
Vashon Island Community Van[1]	75	$11.66
Duvall Community Van[1]	40	$16.14
Bothell – Woodinville Community Van[1]	92	$9.52
Shoreline – Lake Forest Park Community Van[1]	70	$11.36
Kenmore – Kirkland Community Van[1]	61	$64.03
Trailhead Direct – Issaquah Alps[2]	117	$30.73
Trailhead Direct – Mount Si[2]	278	$16.73
Trailhead Direct – Mailbox Peak[2]	65	$47.63
Trailhead Direct – Cougar Mountain[2]	67	$63.16
Ride2 Eastgate[3]	82	$34.95
Ride2 West Seattle[3]	30	$71.50
Via to Transit – Mount Baker[4]	66	$10.16
Via to Transit – Columbia City[4]	134	$10.16
Via to Transit – Othello[4]	255	$10.16
Via to Transit – Rainier Beach[4]	416	$10.16
Via to Transit – Tukwila International Boulevard[4]	42	$10.16

1 Community Van ridership is measured by number of boardings per month; cost per boarding for Community Van is based on cost of each round trip, regardless of number of passengers on board. Cost includes fuel, insurance, maintenance, and 30% of Community Transportation Coordinator's salary to cover operation time, based on 2019 annual average.

2 Data for 2019: Trailhead Direct 2019 Season, April 20, 2019 through October 27, 2019.

3 Last day of Ride2 service was on 12/20/2019.

4 Cost per boarding is based on Via total combined average. Vehicles travel between stations and are not assigned to a specific station.



What's Next

During the COVID-19 pandemic, Metro suspended operations of many flexible services along with other Metro services. Community Van continued to operate throughout the pandemic, and Via to Transit was restored to service in June. Small vehicle size was a particular challenge for flexible services during the pandemic because of the need to ensure safety for customers and drivers. Metro took actions such as using barriers between customers and drivers, requiring masks, and limiting loads on flexible services as well as on bus service.

Metro is moving forward with several services planned during the period this report was produced. Sammamish Community Van launched in summer 2020, and Juanita Area Community Ride launched in September 2020. Flexible services pilots planned for 2021 include Renton Highlands Community Ride, Kent Industrial Valley Feeder to fixed, Tukwila Community Van, and Algona – Pacific Community Van. Most of these new services were developed as part of the Renton, Kent, Auburn Area Mobility Plan and the North Eastside Mobility Project. In these projects, Metro engaged the community to assess needs and develop flexible services that complement bus service changes, contributing to expanded mobility.

At the same time, Metro faces ongoing financial challenges, and future changes in 2021 and 2022 will likely include discontinuing or not restoring some pilot services.

METRO CONNECTS Progress Report

Overview

METRO CONNECTS is Metro's long-range vision to bring more and better transit service to King County to meet the growing demand and needs of the region through 2040. This is the second progress report on this vision, and is Metro's first step in the long-term annual monitoring of performance metrics associated with METRO CONNECTS.

Measuring Progress

METRO CONNECTS envisions major changes to the King County transit network. The plan outlines key performance metrics intended to measure progress toward the 2040 vision. These metrics measure the following:

- **Transit access.** Walkable access to frequent transit service, including for historically disadvantaged populations, and how people are getting to transit.
- **Transit use.** Use of Metro and Metro-operated transit systems, and transit use during the busiest travel times.
- **Transit efficiency.** The productivity and cost-efficiency of the Metro system.

Table 4 compares current performance on some of these metrics to Metro's goals for 2040. Future system evaluations will include metrics for accessibility and all-day service.

Annual monitoring of the metrics will enable Metro to track progress toward the desired 2040 outcomes. Progress will be affected by economic conditions. Full implementation of METRO CONNECTS will require additional resources beyond what current revenue sources will be able to provide.



Table 4: *METRO CONNECTS Performance Metrics*

	2017*	2018	2019	2040**
Transit access (bus service)				
Proximity of households to transit stops: percentage of households within half a mile of frequent service	50%	52%	52%	73%
Equity of access: percentage of minority households with access to frequent service	47%	49%	49%	77%
Equity of access: percentage of low-income households with access to frequent service	51%	53%	54%	87%
Proximity of jobs to transit stops: percentage of jobs within half a mile of frequent service	69%	69%	70%	87%
Access to transit: percentage of people who bike and walk to transit	78%	79%	77%	84%
Transit use (all transit)				
Ridership: daily boardings across all modes—bus, DART, light rail, flexible services, and paratransit	497,000	504,000	507,000	1,026,000
Mode share: percentage of all commute trips taken on transit (2016 one-year American Community Survey estimates, Table B08101)	13.1%	13.7%	14.6%	23%
Transit efficiency				
Cost per boarding (Metro bus service and DART service only), 2015 dollars*	$4.73	$4.87	$5.22	$3.95
Productivity: boardings per hour (Metro bus service and DART service only)	30.7	29.7	28.5	36.7

* Figures for 2017 have been adjusted and corrected since the 2018 System Evaluation was published.

** METRO CONNECTS target.



Potential Changes to the Service Guidelines and Strategic Plan

Integration with METRO CONNECTS and the Mobility Framework

Metro worked with community members, regional leaders, and an Equity Cabinet to develop a Mobility Framework, Motion 25353, adopted by the King County Council. With the Mobility Framework, the METRO CONNECTS vision can be integrated into the Service Guidelines in a way that prioritizes equity and sustainability, is mindful of new advances in mobility technologies, and guides Metro to invest where needs are greatest. Areas of the guidelines that could be updated include the following:

- **Equity.** Update the definition of equity to be more inclusive of marginalized populations, and develop processes that prioritize equity and lead with racial justice.
- **Innovations and flexible services.** Develop guidelines for how we test new services through pilot programs, and evaluate flexible services and new technologies.
- **Partnerships.** Provide more clarity on the types of partnerships Metro engages in, and actions that cities and other partners can take to support and contribute to transit.
- **METRO CONNECTS.** Revise the guidelines to align and better reflect the service and priorities outlined in METRO CONNECTS.

Metro is working with the King County Council, Regional Transit Committee, and stakeholders to develop proposed policy changes.



Appendices

Appendix A: Methodologies and Process Descriptions 22
Appendix B: King County Low-Income and Minority Census Tracts 26
Appendix C: Route Productivity Data 27
Appendix D: Changes to Route Productivity Thresholds 37
Appendix E: Peak Route Analysis 38
Appendix F: Route-level Reliability 40
Appendix G: Route-level Ridership 41
Appendix H: Service Changes and Corridor Changes 47
Appendix I: Corridor Analysis 52
Appendix J: Investment Needs 58

Appendix A: Methodologies and Process Descriptions

Crowding (Priority 1)

Data is processed for two metrics: crowding and 20-minute standing loads.

Crowding. Data from Automated Passenger Counters (APCs) are collected, validated, cleaned, and compiled for each unique trip in the system (for example, the Route 5 trip that leaves Shoreline Community College at 5:15 a.m. on weekdays). Metro uses several months of data to determine the average maximum load on each trip. This figure is compared to the crowding threshold of the scheduled coach assignment. Each coach type Metro operates has its own crowding threshold. This threshold is determined by adding the number of seats on the coach to the number of standing passengers the coach can accommodate if each passenger has at least 4 square feet of floor space. For example, a coach with 50 seats and 100 square feet of floor space available for passengers to stand would have a crowding threshold of 50 + 100/4 = 75. If a trip's average maximum load is greater than its crowding threshold, it is then determined if other trips that arrive within 15 minutes have the capacity to take the excess load without being overcrowded themselves. If excess capacity does not exist, the route is identified as needing investment. This process prevents Metro from adding too much capacity where it already exists. Estimated investment need is based on the number of hours it takes to provide a trip on the identified route in the identified time period.

Twenty-minute standing loads. Metro compiles data from APCs for each unique trip in the system. Several months of data is used to determine the average departing load from each bus stop served by the trip. The data is also used to determine the average time when buses leave each stop (known as the "passing minute"). These data are then processed to determine whether the passenger load exceeded the number of seats on the scheduled coach assignment for a period of at least 20 consecutive minutes. Where this happens, other trips that arrive within 15 minutes are checked to determine if they have the capacity to take those standing passengers without having standing loads themselves. If excess capacity is not found, the route is identified as needing investment. Note that this measure does not determine if any individual passengers were standing for more than 20 minutes, as Metro is unable to collect such data. Investment need is estimated as above.

Reliability (Priority 2)

On-time performance is measured by comparing actual arrival times at time stops to scheduled arrival times. Buses that arrive at time stops up to 1.5 minutes before the scheduled time and up to 5.5 minutes after the scheduled time are considered to be on time. This allows for random variations resulting from operating in mixed traffic without prompting an unnecessary allocation of resources. All arrivals at time stops are recorded by systems on the bus. This data is then validated and cleaned. For the System Evaluation, late arrivals are analyzed by route and by time period.

The four time periods used are weekdays all day, weekday PM peak, Saturdays all day, and Sundays all day. For each route and each time period, the percentage of recorded arrivals at time stops that are late (more than 5.5 minutes after the scheduled arrival time) are calculated. For all-day measures, routes that arrive late more than 20 percent of the time are identified for investment. For the weekday PM peak period, routes that arrive late more than 35 percent of the time are identified for investment. Investment need is estimated based on how much time must be added to schedules to ensure the route meets the 20 percent or 35 percent goal.

Service Growth (Priority 3)

Target service levels are determined for corridors, which are major transit pathways throughout the county. A combination of productivity, geographic value, and social equity factors are used to determine how much service each corridor should have.

Productivity. The productivity measure includes two primary factors:

Housing. Metro calculates the number of housing units that fall within a quarter-mile, network-based walkshed of each stop served by the corridor. Housing unit information is maintained by the King County Assessor. The number of park-and-ride stalls within the same walkshed, multiplied by a factor of 1.1 (representing average occupancy), is added to this figure. Park-and-ride data is maintained by Metro. A graduated scale establishes the points assigned to each corridor (see the Service Guidelines for more information).

Employment. The number of jobs that fall within the same walkshed is calculated. This proprietary information is provided by the Puget Sound Regional Council. Added to this number is the number of in-person students at campuses of degree-conferring institutes of higher learning that fall within the same walkshed. This data is collected from each institute of higher learning. A graduated scale establishes the points assigned to each corridor (see the Service Guidelines for more information).

Geographic Value. This measure determines the value of connections made between centers. A primary connection between each distinct pair of Regional Growth Centers, Manufacturing/Industrial Centers, and Transit Activity Centers is determined based on two factors: ridership and travel time. These two factors are designed to determine which corridor a typical rider would choose when traveling between two centers. Metro evaluates each corridor serving each pair of centers on these factors; the best corridor is determined to be the primary connection and scores points as outlined in the Service Guidelines.

Social Equity. This measure includes two primary factors:

- Boardings from low-income census tracts
- Boardings from minority census tracts

First, census tracts in King County are divided into two groups: low-income or not low-income. Low-income tracts are those where a greater percentage of the population than the countywide average has low incomes (less than 200 percent of the federal poverty level depending on household size). This data is from the latest American Community Survey 5-year estimates, or decennial census data when it is the most up-to-date and accurate. Second, each corridor's proportion of inbound boardings that happen in low-income tracts is compared to the systemwide average of boardings in low-income tracts. Corridors above the systemwide average receive the greatest numbers of points, while corridors just below the systemwide average receive fewer. (See the Service Guidelines for more details.)

This same process is used to measure boardings from minority census tracts.

Initial target and final target. The aggregate score of the three measures above determine each corridor's initial service level. Then an analysis is conducted that measures how crowded buses would be, given current ridership, if only that level of service were provided. If the initial level of service is not sufficient to handle current ridership, the final target service levels are adjusted upward to ensure the target at least matches current demand. Additional policy considerations are applied for night service to arrive at target service levels for peak, off-peak, and night time periods. Then the target is compared to current service levels in each time period. Investment need is estimated corridor by corridor based on this gap, if one exists, by determining the number of additional trips that are needed to meet the target. Corridors are prioritized for investment based on their initial score, ordered first by geographic value, then productivity, then social equity, then corridor number if a tie exists.

Methodologies and Process Descriptions continued

Route Productivity (Priority 4)

Two measures of productivity are calculated for three time periods (peak, off-peak, and night):

- **Rides per platform hour.** Annualized ridership for each route in each time period is determined based on data collected in one service period (between one service change and the next). Annualized platform hours are similarly calculated. Rides are then divided by platform hours.
- **Passenger miles per platform mile.** Annualized passenger miles (the sum of miles every individual passenger travels) are divided by the number of miles buses traveled on each route in each time period.

Routes are separated into three service types: urban, suburban, and DART/Shuttle:

- **Urban routes** primarily serve the densest parts of the county: the PSRC-designated Regional Growth Centers of Seattle Downtown, First Hill/Capitol Hill, South Lake Union, the University Community, and Uptown.
- **Suburban routes** primarily serve passengers in suburban and rural areas in Seattle and King County.
- **DART/Shuttle routes** are those that provide flexible, community-based service that has different characteristics than the bus service system.

For each group of routes, in each time period, for each measure, the quartiles are calculated based on the results. Each route's performance in each time period in each measure is classified as being in either the top 25 percent, middle 50 percent, or bottom 25 percent of routes within the same service type. This data helps planners know which routes in each category and in each time period are the most and least productive, which informs investment and reduction decisions in accordance with the Service Guidelines.

