



**KING COUNTY**

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

**Signature Report**

**December 12, 2017**

**Motion 15023**

**Proposed No. 2017-0467.1**

**Sponsors Balducci**

1           A MOTION relating to the King County Metro Transit  
2           Strategic Plan for Public Transportation 2011-2021 and  
3           King County Metro Transit Service Guidelines and  
4           accepting the King County Metro Transit 2017 System  
5           Evaluation.

6           WHEREAS, the King County Metro Transit Strategic Plan for Public  
7           Transportation 2011-2021 ("the strategic plan") and the King County Metro Transit  
8           Service Guidelines ("the service guidelines") were adopted in July 2011 and revised in  
9           June 2016, and

10           WHEREAS, the strategic plan and the service guidelines were to follow the  
11           recommendations of the regional transit task force regarding the policy framework for the  
12           Metro transit system, and

13           WHEREAS, the regional transit task force recommended that the strategic plan  
14           and the service guidelines focus on transparency and clarity, cost control and  
15           productivity, and

16           WHEREAS, the regional transit task force further recommended that the policy  
17           guidance for making service reductions and service growth decisions be based on the  
18           following priorities:

19           1. Emphasize productivity due to its linkage to economic development, land use,

20 financial stability, and environmental sustainability;

21         2. Ensure social equity; and

22         3. Provide geographic value throughout the county, and

23         WHEREAS, Ordinance 17143, Section 5, directs that an annual service guidelines  
24 report of Metro's transit system, beginning with a baseline report in 2012, be transmitted  
25 by the executive to the council for acceptance by motion, and

26         WHEREAS, Ordinance 17143, Section 5.B., as amended by Ordinance 17597,  
27 Section 1, specifies that the annual service guidelines report be transmitted by October 31  
28 of each year to the regional transit committee for consideration, and

29         WHEREAS, Ordinance 17143, Section 5.A, specifies that the annual service  
30 guidelines report include:

31         1. The corridors analyzed to determine the Metro All-Day and Peak Network  
32 with a summary of resulting scores and assigned service levels as determined by the  
33 service guidelines;

34         2. The results of the analysis including a list of transit corridors above and below  
35 their target service levels and the estimated number of service hours necessary to meet  
36 the needs of each corridor below its target service level;

37         3. The performance of transit services by route and any changes in the service  
38 guidelines thresholds since the previous reporting period, using the performance  
39 measures identified in chapter III of the strategic plan and in the service guidelines;

40         4. A list of transit service changes made to routes and corridors of the network  
41 since the last reporting period;

42         5. Network and rider connectivity associated with transit services delivered by

43 other providers; and

44 6. A list of potential changes, if any, to the strategic plan and the service  
45 guidelines to better meet their policy intent, and

46 WHEREAS, the service guidelines task force called for in the 2015/2016 Biennial  
47 Budget Ordinance, Ordinance 17941, Section 113, Proviso P1, provided  
48 recommendations influencing updates to the strategic plan and service guidelines  
49 regarding:

50 1. How transit service performance is measured as specified in the service  
51 guidelines to reflect the varied purposes of different types of transit service;

52 2. Approaches to evaluating how the goal of geographic value is included in the  
53 service guidelines, including minimum service levels;

54 3. Approaches to evaluating how the goal of social equity is included in the  
55 service guidelines;

56 4. Financial policies for purchase of additional services within a municipality or  
57 among multiple municipalities; and

58 5. Guidelines for alternative services implementation, and

59 WHEREAS, Ordinance 18301, adopted in June 2016, updated service guidelines  
60 policies and procedures regarding the evaluation and allocation of Metro transit service  
61 based on the recommendations of the service guidelines task force, and

62 WHEREAS, Motion 13736, Section D, adopting the Five-Year Implementation  
63 Plan for Alternatives to Traditional Transit Service Delivery, directs that, beginning in  
64 2013, an annual report of alternative services be transmitted by the executive to the  
65 council, which report has been combined with the attached system evaluation in order to

66 provide a comprehensive overview of services and performance, and

67 WHEREAS, Ordinance 18301, Section 3.B.2., requires an update on the  
68 alternative services program to be included with the 2017 service guidelines report, and

69 WHEREAS, Ordinance 18449 adopted Metro's long-range transit service and  
70 capital plan, titled METRO CONNECTS, and that Metro committed to the regional  
71 transit committee to clearly track progress toward the implementation of METRO  
72 CONNECTS as part of the service guidelines report, and