Peak Analysis

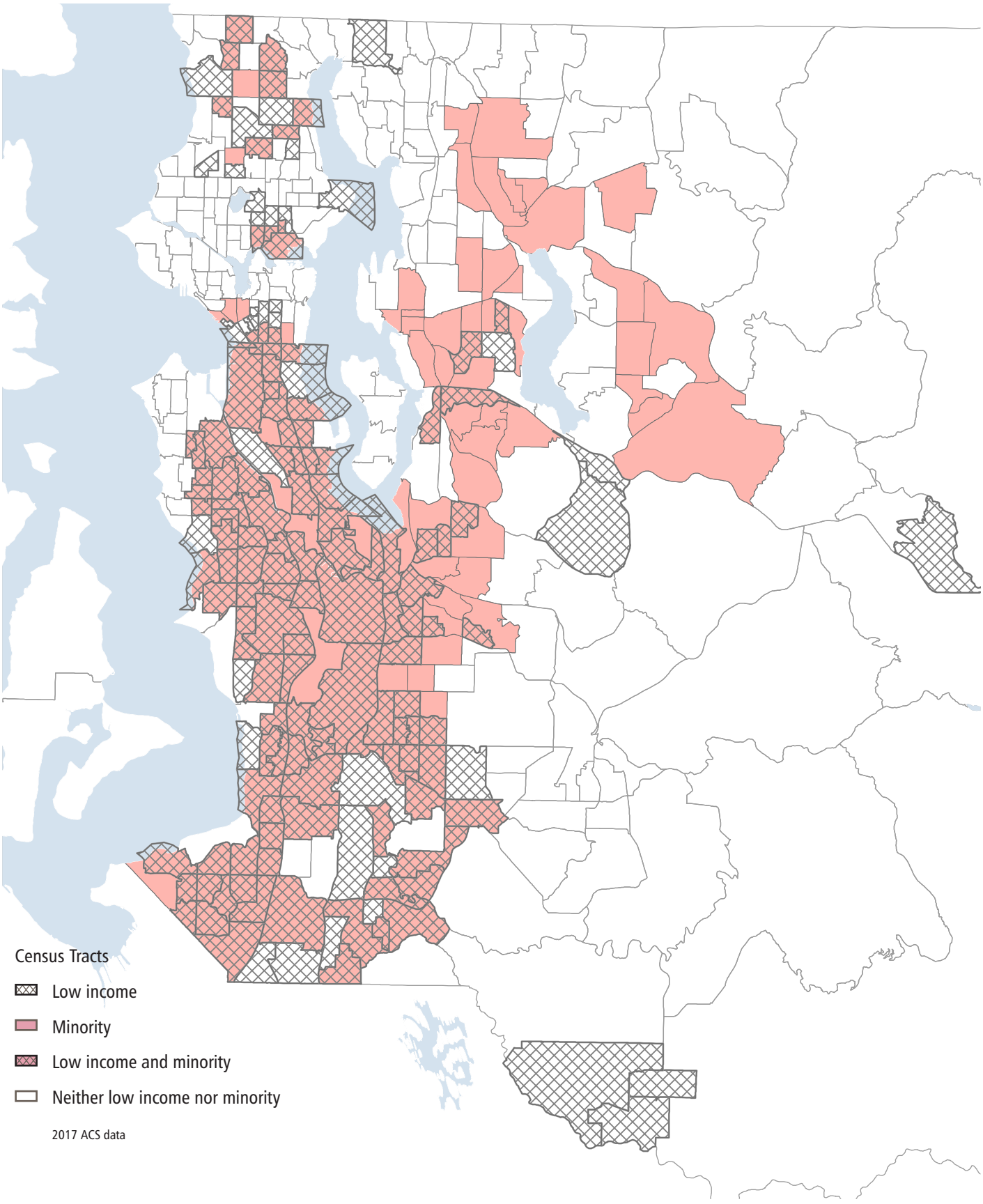
Routes that operate only in the peak period are called peak-only routes. A local alternative for each peak-only route is designated only if the local alternative serves at least 50 percent of the riders of the peak-only route. Each peak-only route is compared to its alternative, if one exists, on two measures: ridership and travel time. Peak-only routes either pass or fail each measure. If the peak-only route's ridership is at least 90 percent of the alternative route's ridership in the peak period, it passes the ridership test. If the peak-only route's scheduled travel time is at least 20 percent faster than the alternative route's travel time, it passes the travel time test. If no local alternative exists, the peak-only route automatically passes both measures. Metro uses the results of this analysis when it is forced to reduce service, in accordance with the Service Guidelines.

Flexible Services

The table below summarizes the performance measures for evaluating flexible services.

Performance Measure	Description of methodology: Community Shuttle, Community Ride, and Ride2	Description of methodology: Via to Transit
Average daily ridership	Measure the level of use of these flexible services over time. High ridership may trigger additional trips and/or conditional conversion to bus service service. Low ridership may trigger re-evaluation of the service and potential right-sizing.	
Direct (or fixed) cost per boarding per passenger	Determine the direct cost per passenger of the service contract with Hopelink. Cost includes service operation, vehicle maintenance and administration conducted by the service provider. (Because fuel prices are highly variable, this cost was excluded from this measure to enable numerical targets for a particular route. Including fuel prices in this measure would require Metro to forecast the future price of fuel in order to set realistic performance targets.) Example: A shuttle that costs $1,200 per day to operate and provides an average of 100 boardings per day costs $12 per boarding. An uncharacteristically high cost per boarding may trigger a re-evaluation of the service.	Determine the direct cost per passenger of the service contract with Via. Cost includes service operation, full vehicle costs, and fuel. The hourly cost for Via during the evaluation period was approximately $45.73 and the average rides/vehicle/hour was 4.5, resulting in an average cost of $10.16 per boarding. An uncharacteristically high cost per boarding may trigger a re-evaluation of the service.

Appendix B: King County Low-Income and Minority Census Tracts



Appendix C: Route Productivity Data

Suburban Routes

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Suburban Routes		Peak		Off Peak		Night	
Bottom 25%		13.1	4.9	13.6	5.4	9.4	3.0
Top 25%		21.6	7.3	25.2	8.6	15.2	4.8
22	Arbor Heights - Westwood Village - Alaska Junction	17.19	3.56	8.74	2.04	6.84	1.64
50	Alki - Columbia City - Othello Station	20.96	5.97	18.48	5.40	9.95	2.96
105	Renton Highlands - Renton TC	27.25	7.58	27.49	7.94	13.53	3.97
107	Renton TC - Rainier Beach	24.23	6.15	23.26	6.36	11.70	
118	Tahlequah - Vashon	11.85	5.10	12.12	3.45	4.92	1.74
119	Dockton - Vashon	11.64	5.21	8.12	2.68		
128	Southcenter - Westwood Village - Admiral District	24.96	8.59	28.58	10.83	14.72	4.78
148	Fairwood - Renton TC		4.85	13.60	5.86	11.92	4.92
153	Kent Station - Renton TC	20.30	7.09				
154	Tukwila Station - Boeing Industrial	15.02	4.53	21.79	6.44		
156	Southcenter - SeaTac Airport - Highline CC	13.25	3.77	16.87	6.42	10.07	3.87
164	Green River CC - Kent Station	34.54	10.67	36.06	13.06	14.91	4.02
166	Kent Station - Burien TC	20.83	7.21	24.72	8.06	15.80	5.41
168	Maple Valley - Kent Station	19.72	6.56	22.31	8.27	18.64	6.11
169	Kent Station - East Hill - Renton TC	23.37	8.76	22.25	8.55	26.20	9.89
180	Auburn - SeaTac Airport - Burien TC	25.96	8.88	32.84	12.96	19.16	7.91
181	Twin Lakes P&R - Green River CC	17.08	4.98	25.92	9.87	15.54	4.80
182	NE Tacoma - Federal Way TC	13.00	3.51	19.68	7.07	12.28	4.25
183	Federal Way - Kent Station	21.75	7.83	22.39	9.93		4.57
186	Enumclaw - Auburn Station	9.92	2.40				
187	Federal Way TC - Twin Lakes	20.27	5.63	32.40	9.91	15.09	3.56

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Suburban Routes		Peak		Off Peak		Night	
Bottom 25%		13.1	4.9	13.6	5.4	9.4	3.0
Top 25%		21.6	7.3	25.2	8.6	15.2	4.8
200	Downtown Issaquah - North Issaquah			8.17	1.95		
208	Issaquah - North Bend	5.75	3.20	8.98	5.41	4.65	2.23
221	Education Hill - Overlake - Eastgate	17.78	5.48	21.12	6.89	9.84	2.39
226	Eastgate - Crossroads - Bellevue	22.53	6.98	22.16	6.80	12.60	3.81
232	Duvall - Bellevue	14.03	5.38				
234	Kenmore - Kirkland TC - Bellevue	19.13	7.29	14.66	5.37	11.73	4.16
235	Kingsgate - Kirkland TC - Bellevue	20.38	6.97	16.82	5.99	10.01	3.86
236	Woodinville - Totem Lake - Kirkland	7.58	2.35	7.85	2.75	5.94	1.82
237	Woodinville - Bellevue	15.84	8.28				
238	Bothell - Totem Lake - Kirkland	9.57	2.92	11.47	4.25	6.38	2.16
240	Bellevue - Newcastle - Renton	17.75	6.93	22.22	9.17	12.81	5.82
241	Eastgate - Factoria - Bellevue	13.64	4.37	11.07	3.90	7.29	2.78
243	Overlake - Kenmore	2.47	1.02				
244	Kenmore - Overlake	12.28	6.03				
245	Kirkland - Overlake - Factoria	20.67	5.82	22.07	6.77	14.59	4.17
246	Eastgate - Factoria - Bellevue	12.36	3.16	8.67	2.53		
248	Avondale - Redmond TC - Kirkland	20.29	5.72	20.43	6.07	12.10	2.99
249	Overlake - South Kirkland - South Bellevue	17.59	5.08	16.55	5.65	10.83	3.70
269	Issaquah - Overlake	11.81	5.00	10.70	5.04	4.20	1.60
330	Shoreline CC - Lake City	18.57	5.79	26.56	8.99		

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Suburban Routes		Peak		Off Peak		Night	
Bottom 25%		13.1	4.9	13.6	5.4	9.4	3.0
Top 25%		21.6	7.3	25.2	8.6	15.2	4.8
331	Shoreline CC - Kenmore	15.12	5.85	17.57	7.38	9.22	3.00
342	Shoreline - Bellevue TC - Renton	15.37	8.17				
345	Shoreline CC - Northgate	26.53	7.24	29.96	8.61	9.23	3.00
346	Aurora Village - Northgate	24.45	7.25	25.19	7.14	9.19	3.65
347	Mountlake Terrace - Northgate	20.63	6.28	18.44	5.10	15.25	4.67
348	Richmond Beach - Northgate	19.88	5.01	21.64	5.56		4.59
671	Federal Way - Tukwila	47.80	14.30	60.92	18.90	40.30	13.42
672	Bellevue - Crossroads - Redmond	38.89	11.68	38.83	12.33	24.88	7.41
676	Burien - Tukwila Int'l Blvd - Renton	28.16	8.66	31.13	11.83	22.94	7.80
952	Auburn P&R - Kennydale - Seaway TC	5.70	4.91	6.70	7.00		

Route Productivity Data continued

DART/Shuttle Routes

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: DART/Shuttle Routes		Peak		Off Peak		Night	
Bottom 25%		8.2	2.5	6.7	2.3	5.2	1.3
Top 25%		15.1	3.6	16.0	4.0	9.4	2.8
204**	South Mercer Island - Mercer Island P&R	8.2	1.8	7.7	2.7	0.0	0.0
224++	Duvall - Redmond TC	8.0		8.4	3.9		
773	Seacrest Park - Alaska Junction	14.7	3.0	13.9	2.3		
775	Seacrest Park - Admiral District - Alki	17.0	3.5	21.4	3.7		
901DART	Mirror Lake - Federal Way TC	18.5	5.4	21.7	5.9	14.1	4.1
903DART	Twin Lakes - Federal Way TC	12.8	2.9	15.9	3.6	6.6	1.5
906DART	Fairwood - Southcenter	16.0	5.1	16.3	6.0	11.9	4.7
907DART	Black Diamond - Renton TC			6.1	2.8		
908DART	Renton Highlands - Renton TC	7.5	2.0	5.3	1.5	3.8	0.9
910DART	North Auburn - SuperMall			9.6	2.1	7.1	1.7
913DART	Kent Station - Riverview	10.3	2.8				
914DART	Kent - Kent East Hill			8.3	2.5	5.8	1.5
915DART	Enumclaw - Auburn Station			16.6	5.6	10.1	3.1
916DART	Kent - Kent East Hill			6.4	2.7	5.8	2.0
917DART	Pacific - Auburn	9.9	2.6	6.8	1.8	5.0	1.3
930DART	Kingsgate - Redmond	10.8	4.2	12.1	4.4		
931DART	Bothell - Redmond	5.0	2.3	3.5	1.7		

Route Productivity Data continued

Urban Routes

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
1	Kinnear - Seattle CBD	41.52	10.97	32.63	7.53	24.43	5.27
2	West Queen Anne - Seattle CBD - Madrona Park	51.70	12.34	46.14	9.95	27.80	6.15
3	Seattle Pacific University - North Queen Anne - Seattle CBD - Madrona Park	47.71	10.93	39.63	9.18	22.70	4.36
4	Seattle Pacific University - East Queen Anne - Seattle CBD - Judkins Park	43.85	9.29	29.19	7.15	24.35	4.74
5	Shoreline CC - Seattle CBD	44.25	14.91	37.59	13.77	23.23	7.61
5X	Greenwood - Seattle CBD	34.57	13.44				
7	Rainier Beach - Seattle CBD	43.72	14.14	49.18	15.27	35.50	10.89
8	Seattle Center - Capitol Hill - Mount Baker	54.47	12.14	42.09	10.06	30.74	6.91
9	Rainier Beach - Capitol Hill	26.86	7.84	23.01	7.50		
10	Capitol Hill - Seattle CBD	36.70	6.71	39.33	7.96	25.70	4.91
11	Madison Park - Seattle CBD	50.31	11.56	44.65	9.34	29.65	5.19
12	Interlaken Park - Seattle CBD	50.82	9.73	38.64	7.49	17.55	3.49
13	Seattle Pacific University - Queen Anne - Seattle CBD	40.33	11.25	35.69	9.01	29.00	6.44
14	Mount Baker - Seattle CBD	39.35	9.22	32.01	7.07	20.43	4.39
15X	Blue Ridge - Ballard - Seattle CBD	41.81	16.76				
17X	Sunset Hill - Ballard - Seattle CBD	39.54	16.45	28.40	11.59		
18X	North Beach - Ballard - Seattle CBD	35.30	14.36				
19	West Magnolia - Seattle CBD	24.76	8.50				
21	Arbor Heights - Westwood Village - Seattle CBD	36.84	12.12	28.30	10.22	16.17	5.99
21X	Arbor Heights - Westwood Village - Seattle CBD	27.70	14.59				
24	Magnolia - Seattle CBD	36.56	11.90	25.90	9.33	14.15	4.70

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
26	Northgate - East Green Lake - Wallingford - Seattle CBD	37.80	12.82	25.11	11.33	12.80	4.87
27	Colman Park - Leschi Park - Seattle CBD	33.33	7.23	19.53	4.60	14.01	3.10
28	Broadview - Crown Hill - Ballard - Seattle CBD via Leary Way NW	33.03	11.44	26.68	10.90	12.06	4.43
29	Ballard - Queen Anne - Seattle CBD	27.10	6.24	12.30	3.51		
31	University District - Fremont - Magnolia	30.25	7.95	24.95	7.77	15.24	3.40
32	University District - Fremont - Seattle Center	36.66	11.05	30.46	10.27	20.96	6.05
33	Discovery Park - Seattle CBD	42.55	12.97	31.04	9.09	14.40	4.58
36	Othello Station - Beacon Hill - Seattle CBD	41.87	11.54	41.17	11.30	28.59	7.63
37	Alaska Junction - Alki - Seattle CBD	12.71	6.68				
40	Northgate TC - Ballard - Seattle CBD via Leary Av NW	44.22	12.90	40.54	13.51	23.61	7.65
41	Lake City - Seattle CBD via Northgate	28.45	17.24	22.83	12.67	14.82	8.72
43	University District - Capitol Hill - Seattle CBD	22.89	5.49	23.89	6.15	11.08	3.19
44	Ballard - Wallingford - Montlake	60.04	16.64	46.09	12.66	34.11	8.83
45	Loyal Heights - University District	37.60	8.68	42.85	11.62	25.84	5.78
47	Summit - Seattle CBD	26.20	5.03	21.39	4.17	16.85	2.96
48	Mount Baker - University District	31.40	9.53	25.87	7.64	14.36	3.97
49	University District - Capitol Hill - Seattle CBD	41.99	15.27	38.84	14.86	31.13	11.40
55	Admiral District - Alaska Junction - Seattle CBD	21.94	10.03				
56	Alki - Seattle CBD	30.03	13.61	17.53	10.30		

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
57	Alaska Junction - Seattle CBD	34.49	16.12				
60	Westwood Village - Georgetown - Capitol Hill	31.38	9.50	29.52	9.29	21.21	6.29
62	Sand Point – Green Lake – Seattle CBD	42.08	12.20	30.77	10.00	19.50	6.31
63	Northgate - Cherry Hill	27.67	9.94	22.87	8.99		
64	Jackson Park - Cherry Hill	29.48	9.41				
65	Jackson Park – Lake City – University District	47.14	11.48	33.14	8.34	23.97	6.05
67	Northgate TC - University District	43.35	11.38	41.67	10.61	28.48	6.54
70	University District - Seattle CBD	47.97	15.80	37.92	14.01	21.96	7.76
71	Wedgwood - University District	26.88	5.84	26.25	5.36	17.16	3.38
73	Jackson Park - Cowen Park - University District			28.64	7.70	20.85	5.63
74	Sand Point - Seattle CBD	22.60	9.23	9.10	2.96		
75	Northgate TC - Lake City - Seattle CBD	37.05	9.39	31.39	8.15	19.07	4.69
76	Wedgwood - Seattle CBD	39.41	14.53	20.27	9.10		
77	North City - Seattle CBD	30.87	14.97				
78	Children's Hospital - UW Station	16.43	2.89	14.56	2.76		
101	Renton TC - Seattle CBD	26.66	19.08	20.89	15.82	19.87	15.05
102	Fairwood - Seattle CBD	26.17	18.10				
106	Renton TC - Rainier Beach - Seattle CBD	35.24	9.54	33.49	9.96	20.33	6.72
111	Lake Kathleen - Seattle CBD	17.05	13.21				
113	Shorewood - Seattle CBD	17.26	9.54				
114	Renton Highlands - Seattle CBD	13.84	10.25				
116	Fauntleroy Ferry - Seattle CBD	19.10	7.25				

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
118X	Tahlequah - Vashon	17.22	9.01	9.93	5.02		
119X	Dockton - Vashon	23.25	4.55				
120	Burien TC - Westwood Village - Seattle CBD	30.41	14.23	29.95	14.07	22.12	10.58
121	Highline CC -Burien TC - Seattle CBD via 1st Av S	14.73	7.64	10.67	4.48		
122	Highline CC -Burien TC - Seattle CBD via Des Moines Memorial Dr S	14.50	7.79	15.32	9.05		
123	Burien - Seattle CBD	21.17	13.18				
124	Tukwila - Georgetown - Seattle CBD	32.71	11.52	32.41	10.57	20.07	7.49
125	Westwood Village - Seattle CBD	23.36	10.26	19.07	8.78	7.63	3.34
131	Burien TC - Highland Park - Seattle CBD	37.09	15.26	41.02	15.96	23.14	8.68
132	Burien TC - South Park - Seattle CBD	32.65	13.05	30.58	11.50	19.65	7.21
143	Black Diamond - Renton TC - Seattle CBD	15.38	10.56				
150	Kent Station - Southcenter - Seattle CBD	25.84	17.25	23.89	18.93	18.89	14.56
157	Lake Meridian - Seattle CBD	13.44	10.28				
158	Kent East Hill - Seattle CBD	15.34	11.55				
159	Timberlane - Seattle CBD	13.27	9.53				
167	Renton - Newport Hills - University District	21.47	17.48	15.29	18.26		
177	Federal Way - Seattle CBD	12.57	9.11				
178	South Federal Way - Seattle CBD	12.19	9.50				
179	Twin Lakes - Seattle CBD	16.61	14.53				
190	Redondo Heights - Seattle CBD	11.09	8.55				
192	Star Lake - Seattle CBD	9.62	7.89				

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
193	Federal Way - First Hill	12.99	10.57				
197	Twin Lakes - University District	12.96	11.03	11.77	8.10		
212	Eastgate - Seattle CBD	36.87	20.84	21.30	11.24		
214	Issaquah - Seattle CBD	23.13	16.74				
216	Sammamish - Seattle CBD	29.06	20.24				
217	Seattle CBD - Eastgate - Issaquah	15.00	10.93				
218	Issaquah Highlands - Seattle CBD	31.69	20.86	23.04	16.36		
219	Redmond - Sammamish - Seattle CBD	23.88	19.89				
252	Kingsgate - Seattle CBD	20.38	14.05				
255	Brickyard - Kirkland TC - Seattle CBD	23.96	14.33	17.51	10.79	13.69	8.80
257	Brickyard - Seattle CBD	23.31	16.02				
268	Redmond - Seattle CBD	29.83	20.00				
271	Issaquah - Bellevue - University District	23.18	10.50	22.53	11.36	16.27	7.81
277	Juanita - University District	12.16	5.52	18.09	8.03		
301	Aurora Village - Seattle CBD	31.44	22.78	27.94	20.68		
303	Shoreline - First Hill	27.97	14.91				
304	Richmond Beach - Seattle CBD	24.37	17.79				
308	Horizon View - Seattle CBD	14.14	8.19				
309	Kenmore - First Hill	26.37	14.56				
311	Woodinville - Seattle CBD	22.02	15.92				
312	Bothell - Seattle CBD	29.00	17.12	19.38	10.39		
316	Meridian Park - Seattle CBD	36.75	16.01				
355	Shoreline CC - University District - Seattle CBD	28.20	12.74	20.39	9.11		
372	Woodinville - Lake City - University District	35.55	10.55	39.76	11.68	24.39	5.64

Route Productivity Data continued

Route	Description	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Fall 2019 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		22.2	9.5	21.3	8.0	16.3	4.7
Top 25%		37.8	15.0	37.9	11.7	25.7	7.8
373	Aurora Village - University Village	31.63	10.46	30.83	9.00		
673	Westwood Village - Alaska Junction - Seattle CBD	36.69	14.57	33.44	15.18	19.88	9.15
674	Crown Hill - Ballard - Seattle Center - Seattle CBD	58.68	17.26	54.42	17.64	36.38	11.00
675	Aurora Village - Seattle CBD	48.25	18.28	51.05	21.15	41.11	16.06
--	First Hill Streetcar	47.64	11.75	47.64	11.75	47.64	11.75
--	South Lake Union Streetcar	11.8	6.0	11.8	6.0	11.8	6.0
--	West Seattle Water Taxi	87.0	31.0				
--	Vashon Island Water Taxi	159.0	79.0				

* Designates routes receiving Seattle investments

** Water Taxi is operated by Metro's Marine Division

Appendix D: Changes to Route Productivity Thresholds

Top 25%

Service Type	Year	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Suburban	2020	21.6	7.3	25.2	8.6	15.2	4.8
	2019	24.1	7.8	25.3	8.5	15.8	5.4
	Change	-2.5	-0.5	-0.1	0.1	-0.6	-0.6
Urban	2020	37.8	15.0	37.9	11.7	25.7	7.8
	2019	40.3	16.4	36.4	11.9	24.7	7.7
	Change	-2.5	-1.4	1.5	-0.2	1.0	0.1
DART/Shuttle	2020	15.1	3.6	16.0	4.0	9.4	2.8
	2019	13.8	4.5	14.8	4.5	12.7	4.7
	Change	1.3	-0.9	1.2	-0.5	-3.3	-1.9

Bottom 25%

Service Type	Year	Peak		Off Peak		Night	
		Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile	Rides/ Platform Hour	Passenger Miles/ Platform Mile
Suburban	2020	13.1	4.9	13.6	5.4	9.4	3.0
	2019	13.7	5.3	11.9	4.9	8.4	2.8
	Change	-0.6	-0.4	1.7	0.5	1.0	0.2
Urban	2020	24.3	10.1	21.2	7.4	16.6	4.3
	2019	24.7	9.8	22.4	7.5	15.7	4.4
	Change	-0.4	0.3	-1.2	-0.1	0.9	-0.1
DART/Shuttle	2020	8.9	2.5	8.1	2.4	12.7	4.7
	2019	8.1	2.1	7.4	2.3	13.0	4.7
	Change	0.8	0.4	0.7	0.1	-0.3	0.0

Appendix E: Peak Route Analysis

Route	Description	Alternative Route(s)*	Ridership ≥ 90% of alternative	Travel Time ≥ 20% faster than alternative
5EX	Shoreline CC - Seattle CBD	5	No	No
9EX	Rainier Beach - Capitol Hill	7	No	No
15EX	Blue Ridge - Ballard - Seattle CBD	674	No	Yes
17EX	Sunset Hill - Ballard - Seattle CBD	29	Yes	Yes
18EX	North Beach - Ballard - Seattle CBD	40	No	No
19	West Magnolia - Seattle CBD	24	No	No
21EX	Arbor Heights - Westwood Village - Seattle CBD	21	Yes	Yes
29	Ballard - Queen Anne - Seattle CBD	2	No	Yes
37	Alaska Junction - Alki - Seattle CBD	773	Yes	Yes
55	Admiral District - Alaska Junction - Seattle CBD	50	Yes	No
56	Alki - Seattle CBD	50	Yes	Yes
57	Alaska Junction - Seattle CBD	56	Yes	No
63EX	Northgate - Cherry Hill	303EX	Yes	No
64EX	Lake City - First Hill	76	No	Yes
76	Wedgwood - Seattle CBD	71	Yes	No
77EX	North City - Seattle CBD	373EX	Yes	Yes
102	Fairwood - Renton TC - Seattle CBD	148	Yes	No
111	Lake Kathleen - Seattle CBD	None	Yes	Yes
113	Shorewood - Seattle CBD	None	Yes	Yes
114	Renton Highlands - Seattle CBD	240	Yes	Yes
116EX	Fauntleroy Ferry - Seattle CBD	673	No	No
118EX	Tahlequah - Seattle CBD via ferry	118	Yes	No
119EX	Dockton - Seattle CBD via ferry	119	Yes	No
121	Highline CC -Burien TC - Seattle CBD via 1st Av S	166	Yes	Yes
122	Highline CC -Burien TC - Seattle CBD via Des Moines Memorial Dr S	156	Yes	Yes
123	Burien - Seattle CBD	121	Yes	No
154	Tukwila Station - Boeing Industrial	124	No	No
157	Lake Meridian - Seattle CBD	None	Yes	Yes
167	Renton - Newport Hills - University District	560EX	Yes	Yes
177	Federal Way - Seattle CBD	577EX	No	No
178	South Federal Way - Seattle CBD	177	Yes	No
179	Twin Lakes - Seattle CBD	181	Yes	No
190	Redondo Heights - Seattle CBD	574EX	No	Yes
193EX	Federal Way - First Hill	None	Yes	Yes
197	Twin Lakes - University District	181	Yes	Yes
197	Twin Lakes - University District	181	Yes	Yes
212	Eastgate - Seattle CBD	554EX	Yes	No