73 WHEREAS, Ordinance 18413 requires the planning, implementing, administering  
74 and operating of passenger ferry service in King County to be integrated with and subject  
75 to the methodology of the service guidelines, and

76 WHEREAS, King County Metro staff has compiled all required information in  
77 the King County Metro Transit 2017 System Evaluation and the executive has  
78 transmitted this report, set forth as Attachment A to this motion, to the council and to the  
79 regional transit committee;

80 NOW, THEREFORE, BE IT MOVED by the Council of King County:

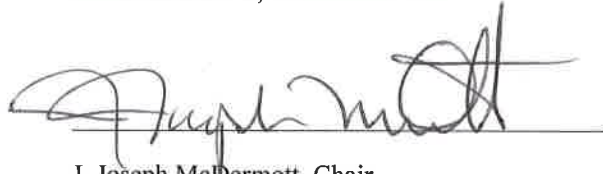
81 The King County council hereby accepts as the service guidelines report required

82 under Ordinance 17143, Section 5, as amended, the King County Metro Transit 2017  
83 System Evaluation, which is Attachment A to this motion.  
84

Motion 15023 was introduced on 11/6/2017 and passed by the Metropolitan King County Council on 12/11/2017, by the following vote:

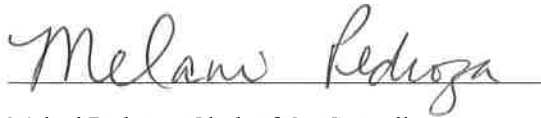
Yes: 7 - Mr. von Reichbauer, Mr. Dunn, Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles and Ms. Balducci  
No: 0  
Excused: 2 - Mr. Gossett and Ms. Lambert

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Melani Pedroza, Clerk of the Council



**Attachments:** A. 2017 System Evaluation



# 2017 System Evaluation





### Alternative Formats Available

206-477-3832 TTY Relay: 711

Para solicitar esta información en español, sírvase llamar al 206-263-9988 o envíe un mensaje de correo electrónico a [community.relations@kingcounty.gov](mailto:community.relations@kingcounty.gov)

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# Executive Summary

This report presents Metro Transit’s annual assessment of the transit network as required by Ordinances 17143 and 18413 and Motion 13736. Using our adopted Service Guidelines, we analyzed data from the September 2016–March 2017 timeframe (unless otherwise noted). Methodologies and definitions can be found in Appendix A.

## Our Findings

Our 2017 data analysis found that an investment of 509,500 annual service hours is needed to meet *current* demand. The analysis reflects recent investments, growth in jobs and population, and increasing congestion on our roadways.

The needed investment would reduce crowding, improve reliability, and grow our service network. Making some of these investments would help Metro move toward our METRO CONNECTS long-range vision and the Puget Sound Regional Council’s Transportation 2040 plan. About 2.2 million additional service hours are required to achieve this vision.

## Our Investment Activities

In fall 2016 and spring 2017, Metro invested approximately 109,000 annual service hours in the system:

- » 21,000 hours to relieve crowding (Priority 1)
- » 30,000 hours to improve reliability (Priority 2) and operator access to comfort stations, which also helps Metro comply with labor and industry standards
- » 13,000 hours to address emergent needs associated with the opening of Link light rail on Capitol Hill and at Husky Stadium
- » Other targeted investments for fixed-route service
- » Community Connections (formerly Alternative Services) investments in Redmond LOOP, Mercer Island TripPool, Black Diamond-Enumclaw Community Ride, and Auburn Community Ride.

## Seattle Investments

Metro and Seattle work together to plan and implement additional service funded by Seattle’s voter-approved November 2014 Proposition 1. In accordance with the contract between Metro and Seattle, Metro is in the process of assuming funding for some of Seattle’s investments. As Metro assumes funding for service, Seattle may add more service hours at its discretion, in coordination with Metro.

## Community Connections

The significantly expanded Community Connections program (formerly Alternative Services) launched two new pilot services—Auburn Community Ride and Black Diamond-Enumclaw Community Ride—during the September 2016 to March 2017 service period. This brought the total number of operating services to 10. The program is currently monitoring performance in six communities and developing innovative services in 15 other communities throughout the county, eight of which committed to collaborating on new projects in 2017. This report includes performance data for services currently in the evaluation stage.

## Marine Division

New in this year’s report is data on the King County Marine Division’s Water Taxi service. Ordinance 18413 requires that planning, implementing, administering and operating passenger ferry service should be integrated and subject to the methodology of Metro’s Service Guidelines. Operating between Colman Dock in downtown Seattle and both Vashon Island and West Seattle, the Water Taxi provides travel options and complements transit service. Information about the services can be found in the Fixed-Route Service Evaluation and in the tables in appendices C, E, F, and G.



### 2017 Investment Needs



**6,800 bus hours**

Priority 1  
(Reduce Crowding)



**17,000 bus hours**

Priority 2  
(Improve Reliability)



**485,700 bus hours**

Priority 3  
(Service Growth)



## Our Future

At the time this report was finalized, Metro planned to add approximately 150,000 hours of new service between September 2017 and the end of 2018. These new hours will address the priority investment needs identified in this System Evaluation. Metro also planned to invest approximately 40,000 hours to mitigate service disruptions caused by major construction projects. King County Marine Division is continuing to explore opportunities to partner with other agencies to provide service. However, near-term plans are to maintain existing service.

The needs identified in this report are only a part of the approximately 2.2 million service hours needed to double ridership and achieve the METRO CONNECTS vision. As we move forward, the METRO CONNECTS Development Program aims to improve coordination with external agencies and jurisdictions to identify opportunities to deliver the plan efficiently and effectively. A forthcoming Policy Report will identify policies that need to be reviewed and potentially revised to put Metro on a course to achieve METRO CONNECTS by 2040. This report contains a new METRO CONNECTS Progress Report section that provides additional details.

# Introduction

## What is the System Evaluation?

This report is a snapshot of the health of our transit system: our fixed-route services, the Community Connections program, and new this year, the King County Water Taxi system. It is based on the Service Guidelines, which establish criteria and processes that Metro uses to analyze and plan changes to the transit system. The guidelines were adopted by the King County Council (Ordinances 18301 and 18413, and Motion 13736). The report contains the following information:

- » Fixed-route service evaluation
- » Community Connections evaluation
- » METRO CONNECTS progress report
- » Potential changes to the Service Guidelines and Strategic Plan for Public Transportation.

Reducing crowding and improving reliability—our service quality indicators—are Metro’s top two investment priorities, as they directly affect the quality of our service. Improvements in these areas help us keep the riders we have and attract new riders. Growing our service is our third investment priority, as more service enables us provide better mobility options, helping us meet existing demand, reach climate action goals, and enable the region’s economy to continue growing without expanding roadways. Highly productive routes are our fourth investment priority.



## Why produce the report?

Metro analyzes transit system data to inform decision-making and continuous improvement. We publish the report to show the public the basis for our decisions about adding, reducing, or changing service.


## How does Metro use the report?

We analyze data to learn where problems exist in our system and where we are not providing sufficient service. We combine this information with what we hear from customers to develop proposals to change service. We then take these proposals to the public, gather and incorporate feedback, and submit final plans for approval by the King County Council. After we make the service changes, the cycle begins again.