Peak Route Analysis continued

Route	Description	Alternative Route(s)*	Ridership ≥ 90% of alternative	Travel Time ≥ 20% faster than alternative
214	Issaquah - Seattle CBD	554EX	No	No
216	Sammamish - Seattle CBD	269	Yes	No
217	Issaquah - Eastgate - Seattle CBD	554EX	No	Yes
218	Issaquah Highlands - Seattle CBD	554EX	Yes	Yes
219	Redmond - Sammamish - Seattle CBD	None	Yes	Yes
232	Duvall - Bellevue	248	Yes	Yes
237	Woodinville - Bellevue	311	No	Yes
243EX	Overlake - Kenmore	930	Yes	Yes
244	Kenmore - Overlake	234	Yes	Yes
252	Kingsgate - Seattle CBD	255	No	Yes
257	Brickyard - Seattle CBD	238	Yes	Yes
268	Redmond - Seattle CBD	545	No	Yes
301	Aurora Village - Seattle CBD	675	No	Yes
303EX	Shoreline - First Hill	None	Yes	Yes
304	Richmond Beach - Seattle CBD	348	Yes	Yes
308	Horizon View - Seattle CBD	331	Yes	No
309EX	Kenmore - First Hill	312EX	Yes	Yes
311	Woodinville - Seattle CBD	232	Yes	Yes
312EX	Bothell - Seattle CBD	522EX	Yes	No
316	Meridian Park - Seattle CBD	26EX	Yes	Yes
342	Shoreline - Bellevue TC - Renton	None	Yes	Yes
355EX	Shoreline CC - University District - Seattle CBD	5	No	No
Vashon Water Taxi	Vashon - Seattle CBD	118	Yes	Yes
W. Seattle Water Taxi	West Seattle - Seattle CBD	37	Yes	Yes

Peak-only routes 143, 373 Express, 930, and 931 are included in the corridor analysis because they each serve as the only route on one of Metro's corridors during at least one time period. These routes are not analyzed as part of the peak analysis because their target service levels are set by the corridor analysis.

* Alternative routes must serve at least 50% of riders on the peak-only route.
** Water Taxi is operated by Metro's Marine Division.

Appendix F: Route-level Reliability

over the lateness threshold

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
1	10%	12%	12%	24%
5	19%	31%	25%	19%
7	15%	17%	23%	12%
8	11%	17%	16%	26%
10	24%	25%	10%	8%
11	18%	26%	19%	31%
15X	22%	34%		
17X	28%	23%		
18X	28%	32%		
21	17%	23%	27%	15%
22	22%	50%	7%	27%
24	20%	31%	25%	22%
26X	22%	25%	23%	20%
28X	19%	23%	27%	20%
33	15%	28%	21%	15%
40	19%	26%	31%	43%
43	25%	23%	15%	6%
50	20%	36%	10%	18%
60	21%	26%	23%	16%
62	21%	34%	21%	15%
63X	34%	41%		
64X	34%	43%		
76	30%	41%		
77X	20%	21%		
106	21%	23%	19%	14%
116X	22%	19%		
119	21%	28%		
124	16%	21%	23%	17%
125	21%	32%	12%	10%
131	22%	28%	28%	23%
132	20%	22%	21%	19%
143	29%	35%		
153	22%	43%		
154	22%	24%		
156	13%	17%	9%	24%
157	31%	33%		
159	21%	33%		
167	20%	22%		

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
169	11%	14%	21%	19%
186	20%	35%		
190	21%	13%		
193X	23%	26%		
197	24%	29%		
208	20%	43%	26%	
218	21%	7%		
226	16%	19%	20%	25%
232	21%	18%		
235	21%	26%	6%	5%
238	23%	33%	16%	15%
244	36%	39%		
257	22%	39%		
268	22%	21%		
277	36%	36%		
301X	23%	32%		
303X	22%	36%		
308	35%	62%		
309X	18%	39%		
316	34%	51%		
330	20%	33%		
342	21%	33%		
E Line	22%	25%		

Appendix G: Route-level Ridership and Hours

Metro adopted a more accurate methodology to process data from its automatic passenger counters. This methodology was applied to last year's data to provide an apples-to-apples comparison. Data for 2015 will not match the data published in last year's System Evaluation.

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
1	2,400	2,700	300	67	78	11
2	5,900	5,900	0	138	137	-1
3	8,100	6,800	-1,300	190	168	-22
4	2,700	3,900	1,200	110	109	-1
5	8,000	7,700	-300	203	218	15
7	11,200	11,200	0	260	261	1
8	8,600	8,800	200	194	195	1
9	1,000	1,000	0	37	37	0
10	3,200	3,200	0	94	95	1
11	4,100	4,200	100	93	97	4
12	3,400	3,500	100	86	86	0
13	2,400	2,300	-100	64	65	1
14	3,000	3,400	400	87	104	17
15X	1,400	1,500	100	33	35	2
17X	1,100	1,200	100	27	30	3
18X	1,100	1,000	-100	27	27	1
19	300	400	100	13	14	1
21	4,800	4,600	-200	158	159	1
22	200	200	0	16	17	1
24	2,300	2,100	-200	74	74	0
26X	3,000	2,700	-300	95	97	2
27	1,200	1,300	100	50	50	0
28X	3,300	3,000	-300	106	110	4
29	1,100	1,000	-100	38	39	1
31	1,800	1,800	0	67	68	1
32	2,300	2,400	100	77	77	0
33	2,100	2,000	-100	60	60	0
36	9,200	9,200	0	237	242	5
37	200	200	0	13	13	1
40	12,600	13,200	600	315	343	28
41	8,800	6,800	-2,000	233	279	46
43	700	700	0	32	33	1
44	8,900	8,800	-100	177	179	2
45	6,800	6,800	0	186	186	0

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
47	500	600	100	23	24	1
48	5,600	5,200	-400	199	205	6
49	6,000	6,300	300	169	169	0
50	2,400	2,500	100	137	148	11
55	900	900	0	37	37	0
56	700	800	100	26	27	1
57	500	500	0	13	14	1
60	5,700	5,600	-100	193	192	-1
62	8,100	8,100	0	244	245	1
63	700	900	200	30	30	0
64X	800	900	100	30	31	1
65	5,700	5,800	100	146	156	10
67	5,700	6,000	300	146	151	5
70	8,600	8,100	-500	216	217	1
71	1,300	1,300	0	51	51	0
73	700	700	0	24	25	1
74	1,300	1,100	-200	50	56	6
75	4,600	4,300	-300	136	136	0
76	1,600	1,700	100	44	44	0
77	1,100	1,200	100	36	37	1
78	200	300	100	14	14	0
101	4,700	3,900	-800	154	166	12
102	1,400	1,300	-100	40	46	6
105	900	1,000	100	38	38	0
106	5,800	5,600	-200	178	179	1
107	2,700	2,500	-200	117	121	4
111	800	900	100	43	49	6
113	200	300	100	13	14	1
114	400	500	100	31	32	1
116	600	600	0	29	30	1
118X	200	500	300	11	42	31
118	400	500	100	30	42	12
119X	100	300	200	5	22	17
119	200	300	100	12	22	10
120	8,400	8,200	-200	243	298	55
121	900	900	0	56	56	0
122	400	500	100	30	30	0

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
123	300	300	0	14	14	0
124	4,200	4,100	-100	137	137	0
125	1,400	1,300	-100	60	62	2
128	3,400	3,200	-200	140	139	-1
131	3,300	3,500	200	93	97	4
132	2,900	3,000	100	103	103	0
143	500	600	100	35	36	1
148	600	600	0	43	44	1
150	6,300	5,400	-900	208	225	17
153	800	800	0	42	42	0
154	100	200	100	9	9	0
156	1,000	1,000	0	70	72	2
157	200	300	100	17	18	1
158	600	500	-100	31	33	2
159	300	400	100	25	27	2
164	1,700	1,700	0	48	55	7
166	1,700	1,800	100	86	86	0
167	300	400	100	16	17	1
168	1,500	1,500	0	72	75	3
169	3,300	3,300	0	144	145	1
177	500	500	0	36	38	2
178	400	500	100	32	35	3
179	700	800	100	42	44	2
180	4,600	4,700	100	183	183	1
181	2,200	2,000	-200	108	107	-1
182	500	500	0	29	30	1
183	1,000	1,100	100	52	52	0
186	200	300	100	21	21	0
187	500	500	0	19	20	1
190	400	400	0	29	33	4
192	100	200	100	14	16	2
193	400	500	100	31	32	1
197	500	600	100	40	41	1
200	100	200	100	13	14	1
201	50	0	-50	2	0	-2
204	200	200	0	19	21	2
208	100	200	100	17	18	1

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
212	2,700	2,800	100	79	77	-2
214	1,200	1,100	-100	46	48	2
216	900	1,000	100	31	32	1
217	200	200	0	13	13	0
218	1,400	1,400	0	41	47	6
219	800	900	100	36	36	0
221	1,500	1,500	0	83	84	1
224	100	200	100	16	16	0
226	1,500	1,500	0	70	71	1
232	400	400	0	24	25	1
234	1,300	1,300	0	76	76	0
235	1,100	1,200	100	67	68	1
236	400	500	100	63	63	0
237	100	100	0	6	6	0
238	800	900	100	78	79	1
240	2,400	2,500	100	136	137	1
241	600	600	0	48	48	0
243	50	100	50	11	11	0
244	200	200	0	16	17	1
245	3,500	3,500	0	168	169	1
246	300	400	100	30	31	1
248	1,000	1,000	0	55	56	1
249	800	1,000	200	54	55	1
252	700	600	-100	26	29	3
255	6,300	5,500	-800	240	262	22
257	600	600	0	24	25	1
268	600	600	0	17	18	1
269	900	1,000	100	86	87	1
271	5,400	5,300	-100	236	237	1
277	200	300	100	19	20	1
301	1,600	1,600	0	49	50	1
303	1,200	1,200	0	39	41	2
304	400	400	0	16	17	1
308	200	200	0	13	14	1
309	500	500	0	19	19	0
311	1,300	1,200	-100	49	53	4
312	2,600	2,500	-100	84	86	2

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
316	1,200	1,200	0	29	31	2
330	400	400	0	14	14	0
331	900	900	0	51	52	1
342	300	300	0	17	17	0
345	1,100	1,100	0	47	47	0
346	1,100	1,000	-100	44	47	3
347	1,200	1,100	-100	55	56	1
348	1,200	1,100	-100	57	57	0
355	900	1,000	100	34	35	1
372	7,800	7,600	-200	216	216	0
373	1,900	2,000	100	61	63	2
628	50	100	50	18	23	5
630	50	200	150	11	11	0
631	50	100	50	9	10	1
635	50	200	150	16	22	6
A Line	9,400	9,100	-300	182	184	2
B Line	6,200	6,100	-100	166	167	1
C Line	12,200	11,100	-1,100	339	336	-3
D Line	13,900	13,800	-100	261	264	3
E Line	16,800	16,700	-100	336	360	24
F Line	5,700	5,300	-400	191	197	6
773	200	200	0	7	7	0
775	200	200	0	8	8	0
823	100	100	0	2	3	1
824	100	100	0	2	2	0
886	50	100	50	2	2	0
887	100	100	0	2	3	1
888	100	100	0	2	3	1
889	100	100	0	2	3	1
891	100	100	0	3	3	0
892	100	100	0	2	3	1
893	100	100	0	2	2	0
894	100	100	0	2	3	1
895	100	100	0	2	2	0
901DART	300	400	100	18	23	5
903DART	200	400	200	24	23	-1
906DART	300	400	100	26	27	1

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2018	Weekday Rides in Fall 2019	Change in Rides	Weekday Platform Hours in Fall 2018	Weekday Platform Hours in Fall 2019	Change in Platform Hours
907DART	100	100	0	17	19	2
908DART	100	100	0	10	11	1
910DART	100	100	0	9	10	1
913DART	100	200	100	13	13	0
914DART	100	200	100	10	11	1
915DART	300	200	-100	15	16	1
916DART	100	200	100	12	12	0
917DART	100	200	100	14	15	1
930DART	200	200	0	20	22	2
931DART	100	200	100	28	31	3
952	200	200	0	27	26	-1
980	50	<50	50	2	3	1
981	50	<50	50	3	3	0
982	100	100	0	4	5	1
984	50	<50	50	2	3	1
986	100	100	0	4	4	0
987	100	100	0	4	5	1
988	100	100	0	3	4	1
989	100	100	0	4	5	1
994	100	100	0	3	4	1
995	50	<50	50	3	4	1
West Seattle Water Taxi*	1,500	900	-600	8	10	1
Vashon Water Taxi*	1,000	950	-50	6	6	0
South Lake Union Streetcar	1,650	1,700	50	91	91	0
First Hill Streetcar	4,400	4,500	100	172	172	0

Rides are rounded to the nearest 100; rounding errors may appear in this table
* Previous year data from March–June 2019; current year data from October 2019–March 2020

Appendix H: Service Changes and Corridor Changes

Service Changes

Route(s)	Summary of Change	Type of Change
SEPTEMBER 2019		
1, 14	Add 18 trips throughout peak and midday to achieve 15-minute headways between 6 AM–7 PM	Added trips
3	Add two new AM trips	Added trips
5, 5X	Add three southbound AM edge-of-peak Route 5 trips and two northbound PM edge-of-peak Route 5 trips; add one northbound PM edge-of-peak Route 5X trip	Added trips
7	Add more layover time for comfort station access	Layover adjustment
8	Add service hours to help improve reliability and quality of service	Schedule adjustment
11	Add four trips in the AM peak and two trips in the evening	Added trips
15, 17, 18	Add a northbound Route 17 trip; add Routes 15, 17, and 18 to the Elliott Ave W/ W Prospect St stop pair	Added trips, added stops
21	Improve Saturday evening service to match Sunday evening frequency (15 minutes between 8 PM–10 PM); add service hours to help improve reliability and quality of service	Added trips, schedule adjustment
22	Revise routing because of construction improvements	Route revision
26, 28, 131, 132	Add one southbound Route 28 trip; adjust headway of southbound Routes 26 and 28 adjacent trips; adjust schedule for Route 131 and 132 trips that are impacted	Added trips, schedule adjustment
27	Relocate downtown layover	Layover adjustment
36	Add one southbound trip in the AM peak; add one northbound in late morning and one late evening	Added trips
37	Relocate downtown layover	Layover adjustment
40	Add three northbound trips; add two trips on weekdays, Saturdays and Sundays	Added trips
41	Increase frequency to 15 minutes on weekdays between 6 AM–12 AM and on weekends between 6 AM–7 PM; 20 minute frequency on weekends between 7 PM–12 AM; add service hours to help improve reliability and quality of service	Added trips, schedule adjustment
44	Add six trips between 9 AM-11 AM	Added trips
48	Add three round trips in late evening on weekdays and two round trips for early morning on Sundays	Added trips
60	Adjust schedule to provide 15-minute headway on weekends between Beacon Hill Station and Georgetown in coordination with Route 107	Schedule adjustment
65, 67	Increase frequency to 15 minutes on weekdays between 6 AM–12 AM and weekends between 6 AM–7 PM; 20 minute frequency on weekends between 7 PM–12 PM; add more Route 65 layover time for comfort station access	Added trips, layover adjustment
70	Eliminate summer-only seasonal trips that were added in June; change the stop at Brooklyn Ave NE / NE 50th St (ID# 9130) to a layover-only stop	Removed seasonal trips, removed a stop

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
74	Move operation of Route 74 from North Base to Central Base	Route operation revision
101	Add four trips on weekdays, Saturdays, and Sundays	Added trips
105	Increase frequency from 60 to 30 minutes on Sundays	Added trips
106	Add service hours to help improve reliability and quality of service	Schedule adjustment
107	Adjust schedule to provide 15-minute headway evenings and nights between Beacon Hill station and Georgetown in coordination with Route 60	Schedule adjustment
116, 118, 119	Relocate downtown layover	Layover adjustment
118	Put existing deadhead into revenue service in AM; adjust PM schedule to improve ferry connection	Route adjustment, schedule adjustment
120	Add 12 weekday trips, 20 Saturday trips, and 19 Sunday trips	Added trips
124	Add one Sunday night trip	Added trips
128	Move operation of Route 128 from Central Base to South Base	Route operation revision
143	Add service hours to help improve reliability and quality of service; relocate downtown layover	Schedule adjustment, layover adjustment
150	Add one trip on weekdays, Saturdays, and Sundays	Added trips
164, 183	Increase frequency on weekday nights for Route 164 from 60 to 30 minutes; increase frequency for both routes from 60 to 30 minutes on Saturdays from 8:30 AM-5:30 PM	Added trips
178	Relocate downtown layover	Layover adjustment
190	Make minor route revision with the closure of the Star Lake Park and Ride	Route revision
212, 217	Relocate downtown layover	Layover adjustment
214	Relocate downtown layover	Layover adjustment
218	Add two AM and two PM trips to address overcrowding	Added trips
252	Add one AM inbound trip to address overcrowding	Added trips
255	Add one PM trip to address overcrowding	Added trips
271	Add one PM trip to address overcrowding	Added trips
303	Shift bay assignment at Aurora Village Transit Center	Stop adjustment
311	Add one AM trip	Added trips
312	Shorten two PM peak trips to start at Kenmore instead of UW Bothell	P.M. peak route revision
346	Increase frequency to 30 minutes on weekday evenings; add more layover time for comfort station access	Added trips; layover adjustment
348	Add more layover time for comfort station access	Layover adjustment

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
372	Increase frequency to operate at least every 15 minutes between 6 AM-7 PM	Added trips
373	Add a new round trip toward the end of the PM peak period; shift bay assignment at Aurora Village Transit Center	Added trips, stop adjustment
522EX	Discontinue last weeknight trip from Woodinville and add one peak-hour trip from Bothell to Seattle	Added trips, reduced trips
540EX	Pierce Transit will operate this route	Administrative revision
541EX	Pierce Transit will operate this route	Administrative revision
554EX	Revise eastbound route pathway to operate on S Jackson St with new stop at Maynard Ave S	Route revision, added stop
560EX	Make minor schedule adjustments on weekdays and significant schedule adjustments on weekends	Schedule adjustment
567EX	Make minor schedule adjustments	Schedule adjustment
577EX	Add new trip departing Federal Way at 4:45 AM and minor schedule adjustments	Added trips, schedule adjustment
635	Add 30-minute service during midday on weekdays; add 30-minute service on Saturdays between 6:30 AM-6:30 PM	Added trips
638	Shift bay assignment at Aurora Village Transit Center	Stop adjustment
673	Add three inbound (northbound) AM trips; add two outbound (southbound) PM trips	Added trips
674	Add two southbound trips from Crown Hill to downtown; add one northbound trip from downtown to Crown Hill	Added trips
675	Add 11 southbound trips from Aurora Village to downtown; add 12 northbound trips from downtown to Aurora Village	Added trips
676	Add service hours to help improve reliability and quality of service	Schedule adjustment
903	Discontinue Route 903 service to Northeast Tacoma. All Route 903 trips will layover at the QFC on 49th Ave NE /42nd St NE	Route revision
906	Increase frequency from 60 to 30 minutes between 7 AM-9 AM and 2:30 PM-5:30 PM	Added trips
Sounder	Reduce holiday service	Reduced holiday service
MARCH 2020		
C line	Reroute to permanent pathway using Alaskan Way and Columbia St	Route adjustment
North Base	Add more runtime for pull-in/pull-out trips from North Base	Scheduling adjustment
21X, 55, 56, 57, 120	Reroute to permanent pathway using Alaskan Way and Columbia St	Route adjustment
37	Reroute to permanent pathway using Alaskan Way and Columbia St	Route adjustment
62	Make minor reroute to accommodate a protected bike lane on Bell St	Route adjustment

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
113, 121, 122, 123	Reroute to permanent pathway using Alaskan Way and Columbia St	Route adjustment
120	Move operations from Atlantic to Central Base	Route operation revision
125	Reroute to permanent pathway using Alaskan Way and Columbia St	Route adjustment
167, 271	Remove "UWR" designation from all remaining trips	Administrative revision
190	Closure of Star Lake Park and Ride for light rail cosntruction, adjust Route 190 stop accordingly	Route adjustment, stop adjustment
221	Make minor reroute to simplify pathway and better align with new Route 250	Route adjustment
225	Create a new route connecting Kenmore Park and Ride and the Redmond Technology Station	Added route
225, 232, 243, 244, 245, 249, 268, 982, 989, 992 B line	Officially change name and provide new routing instructions for operation at the Redmond Technology Station (formerly Overlake Transit Center); routes serving the bus loop at Redmond Technology Station will have new assigned drop-off and pick-up bay locations and layover location	Stop name adjustment, stop adjustment, layover adjustment
230	Create a new route connecting North Creek, Bothell, Juanita nd Kirkland	Added route
231	Create a new route connecting Woodinville, Brickyard, Juanita and Kirkland	Added route
234	Delete route and replace with other service	Deleted route
235	Delete route and replace with other service	Deleted route
236	Delete route and replace with other service	Deleted route
238	Delete route and replace with other service	Deleted route
239	Create a new route connecting UW Bothell, Kingsgate, Totem Lake, Rose Hill, and Kirkland Transit Center	Added route
243	Delete route and replace with other service	Deleted route
244	Delete route and replace with other service	Deleted route
248	Delete route and replace with other service	Deleted route
250	Create a new route connecting Avondale, Bear Creek, Redmond, Kirkland, and Bellevue	Added route
255	Reroute to terminate at Totem Lake Transit Center and the University District	Route revision
271	Operate some Route 271 trips out of East Base	Route operation revision
277	Delete route and replace with other service	Deleted route
930	Expand service to run all-day and later in the evening	Increased span of service

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
510EX, 511EX, 512EX, 513EX, 532EX, 535EX	Make schedule adjustments; operator: Community Transit	Schedule adjustment
540EX	Delete route	Deleted route
541EX	Discontinue 33 trips; operator: King County Metro	Reduced trips
541EX, 542EX	Make minor route and bus stop changes at University of Washington Station	Route revision, stop revision
544EX	Add new route operating between Overlake and South Lake Union; operator: Pierce Transit	Added route
566EX	Discontinue service on Route 566 to Kennydale and Newport Hills Freeway stops; revise running times on route to coordinate with Route 567 between Overlake and Bellevue and to reflect traffic conditions along I-405 and SR 167; discontinue four AM peak trips past Bellevue Transit Center because of low ridership	Schedule adjustments, trips adjustments, deleted stops
574EX	Rewrite schedule to reflect traffic conditions during AM and PM peak periods; consolidate two southbound departures into one departure because of low ridership; remove MCIs as requirement for fleet type on this route	Schedule adjustment, fleet type adjustment
577EX	Make minor schedule adjustment for two AM peak trips	Schedule adjustment
578EX	Adjust running times on weekday Route 578 trips to better reflect current traffic conditions; recommend use of East Valley Highway on trips departing Seattle between 12:30 PM and 5 PM	Schedule adjustment, route revision recommendation
586EX	Make minor schedule adjustment; prioritize 40-foot coaches for Route 586 and shift high-capacity coaches to Routes 590 and 594	Schedule adjustment, fleet type adjustment
590EX	Elminate five northbound and four southbound reverse peak trips; make minor schedule adjustments to runtime; request high-capcity buses between 4 AM-7 AM northbound	Reduced trips, fleet type adjustment
592EX	Make schedule adjustments	Schedule adjustment
594EX	Make schedule adjustments; request high-capacity buses between 8 AM-10 AM northbound and 2 PM-8 PM southbound; add one southbound AM trip on weekdays between 5:27 AM-6:42 AM	Schedule adjustment, fleet type adjustment, added trips

Connections				Land Use - Productivity				Social Equity - Demographics				Geographic Value - Connections to Centers				Initial Target Service Levels		
BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS & P&R STALLS*1.1 / CORRIDOR MILE	POINTS	JOBS & STUDENTS / CORRIDOR MILE	POINTS	% BOARDINGS IN MINORITY TRACTS	POINTS	% BOARDINGS IN LOW-INCOME TRACTS	POINTS	CONNECTION TYPE	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	1,307	4	1,161	2	72%	5	72%	5	RGC/MIC - TAC	7	23		15	30	30
Alki	SODO Station	Alaska Junction	50	1,463	4	2,162	4	31%	0	31%	0	RGC/MIC - TAC	7	15		30	30	
Auburn	Burien	Kent, SeaTac	180	749	2	1,194	2	65%	5	99%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Auburn	Pacific	Algona	917	438	0	504	2	57%	3	100%	5	Other	2	12		30	30	
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	774	2	1,114	2	80%	5	98%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Aurora Village	Northgate	Meridian Ave N	346	1,316	4	1,963	4	69%	5	67%	5	RGC/MIC - TAC	7	25		15	15	30
Aurora Village	Seattle CBD	Aurora Ave N	E Line	3,130	10	8,859	8	58%	5	47%	3	RGC/MIC - RGC/MIC	10	36	Yes	10	15	15
Avondale	Kirkland	NE 85th St, Redmond Way, Avondale Rd NE	248	1,792	4	1,767	4	86%	5	0%	0	RGC/MIC - TAC	7	20		15	30	30
Ballard	Northgate	Holman Road	40	2,782	8	3,191	6	12%	0	9%	0	RGC/MIC - RGC/MIC	10	24		15	30	30
Ballard	Seattle CBD	15th Ave W	D Line	4,876	10	15,812	10	10%	0	4%	0	RGC/MIC - RGC/MIC	10	30	Yes	10	15	15
Ballard	Seattle CBD	Fremont, South Lake Union	40	5,008	10	28,378	10	21%	0	6%	0	RGC/MIC - RGC/MIC	10	30		15	15	30
Ballard	University District	Green Lake, Greenwood	45	3,002	10	11,976	10	13%	0	41%	3	RGC/MIC - TAC	7	30		15	15	30
Ballard	University District	Wallingford (N 45th St)	44	3,445	10	15,079	10	17%	0	17%	0	RGC/MIC - RGC/MIC	10	30		15	15	30
Beacon Hill	Seattle CBD	Beacon Ave	36	2,627	8	13,829	10	96%	5	100%	5	Other	2	30		15	15	30
Bellevue	Eastgate	Lake Hills Connector	271	670	2	4,202	6	98%	5	10%	0	RGC/MIC - TAC	7	20		15	30	30
Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	1,844	6	5,444	6	92%	5	0%	0	RGC/MIC - RGC/MIC	10	27	Yes	10	15	15
Bellevue	Renton	Newcastle, Factoria	240	1,213	4	4,199	6	97%	5	31%	0	RGC/MIC - TAC	7	22		15	30	30
Burien	Seattle CBD	1st Ave S, South Park	131	2,033	6	9,088	8	84%	5	100%	5	RGC/MIC - RGC/MIC	10	34		15	15	30
Burien	Seattle CBD	Delridge, Ambaum	120	1,750	4	6,854	8	91%	5	91%	5	RGC/MIC - RGC/MIC	10	32		15	15	30
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	1,686	4	8,240	8	82%	5	100%	5	RGC/MIC - TAC	7	29		15	15	30
Capitol Hill	Seattle CBD	15th Ave E	10	7,622	10	23,929	10	0%	0	72%	5	Other	2	27		15	15	30
Capitol Hill	Seattle CBD	Madison St	12	7,970	10	47,989	10	0%	0	93%	5	Other	2	27		15	15	30
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	2,718	8	5,588	8	89%	5	88%	5	RGC/MIC - TAC	7	33		15	15	30
Central District	Seattle CBD	E Jefferson St	3/4	8,556	10	40,316	10	73%	5	88%	5	RGC/MIC - TAC	7	37		15	15	30
Colman Park	Seattle CBD	Leschi, Yesler Way	27	5,763	10	21,830	10	75%	5	67%	5	Other	2	32		15	15	30
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Ave W	33	3,720	10	14,288	10	5%	0	0%	0	Other	2	22		15	30	30
Eastgate	Bellevue	Newport Way, S. Bellevue, Beaux Arts	241	1,441	4	6,837	8	92%	5	23%	0	RGC/MIC - TAC	7	24		15	30	30
Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	1,316	4	6,003	8	100%	5	27%	0	Other	2	19		15	30	30
Eastgate	Overlake	Phantom Lake	226	1,110	2	2,357	4	47%	3	26%	0	Other	2	11		30	30	
Enumclaw	Auburn	Auburn Way S, SR 164	186/915	291	0	426	0	49%	3	93%	5	RGC/MIC - TAC	7	15		30	30	
Fairwood	Renton	S Puget Dr, Royal Hills	148	968	2	875	2	74%	5	56%	3	RGC/MIC - TAC	7	19		15	30	30
Federal Way	Kent	Military Road S	183	1,171	2	787	2	94%	5	97%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Federal Way	SeaTac	SR-99	A Line	1,187	2	2,351	4	100%	5	100%	5	RGC/MIC - RGC/MIC	10	26	Yes	10	15	15
Fremont	Broadview	8th Ave NW	28	2,383	6	1,761	4	0%	0	7%	0	TAC - TAC	5	15		30	30	
Fremont	Seattle CBD	Dexter Ave N	62	6,628	10	28,753	10	15%	0	7%	0	RGC/MIC - TAC	7	27		15	15	30
Fremont	University District	N 40th St	31/32	1,904	6	18,451	10	10%	0	10%	0	RGC/MIC - TAC	7	23		15	30	30
Green River CC	Kent	132nd Ave SE	164	1,019	2	1,435	4	92%	5	92%	5	RGC/MIC - TAC	7	23		15	30	30
Greenwood	Seattle CBD	Greenwood Ave N	5	3,787	10	10,725	10	2%	0	14%	0	RGC/MIC - TAC	7	27		15	15	30
High Point	Seattle CBD	35th Ave SW	21	2,839	8	13,669	10	68%	5	69%	5	RGC/MIC - TAC	7	35		15	15	30

Figures rounded for display purposes.

Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points
> 3000	10	> 10250	10	FR: 53%	5	FR: 50%	5	RGC/MIC - RGC/MIC	10
> 2400	8	> 5500	8	DART: 63%	5	DART: 56%	5	RGC/MIC - TAC	7
> 1800	6	> 3000	6	FR: 35%	3	FR: 31%	3	TAC - TAC	5
> 1200	4	> 1400	4	DART: 44%	3	DART: 37%	3	Other	2
> 600	2	> 500	2	(FR: Fixed-route)				(RGC: Regional Growth Center)	
				(DART: Dial-a-Ride Transit)				(MIC: Manufacturing/Industrial Center)	
								(TAC: Transit Activity Center)	

Levels	Points	Points	Points
15	19-40	25-40	--
30	10-18	10-24	19-40
60	0-9	0-9	--

Connections				Land Use - Productivity				Social Equity - Demographics				Geographic Value - Connections to Centers				Initial Target Service Levels		
BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS & P&R STALLS*1.1 / CORRIDOR MILE	POINTS	JOBS & STUDENTS / CORRIDOR MILE	POINTS	% BOARDINGS IN MINORITY TRACTS	POINTS	% BOARDINGS IN LOW-INCOME TRACTS	POINTS	CONNECTION TYPE	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
Issaquah	Eastgate	SE Newport Way	271	639	2	2,178	4	68%	5	28%	0	Other	2	13		30	30	
Issaquah	North Bend	Fall City, Snoqualmie	208	291	0	413	0	6%	0	53%	3	RGC/MIC - TAC	7	10		30	30	
Issaquah	Overlake	Sammamish, Bear Creek	269	604	2	1,731	4	69%	5	2%	0	RGC/MIC - RGC/MIC	10	21		15	30	30
Kenmore	Kirkland	Juanita	234	867	2	620	2	0%	0	0%	0	TAC - TAC	5	9		60	60	
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	826	2	1,125	2	35%	0	53%	3	TAC - TAC	5	12		30	30	
Kenmore	Totem Lake	Finn Hill, Juanita	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Kennydale	Renton	Edmonds Ave NE	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Kent	Burien	Kent-DM Rd, S. 240th St, 1st Ave S	166	1,022	2	1,174	2	90%	5	91%	5	RGC/MIC - TAC	7	21		15	30	30
Kent	Maple Valley	SE Kent-Kangley Road	168	818	2	717	2	32%	0	46%	3	RGC/MIC - TAC	7	14		30	30	
Kent	Renton	84th Ave S, Lind Ave SW	153	640	2	2,857	4	100%	5	100%	5	RGC/MIC - RGC/MIC	10	26		15	15	30
Kent	Renton	Kent East Hill	169	1,040	2	1,337	2	100%	5	98%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Kent	Seattle CBD	Tukwila	150	832	2	7,689	8	98%	5	99%	5	RGC/MIC - RGC/MIC	10	30		15	15	30
Kirkland	Bellevue	South Kirkland	234/235	2,027	6	8,377	8	5%	0	0%	0	RGC/MIC - TAC	7	21		15	30	30
Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	1,512	4	3,442	6	60%	5	20%	0	RGC/MIC - TAC	7	22		15	30	30
Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	2,046	6	12,041	10	46%	3	67%	5	RGC/MIC - RGC/MIC	10	34		15	15	30
Lake City	Univeristy District	35th Ave NE	65	2,004	6	9,885	8	14%	0	55%	3	TAC - TAC	5	22		15	30	30
Northgate[1]	University District	Lake City, Sand Point	75	1,567	4	9,727	8	28%	0	56%	3	RGC/MIC - TAC	7	22		15	30	30
Laurelhurst	University District	NE 41st St	78	342	0	22,143	10	18%	0	27%	0	Other	2	12		30	30	
Madison Park	Seattle CBD	Madison St	11	4,944	10	14,851	10	0%	0	53%	3	RGC/MIC - TAC	7	30		15	15	30
Madrona	Seattle CBD	Union St	2	5,931	10	26,591	10	5%	0	63%	5	Other	2	27		15	15	30
Magnolia	Seattle CBD	34th Ae W, 28th Ave W	24	3,331	10	12,550	10	7%	0	0%	0	RGC/MIC - TAC	7	27		15	15	30
Mercer Island	S Mercer Island	Island Crest Way	204	781	2	699	2	0%	0	0%	0	TAC - TAC	5	9		60	60	0
Mirror Lake	Federal Way	S 312th St	901	1,088	2	533	2	97%	5	97%	5	Other	2	16		30	30	
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	5,171	10	20,042	10	64%	5	100%	5	Other	2	32		15	15	30
Mount Baker	University District	23rd Ave E	48	2,120	6	13,422	10	72%	5	89%	5	RGC/MIC - TAC	7	33		15	15	30
Mount Baker Transit Ctr	Seattle Center	Martin Luther King Jr Way, E John St, Denny Way	8	6,242	10	8,616	8	55%	5	26%	0	RGC/MIC - RGC/MIC	10	33		15	15	30
Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	1,584	4	1,819	4	29%	0	50%	3	Other	2	13		30	30	
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S	182	757	2	926	2	62%	5	62%	5	Other	2	16		30	30	
Northgate	Seattle CBD	Green Lake, Wallingford	26	3,442	10	10,403	10	19%	0	42%	3	RGC/MIC - RGC/MIC	10	33		15	15	30
Northgate	University District	Roosevelt Way NE	67	3,415	10	15,915	10	37%	3	73%	5	RGC/MIC - RGC/MIC	10	38		10	15	15
Othello Station	SODO Station	Columbia City Station	50	1,193	2	1,562	4	91%	5	91%	5	Other	2	18		30	30	
Overlake	Bellevue	Bell-Red Road	226	2,611	8	12,376	10	91%	5	0%	0	Other	2	25		15	15	30
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	1,472	4	5,226	6	64%	5	0%	0	RGC/MIC - TAC	7	22		15	30	30
Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	6,135	10	22,746	10	17%	0	15%	0	Other	2	22		15	30	30
Queen Anne	Seattle CBD	Taylor Ave N	3/4	6,402	10	24,933	10	32%	0	56%	5	Other	2	27		15	15	30
Rainier Beach	Seattle CBD	Rainier Ave S	7	2,682	8	12,084	10	86%	5	97%	5	Other	2	30		15	15	30
Rainier Beach	Capitol Hill	Rainier Ave S	See corridor above; connection to Capitol Hill provided by First Hill Streetcar													-	-	-
Rainier Beach	Mount Baker Transit Cent	Martin Luther King Jr Way S	Connection now served by Renton - Beacon Hill corridor													-	-	-
Redmond	Duvall	Avondale Rd NE	224	657	2	513	2	79%	5	0%	0	RGC/MIC - TAC	7	16		30	30	0
Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	1,051	2	2,119	4	82%	5	10%	0	RGC/MIC - TAC	7	18		30	30	
Redmond	Totem Lake	Willows Road	930	1,295	4	3,284	6	70%	5	0%	0	RGC/MIC - RGC/MIC	10	25		15	30	30

Figures rounded for display purposes.

[1] Corridor was extended from Lake City to Northgate.

The Kenmore-Totem Lake and Kennydale-Renton corridors are not currently served in their entirety.

Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points
> 3000	10	> 10250	10	FR: 53%	5	FR: 50%	5	RGC/MIC - RGC/MIC	10
> 2400	8	> 5500	8	DART: 63%	5	DART: 56%	5	RGC/MIC - TAC	7
> 1800	6	> 3000	6	FR: 35%	3	FR: 31%	3	TAC - TAC	5
> 1200	4	> 1400	4	DART: 44%	3	DART: 37%	3	Other	2
> 600	2	> 500	2	(FR: Fixed-route)				(RGC: Regional Growth Center)	
				(DART: Dial-a-Ride Transit)				(MIC: Manufacturing/Industrial Center)	
								(TAC: Transit Activity Center)	

Levels	Points	Points	Points
15	19-40	25-40	--
30	10-18	10-24	19-40
60	0-9	0-9	--

Connections				Land Use - Productivity				Social Equity - Demographics				Geographic Value - Connections to Centers				Initial Target Service Levels		
BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS & P&R STALLS*1.1 / CORRIDOR MILE	POINTS	JOBS & STUDENTS / CORRIDOR MILE	POINTS	% BOARDINGS IN MINORITY TRACTS	POINTS	% BOARDINGS IN LOW-INCOME TRACTS	POINTS	CONNECTION TYPE	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
Renton	Burien	S 154th St	F Line	901	2	1,888	4	100%	5	84%	5	RGC/MIC - RGC/MIC	10	26	Yes	10	15	15
Renton	Black Diamond[1]	Maple Valley	143/907	283	0	350	0	50%	3	41%	3	RGC/MIC - TAC	7	13		30	30	
Renton	Beacon Hill	West Hill, Rainier View	107	974	2	718	2	96%	5	87%	5	RGC/MIC - TAC	7	21		15	30	30
Renton	Renton Highlands	NE 4th St, Union Ave NE	105	1,363	4	1,747	4	100%	5	87%	5	RGC/MIC - TAC	7	25		15	15	30
Renton	Seattle CBD	Martin Luther King Jr Way S, I-5	101/102	1,172	2	9,387	8	97%	5	98%	5	RGC/MIC - RGC/MIC	10	30		15	15	30
Renton	Seattle CBD	Skyway, Martin Luther King Jr Way S S. Beacon Hill	106	1,569	4	2,179	4	92%	5	92%	5	RGC/MIC - TAC	7	25		15	15	30
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE	908	1,265	4	1,919	4	100%	5	71%	5	Other	2	20		15	30	30
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE	348	1,658	4	1,905	4	51%	3	73%	5	RGC/MIC - TAC	7	23		15	30	30
Roosevelt	UW	University Way	Connection now served by Northgate - U District via Roosevelt Way NE corridor													-	-	-
Sand Point	Fremont[2]	View Ridge, NE 65th St, Cowen Park	62	2,521	8	2,135	4	0%	0	33%	0	Other	2	14		30	30	
Sand Point	University District	NE 55th St	74	3,125	10	11,813	10	35%	0	78%	5	Other	2	27		15	15	30
Shoreline	Univeristy District	Jackson Park, 15th Ave NE	373	1,558	4	6,618	8	33%	0	75%	5	RGC/MIC - TAC	7	24		15	30	30
Shoreline CC	Greenwood	Greenwood Ave N	5	2,087	6	2,558	4	10%	0	59%	5	TAC - TAC	5	20		15	30	30
Shoreline CC	Lake City	N 155th St, Jackson Park	330	1,648	4	2,154	4	20%	0	86%	5	TAC - TAC	5	18		30	30	
Shoreline CC	Northgate	N 130th St, Meridian Ave N	345	1,461	4	3,126	6	39%	3	73%	5	RGC/MIC - TAC	7	25		15	15	30
Totem Lake	Seattle CBD	Kirkland, SR-520	255	2,001	6	8,897	8	5%	0	5%	0	RGC/MIC - RGC/MIC	10	24		15	30	30
Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	616	2	1,210	2	93%	5	94%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Tukwila	Fairwood	S 180th St, Carr Road	906	644	2	1,444	4	93%	5	71%	5	RGC/MIC - TAC	7	23		15	30	30
Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S	124	1,924	6	9,630	8	85%	5	87%	5	RGC/MIC - RGC/MIC	10	34		15	15	30
Twin Lakes	Federal Way	S 320th St	187	936	2	608	2	100%	5	90%	5	Other	2	16		30	30	
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	1,262	4	1,179	2	100%	5	98%	5	Other	2	18		30	30	
University District	Bellevue	SR-520	271	935	2	12,649	10	95%	5	9%	0	RGC/MIC - RGC/MIC	10	27		15	15	30
University District	Seattle CBD	Broadway	49	5,941	10	29,264	10	60%	5	79%	5	Other	2	32		15	15	30
University District	Seattle CBD	Eastlake, Fairview	70	6,148	10	44,630	10	54%	5	50%	3	TAC - TAC	5	33		15	15	30
UW Bothell	Redmond	Woodinville, Cottage Lake	931	593	0	1,091	2	19%	3	0%	0	RGC/MIC - TAC	7	12		30	30	
UW Bothell	University District	Kenmore, Lake Forest Park, Lake City	372	1,471	4	7,242	8	44%	3	55%	3	RGC/MIC - TAC	7	25		15	15	30
UW Bothell/CCC	Kirkland	132nd Ave NE, Lake Washington Tech	238	1,305	4	2,298	4	0%	0	0%	0	RGC/MIC - TAC	7	15		30	30	
Vashon	Tahlequah	Valley Center	118	51	0	81	0	0%	0	0%	0	Other	2	2		60	60	
West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	2,384	6	12,606	10	27%	0	27%	0	RGC/MIC - TAC	7	23	Yes	10	15	15
White Center	Seattle CBD	16th Ave SW, South Seattle College	125	738	2	6,429	8	94%	5	94%	5	RGC/MIC - TAC	7	27		15	15	30
Woodinville	Kirkland	Kingsgate	236	1,355	4	1,323	2	29%	0	0%	0	RGC/MIC - TAC	7	13		30	30	

Figures rounded for display purposes.

[1] Corridor was truncated. Demand-response service in place between Black Diamond and Enumclaw.

[2] Corridor was extended from Cowen Park to Fremont.

Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points
> 3000	10	> 10250	10	FR: 53%	5	FR: 50%	5	RGC/MIC - RGC/MIC	10
> 2400	8	> 5500	8	DART: 63%	5	DART: 56%	5	RGC/MIC - TAC	7
> 1800	6	> 3000	6	FR: 35%	3	FR: 31%	3	TAC - TAC	5
> 1200	4	> 1400	4	DART: 44%	3	DART: 37%	3	Other	2
> 600	2	> 500	2	(FR: Fixed-route)				(RGC: Regional Growth Center)	
				(DART: Dial-a-Ride Transit)				(MIC: Manufacturing/Industrial Center)	
								(TAC: Transit Activity Center)	

Levels	Points	Points	Points
15	19-40	25-40	--
30	10-18	10-24	19-40
60	0-9	0-9	--

Connections				Loads at Preliminary Service Level *			Load-Based Service Level Improvements			Other Policy-based Night Service Additions			Service Level Improvements			Final Target Service Levels and Family					
BETWEEN	AND	VIA	MAJOR ROUTE	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	CORRIDOR HAS 15 MIN PEAK SERVICE	ADD WHAT FREQUENCY NIGHT SERVICE?	PEAK	OFFPEAK	NIGHT	**PEAK**	**OFFPEAK**	**NIGHT**	**RESULTING SERVICE FAMILY**	INVESTMENT NEED (after subtracting Mar & Sep 2018 investments)	INVESTMENT PRIORITY
Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	23%	44%	28%	-	-	-	-		30	-	-	-	15	30	30	Frequent	9,400	26
Alki	SODO Station	Alaska Junction	50	92%	37%	19%	1	-	-	-	30	30	1	-	3	15	30	30	Frequent	8,000	25
Auburn	Burien	Kent, SeaTac	180	47%	52%	36%	-	-	-	60		30	-	-	-	15	30	30	Frequent	-	
Auburn	Pacific	Algona	917	0%	0%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	2,100	52
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	19%	33%	22%	-	-	-	60		30	-	-	-	15	30	30	Frequent	7,200	7
Aurora Village	Northgate	Meridian Ave N	346	18%	24%	6%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	9,300	21
Aurora Village	Seattle CBD	Aurora Ave N	E Line	86%	65%	37%	1	1	-	60		30	-	1	-1	< 15	< 15	15	Very Frequent	-	
Avondale	Kirkland	NE 85th St, Redmond Way, Avondale Rd NE	248	28%	22%	14%	-	-	-	-		30	-	-	-	15	30	30	Frequent	4,300	24
Ballard	Northgate	Holman Road	40	260%	76%	33%	2	1	-	60		30	2	1	-	< 15	15	30	Very Frequent	-	
Ballard	Seattle CBD	15th Ave W	D Line	95%	67%	42%	1	1	-	60		15	-	1	-	< 15	< 15	15	Very Frequent	-	
Ballard	Seattle CBD	Fremont, South Lake Union	40	130%	38%	66%	2	-	1	60		15	2	-	1	< 15	15	15	Very Frequent	-	
Ballard	University District	Green Lake, Greenwood	45	115%	32%	76%	2	-	1	-		15	2	-	1	< 15	15	15	Very Frequent	-	
Ballard	University District	Wallingford (N 45th St)	44	138%	95%	77%	2	1	1	60		15	2	1	1	< 15	< 15	15	Very Frequent	-	
Beacon Hill	Seattle CBD	Beacon Ave	36	125%	76%	71%	2	1	1	-		15	2	1	1	< 15	< 15	15	Very Frequent	-	
Bellevue	Eastgate	Lake Hills Connector	271	84%	43%	18%	1	-	-	-		30	1	-	-	< 15	30	30	Frequent	-	
Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	44%	29%	23%	-	-	-	60		15	-	-	-	< 15	15	15	Very Frequent	-	
Bellevue	Renton	Newcastle, Factoria	240	23%	18%	19%	-	-	-	-		30	-	-	-	15	30	30	Frequent	-	
Burien	Seattle CBD	1st Ave S, South Park	131	41%	21%	21%	-	-	-	60		30	-	-	-	15	15	30	Very Frequent	8,600	2
Burien	Seattle CBD	Delridge, Ambaum	120	105%	27%	57%	1	-	1	60		15	1	-	1	< 15	15	15	Very Frequent	-	
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	25%	33%	19%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	16,100	14
Capitol Hill	Seattle CBD	15th Ave E	10	69%	31%	54%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	-	
Capitol Hill	Seattle CBD	Madison St	12	86%	31%	32%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	-	
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	57%	39%	35%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	7,800	13
Central District	Seattle CBD	E Jefferson St	3/4	127%	81%	74%	2	1	1	-		15	2	1	1	< 15	< 15	15	Very Frequent	-	
Colman Park	Seattle CBD	Leschi, Yesler Way	27	31%	8%	15%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	9,200	41
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Ave W	33	58%	28%	16%	1	-	-	-		30	1	-	-	< 15	30	30	Frequent	3,900	44
Eastgate	Bellevue	Newport Way, S. Bellevue, Beaux Arts	241	8%	12%	4%	-	-	-	-		30	-	-	-	15	30	30	Frequent	5,400	16
Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	4%	6%	N/A	-	-	-	-		30	-	-	-	15	30	30	Frequent	15,500	46
Eastgate	Overlake	Phantom Lake	226	15%	11%	7%	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Enumclaw	Auburn	Auburn Way S, SR 164	186/915	32%	N/A	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	4,700	36
Fairwood	Renton	S Puget Dr, Royal Hills	148	36%	25%	32%	-	-	-	-		30	-	-	-	15	30	30	Frequent	3,800	32
Federal Way	Kent	Military Road S	183	18%	30%	11%	-	-	-	60		30	-	-	-	15	30	30	Frequent	6,600	8
Federal Way	SeaTac	SR-99	A Line	40%	42%	33%	-	-	-	60		15	-	-	-	< 15	15	15	Very Frequent	-	
Fremont	Broadview	8th Ave NW	28	125%	14%	9%	2	-	-	-	30	30	3	-	3	< 15	30	30	Frequent	-	
Fremont	Seattle CBD	Dexter Ave N	62	129%	33%	55%	2	-	-	-		30	2	-	-	< 15	15	30	Very Frequent	-	
Fremont	University District	N 40th St	31/32	155%	68%	23%	2	1	-	-		30	2	1	-	< 15	15	30	Very Frequent	-	
Green River CC	Kent	132nd Ave SE	164	26%	37%	11%	-	-	-	-		30	-	-	-	15	30	30	Frequent	5,700	27
Greenwood	Seattle CBD	Greenwood Ave N	5	79%	66%	60%	1	1	1	-		15	1	1	1	< 15	< 15	15	Very Frequent	7,000	11
High Point	Seattle CBD	35th Ave SW	21	42%	27%	31%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	-	

Figures rounded for display purposes.

Ridership*	Peak	OffPk	Night
110%	2	2	2
55%	1	1	1

* The average load's proportion to the crowding threshold. Ridership service level improvements move the preliminary levels of service up one or two levels, e.g. a ridership service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc.

Above Target
At Target
Below Target

Connections				Loads at Preliminary Service Level *			Load-Based Service Level Improvements			Other Policy-based Night Service Additions			Service Level Improvements			Final Target Service Levels and Family					
BETWEEN	AND	VIA	MAJOR ROUTE	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	CORRIDOR HAS 15 MIN PEAK SERVICE	ADD WHAT FREQUENCY NIGHT SERVICE?	PEAK	OFFPEAK	NIGHT	**PEAK**	**OFFPEAK**	**NIGHT**	**RESULTING SERVICE FAMILY**	INVESTMENT NEED (after subtracting Mar & Sep 2018 investments)	INVESTMENT PRIORITY
Issaquah	Eastgate	SE Newport Way	271	26%	22%	20%	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Issaquah	North Bend	Fall City, Snoqualmie	208	0%	5%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	10,200	38
Issaquah	Overlake	Sammamish, Bear Creek	269	11%	21%	0%	-	-	-	60		30	-	-	-	15	30	30	Frequent	8,300	6
Kenmore	Kirkland	Juanita	234	45%	19%	10%	-	-	-	-		-	-	-	-	60	60	0	Hourly	-	
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	61%	35%	N/A	1	-	-	-	30	30	1	-	3	15	30	30	Frequent	9,600	40
Kenmore	Totem Lake	Finn Hill, Juanita	-	-	-	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly	9,500	54
Kennydale	Renton	Edmonds Ave NE	-	-	-	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly	7,200	55
Kent	Burien	Kent-DM Rd, S. 240th St, 1st Ave S	166	14%	29%	24%	-	-	-	-		30	-	-	-	15	30	30	Frequent	6,000	30
Kent	Maple Valley	SE Kent-Kangley Road	168	57%	30%	38%	1	-	-	-	30	30	1	-	-	15	30	30	Frequent	8,500	34
Kent	Renton	84th Ave S, Lind Ave SW	153	32%	22%	N/A	-	-	-	60	30	30	-	-	-	15	15	30	Very Frequent	13,000	5
Kent	Renton	Kent East Hill	169	29%	53%	35%	-	-	-	60		30	-	-	-	15	30	30	Frequent	-	
Kent	Seattle CBD	Tukwila	150	45%	32%	39%	-	-	-	60		30	-	-	-	15	15	30	Very Frequent	-	
Kirkland	Bellevue	South Kirkland	234/235	83%	39%	17%	1	-	-	-	30	30	1	-	-	15	30	30	Frequent	-	
Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	49%	63%	19%	-	1	-	-		30	-	1	-	15	15	30	Very Frequent	-	
Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	102%	34%	64%	1	-	1	60		15	1	-	1	< 15	15	15	Very Frequent	-	
Lake City	Univeristy District	35th Ave NE	65	133%	100%	76%	2	1	1	-		15	2	1	1	< 15	15	15	Very Frequent	-	
Northgate[1]	University District	Lake City, Sand Point	75	64%	33%	58%	1	-	1	-		15	1	-	1	< 15	30	15	Frequent	-	
Laurelhurst	University District	NE 41st St	78	18%	11%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Madison Park	Seattle CBD	Madison St	11	62%	29%	41%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	2,900	10
Madrona	Seattle CBD	Union St	2	95%	48%	64%	1	-	1	-		15	1	-	1	< 15	15	15	Very Frequent	-	
Magnolia	Seattle CBD	34th Ae W, 28th Ave W	24	62%	29%	21%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	11,400	12
Mercer Island	S Mercer Island	Island Crest Way	204	34%	13%	N/A	-	-	-	-	-	-	-	-	-	60	60	0	Hourly	-	
Mirror Lake	Federal Way	S 312th St	901	0%	0%	0%	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	82%	28%	51%	1	-	-	-	30	30	1	-	-	< 15	15	30	Very Frequent	9,200	42
Mount Baker	University District	23rd Ave E	48	38%	28%	18%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	-	
Mount Baker Transit Ctr	Seattle Center	Martin Luther King Jr Way, E John St, Denny Way	8	60%	40%	34%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	-	
Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	42%	20%	30%	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S	182	22%	13%	15%	-	-	-	-		-	-	-	-	30	30	0	Local	2,300	50
Northgate	Seattle CBD	Green Lake, Wallingford	26	69%	16%	20%	1	-	-	-	30	30	1	-	-	< 15	15	30	Very Frequent	13,200	1
Northgate	University District	Roosevelt Way NE	67	72%	57%	50%	1	1	-	60		15	1	1	-	< 15	< 15	15	Very Frequent	-	
Othello Station	SODO Station	Columbia City Station	50	46%	37%	19%	-	-	-	60		60	-	-	-	30	30	60	Local	-	
Overlake	Bellevue	Bell-Red Road	226	15%	11%	7%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	15,100	45
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	14%	6%	13%	-	-	-	-		30	-	-	-	15	30	30	Frequent	11,200	20
Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	127%	88%	67%	2	1	1	-		15	2	1	1	< 15	15	15	Very Frequent	-	
Queen Anne	Seattle CBD	Taylor Ave N	3/4	100%	48%	70%	1	-	1	-		15	1	-	1	< 15	15	15	Very Frequent	-	
Rainier Beach	Seattle CBD	Rainier Ave S	7	99%	59%	74%	1	1	1	-		15	1	1	1	< 15	< 15	15	Very Frequent	-	
Rainier Beach	Capitol Hill	Rainier Ave S		See corridor above; connection to Capitol Hill provided by First Hill Streetcar												-	-	-	-	-	
Rainier Beach	Mount Baker Transit Cent	Martin Luther King Jr Way S		Connection now served by Renton - Beacon Hill corridor												-	-	-	-	-	
Redmond	Duvall	Avondale Rd NE	224	9%	6%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Hourly	7,500	33
Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	25%	30%	13%	-	-	-	-		30	-	-	-	30	30	30	Local	2,300	29
Redmond	Totem Lake	Willows Road	930	9%	N/A	N/A	-	-	-	60	30	30	-	-	-	15	30	30	Hourly	5,100	4

Figures rounded for display purposes.

[1] Corridor was extended from Lake City to Northgate.

The Kenmore-Totem Lake and Kennydale-Renton corridors are not currently served in their entirety.

Ridership*	Peak	OffPk	Night
110%	2	2	2
55%	1	1	1

* The average load's proportion to the crowding threshold. Ridership service level improvements move the preliminary levels of service up one or two levels, e.g. a ridership service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc.

Above Target
At Target
Below Target

Connections				Loads at Preliminary Service Level *			Load-Based Service Level Improvements			Other Policy-based Night Service Additions			Service Level Improvements			Final Target Service Levels and Family					
BETWEEN	AND	VIA	MAJOR ROUTE	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	CORRIDOR HAS 15 MIN PEAK SERVICE	ADD WHAT FREQUENCY NIGHT SERVICE?	PEAK	OFFPEAK	NIGHT	**PEAK**	**OFFPEAK**	**NIGHT**	**RESULTING SERVICE FAMILY**	INVESTMENT NEED (after subtracting Mar & Sep 2018 investments)	INVESTMENT PRIORITY
Renton	Burien	S 154th St	F Line	20%	26%	16%	-	-	-	-		15	-	-	-	< 15	15	15	Very Frequent	-	
Renton	Black Diamond[1]	Maple Valley	143/907	34%	N/A	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	4,000	37
Renton	Beacon Hill	West Hill, Rainier View	107	57%	36%	27%	1	-	-	60		30	1	-	-	< 15	30	30	Frequent	6,700	31
Renton	Renton Highlands	NE 4th St, Union Ave NE	105	17%	24%	20%	-	-	-	60		30	-	-	-	15	15	30	Very Frequent	6,400	22
Renton	Seattle CBD	Martin Luther King Jr Way S, I-5	101/102	92%	27%	37%	1	-	-	-	30	30	1	-	-	< 15	15	30	Very Frequent	-	
Renton	Seattle CBD	Skyway, Martin Luther King Jr Way S S. Beacon Hill	106	72%	38%	32%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	-	
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE	908	0%	0%	N/A	-	-	-	-		30	-	-	-	15	30	30	Frequent	4,400	48
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE	348	47%	28%	35%	-	-	-	60		30	-	-	-	15	30	30	Frequent	6,700	23
Roosevelt	UW	University Way		Connection now served by Northgate - U District via Roosevelt Way NE corridor												-	-	-	-	-	
Sand Point	Fremont[2]	View Ridge, NE 65th St, Cowen Park	62	257%	66%	28%	2	1	-	-		30	-	1	-	< 15	< 15	30	Very Frequent	10,700	47
Sand Point	University District	NE 55th St	74	57%	6%	N/A	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	16,700	43
Shoreline	Univeristy District	Jackson Park, 15th Ave NE	373	58%	N/A	N/A	1	-	-	-	30	30	1	-	-	< 15	30	30	Frequent	18,400	17
Shoreline CC	Greenwood	Greenwood Ave N	5	79%	33%	15%	1	-	-	-	30	30	1	-	-	15	30	30	Frequent	-	
Shoreline CC	Lake City	N 155th St, Jackson Park	330	8%	13%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	3,100	39
Shoreline CC	Northgate	N 130th St, Meridian Ave N	345	23%	18%	12%	-	-	-	-		30	-	-	-	15	15	30	Very Frequent	7,600	19
Totem Lake	Seattle CBD	Kirkland, SR-520	255	118%	45%	29%	2	-	-	-	30	30	2	-	-	< 15	30	30	Frequent	-	
Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	12%	21%	10%	-	-	-	-	30	30	-	-	-	15	30	30	Frequent	5,100	9
Tukwila	Fairwood	S 180th St, Carr Road	906	0%	0%	N/A	-	-	-	-		30	-	-	-	15	30	30	Frequent	7,800	28
Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S	124	21%	16%	11%	-	-	-	60		30	-	-	-	15	15	30	Very Frequent	-	
Twin Lakes	Federal Way	S 320th St	187	26%	12%	17%	-	-	-	-		-	-	-	-	30	30	0	Local	1,300	51
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	0%	0%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	1,000	49
University District	Bellevue	SR-520	271	84%	85%	37%	1	1	-	60		30	1	1	-	< 15	< 15	30	Very Frequent	10,300	3
University District	Seattle CBD	Broadway	49	65%	43%	67%	1	-	1	-		30	1	-	1	15	15	30	Very Frequent	-	
University District	Seattle CBD	Eastlake, Fairview	70	104%	38%	50%	1	-	-	-		30	1	-	-	< 15	15	30	Very Frequent	-	
UW Bothell	Redmond	Woodinville, Cottage Lake	931	0%	N/A	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	3,900	35
UW Bothell	University District	Kenmore, Lake Forest Park, Lake City	372	128%	41%	68%	2	-	1	-		15	2	-	1	< 15	15	15	Very Frequent	5,200	15
UW Bothell/CCC	Kirkland	132nd Ave NE, Lake Washington Tech	238	20%	24%	N/A	-	-	-	-		-	-	-	-	30	30	0	Local	-	
Vashon	Tahlequah	Valley Center	118	99%	13%	11%	1	-	-	-		-	1	-	-	30	60	0	Local	1,100	53
West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	82%	42%	37%	1	-	-	-		15	1	-	-	< 15	15	15	Very Frequent	-	
White Center	Seattle CBD	16th Ave SW, South Seattle College	125	41%	29%	10%	-	-	-	-	30	30	-	-	-	15	15	30	Very Frequent	9,500	18
Woodinville	Kirkland	Kingsgate	236	21%	15%	11%	-	-	-	-		-	-	-	-	30	30	0	Local	-	
																				420,100	

Figures rounded for display purposes.

[1] Corridor was truncated. Demand-response service in place between Black Diamond and Enumclaw.

[2] Corridor was extended from Cowen Park to Fremont.

Ridership*	Peak	OffPk	Night
110%	2	2	2
55%	1	1	1

* The average load's proportion to the crowding threshold. Ridership service level improvements move the preliminary levels of service up one or two levels, e.g. a ridership service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc.

Above Target
At Target
Below Target

Appendix J: Investment Needs

Priority 1 - Crowding

Route	Daily One-way Trips Needed	Hours
33	1	190
40	1	430
62	1	410
125	2	440
674	2	580
675	2	700
		2,750

Priority 2 - Reliability

Route	Hours
1	50
5	200
7	100
8	200
10	400
11	200
15X	250
17X	300
18X	250
21	200
22	300
24	150
26X	400
28X	150
33	50
40	2,100
43	250
50	250
60	400
62	450
63X	500
64X	500
76	600
77X	250
106	300

Priority 2 - Reliability continued

Route	Hours
116X	250
119	250
124	100
125	250
131	450
132	300
143	250
153	250
154	250
156	50
157	250
159	250
167	250
169	50
186	250
190	250
193X	250
197	250
208	300
218	250
226	50
232	250
235	250
238	300
244	300
257	250
268	250
277	400
301X	250
303X	250
308	300
309X	250
316	500
330	250
342	250
E Line	600
	18,250

Priority 3 - Service Growth

Connections				
Between	And	Via	Major Route	Hours
Northgate	Seattle CBD	Green Lake, Wallingford	26E	13,200
Burien	Seattle CBD	1st Ave S, South Park, SODO	131	8,600
University District	Bellevue (Downtown)	SR-520	271	10,300
Redmond	Totem Lake		930	5,100
Kent	Renton	84th Ave S, Lind Ave SW	153	13,000
Issaquah	Overlake	Sammamish, Bear Creek	269	8,300
Green River Community College	Twin Lakes (21st Ave SW/SW 336th St)	15th St SW, Lea Hill Rd	181	7,200
Federal Way	Kent	Military Road S	183	6,600
Tukwila	Highline Community College	McMicken Heights, Sea-Tac, Des Moines	156	5,100
Madison Park (42nd Ave E/E Madison St)	Seattle CBD	Madison St	11	2,900
Greenwood	Seattle CBD	Greenwood Ave N	5	7,000
Magnolia (34th Ave W/W McGraw St)	Seattle CBD	34th Ave W, 28th Ave W	24	11,400
First Hill/Capitol Hill	Westwood Village	South Park, Georgetown, Beacon Hill, First Hill	60	7,800
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	16,100
Bothell (UW Bothell/Cascadia Community College)	University District	Kenmore, Lake Forest Park, Lake City	372E	5,200
Eastgate	Bellevue	Newport Wy , S Bellevue, 112th	241	5,400
Aurora Village Transit Center	University District	Jackson Park, 15th Ave NE	373E	18,400
Westwood Village	Seattle CBD	16th Ave SW, South Seattle College	125	9,500
Shoreline (Shoreline Community College)	Northgate	N 130th St, Meridian Ave N	345	7,600
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	11,200
Aurora Village Transit Center	Northgate	Meridian Ave N	346	9,300
Renton	Renton Highlands (NE Sunset Blvd/NE 12th St)	NE 4th St, Union Ave NE	105	6,400
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE	348	6,700
Avondale	Kirkland (Kirkland Transit Center)	NE 85th St, Redmond Way, Avondale Rd NE	248	4,300
Alki	SODO	Alaska Junction	50	8,000
Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	9,400
Green River CC	Kent	132nd Ave SE	164	5,700
Tukwila	Fairwood (140th Ave SE/SE Petrovitsky Rd)	S 180th St, Carr Road	906	7,800

Priority 3 - Service Growth continued

Connections				
Between	And	Via	Major Route	Hours
Redmond	Eastgate (Bellevue College)	148th Ave, Crossroads, Bellevue College	221	2,300
Kent	Burien	Kent-DM Rd, S. 240th St, 1st Ave S	166	6,000
Renton	Beacon Hill Station	West Hill, Rainier View	107	6,700
Fairwood	Renton	S Puget Dr, Royal Hills	148	3,800
Redmond	Duvall	Redmond Ridge	224	7,500
Kent	Maple Valley (Four Corners, SR-169/ Kent-Kangley Rd)	SE Kent-Kangley Road	168	8,500
Bothell (UW Bothell/Cascadia Community College)	University District	Kenmore, Lake Forest Park, Lake City	372E	5,200
Eastgate	Bellevue	Newport Wy, S. Bellevue, 112th	241	5,400
Renton	Black Diamond	Maple Valley	143E/ 907	4,000
Issaquah	North Bend	Snoqualmie	208	10,200
Shoreline (Shoreline Community College)	Lake City	N 155th St, Jackson Park	330	3,100
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	9,600
Colman Park	Seattle CBD	Leschi, Yesler Way	27	9,200
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	9,200
Sand Point (Sand Point Way/NE 70th St)	University District	NE 55th St	74	16,700
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Av W	33	3,900
Eastgate (Bellevue College)	Bellevue (Downtown)	Bell-Red Road	226	15,100
Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	15,500
Sand Point (Sand Point Way/NE 70th St)	Fremont (Fremont Ave N/N 34th St)	View Ridge, NE 65th St	62	10,700
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE	908	4,400
Twin Lakes (21st Ave SW/SW 336th St)	Federal Way	SW Campus Dr, 1st Ave S	903	1,000
NE Tacoma	Federal Way	SW 356th St, 9th Ave S	182	2,300
Twin Lakes (21st Ave SW/SW 336th St)	Federal Way	S 320th St	187	1,300
Auburn	Pacific	Algona	917	2,100
Vashon	Tahlequah	Valley Center	118	1,100
Kenmore	Totem Lake	Finn Hill, Juanita	-	9,500
Kennydale	Renton	Edmonds Ave NE	-	7,200
Vashon	Tahlequah	Valley Center	118	1,200
Kenmore	Totem Lake	Finn Hill, Juanita	-	9,500
				417,000

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