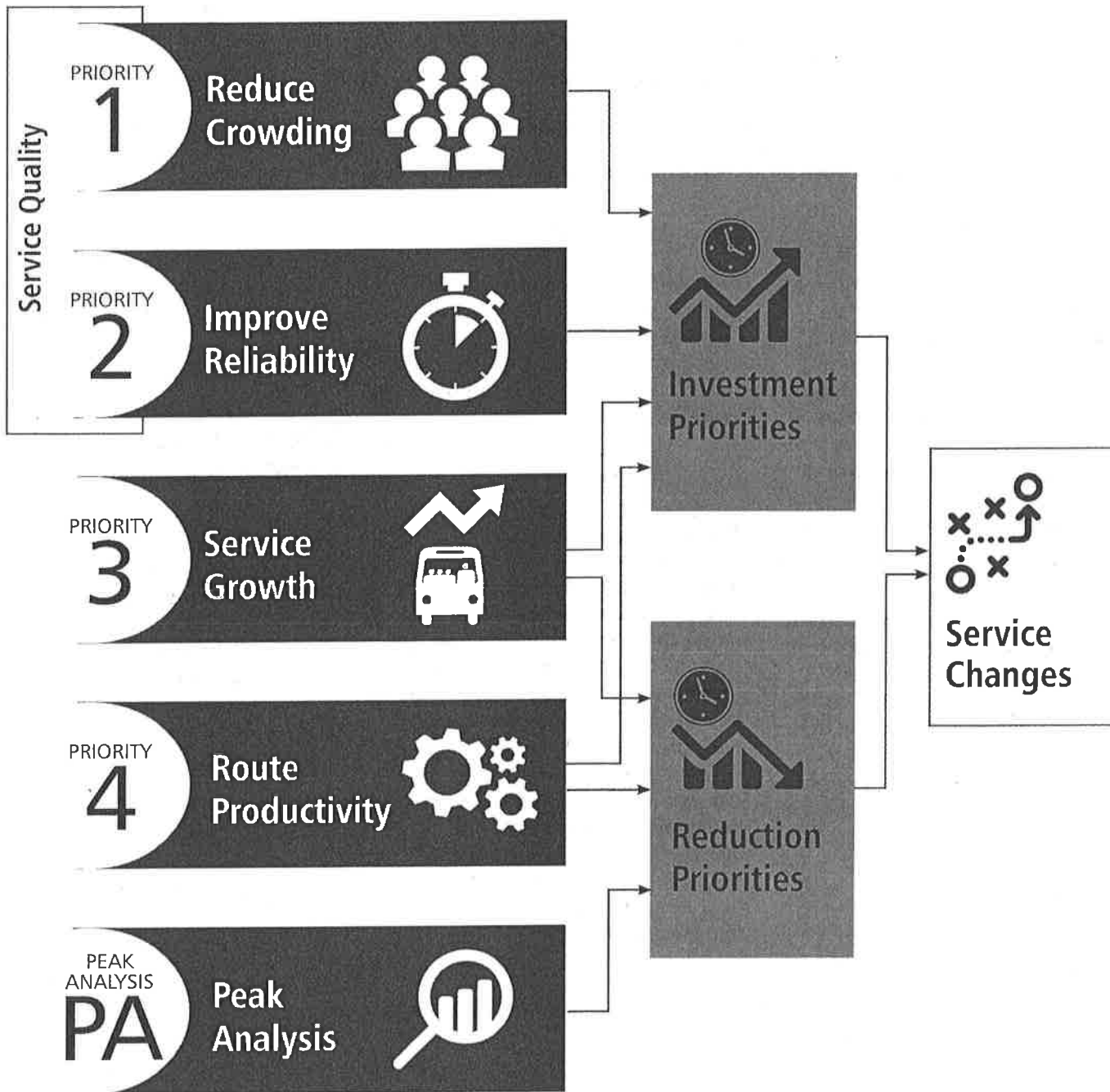
The results of the analysis and the policies embedded in the Service Guidelines provide Metro guidance on how we should add, reduce, or restructure service. The policies and data provide a clear and transparent framework for making decisions about transit service.

## How can you use the report?

You can use the maps throughout the report and the tables in the appendices to find your route and see how it stacks up to other routes in the system. You’ll be able to tell at a glance if we have identified problems on your route (like crowding), and what we believe we need to do to fix it. 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 investment proposals.



**King County Water Taxi Information**  
Water Taxi services were evaluated for crowding, reliability, and productivity. The peak analysis was also performed on these services. Information about the service can be found in the Fixed-Route Service Evaluation and in the tables in appendices C, E, F, and G.



# Fixed-Route Service Evaluation

Investment need



**6,800  
bus hours**

## Crowding (Priority 1)

### What is Crowding?

Reducing crowding is our highest investment priority. A trip is crowded if:

- » its average maximum load exceeds the crowding threshold for its type of bus, or
- » its average load exceeds the number of seats for 20 consecutive minutes.

Trips must be consistently crowded for several months to be identified for investment.

### What We Found

Thirteen routes were identified as having chronically crowded trips. Another 13 routes had crowded trips, but surrounding trips arriving within 15 minutes have sufficient capacity to handle the passenger loads. Metro will monitor these routes and watch for shifts in rider habits before identifying these routes for investment.

Most crowding occurs during the peak periods, and for the near-term, our ability to add new service during these times will remain constrained. New peak service requires more buses, and we have a limited ability to increase the size of our fleet due to space limitations at our seven bases. Metro is currently exploring options to increase available space at current bases and to build a new base.

### What We've Done

Between fall 2016 and spring 2017, Metro invested more than 21,000 hours to reduce crowding. These investments were based on the 2016 System Evaluation and the latest available data.

### What's Next?

Thanks to improvements in our data processing, we can identify and analyze crowded trips and take action to reduce crowding more rapidly than in the past. At the time this report was compiled, Metro planned to invest 5,000 hours in September 2017 to address the most pressing crowding problems we have identified. More hours are planned for March 2018 to address emergent crowding needs. The specific investments Metro makes will be informed by the latest data and the constraints of adding service in peak periods.

For the routes that received investments in March 2017



**12** are no longer crowded



**8** saw a decrease in the number of crowded trips



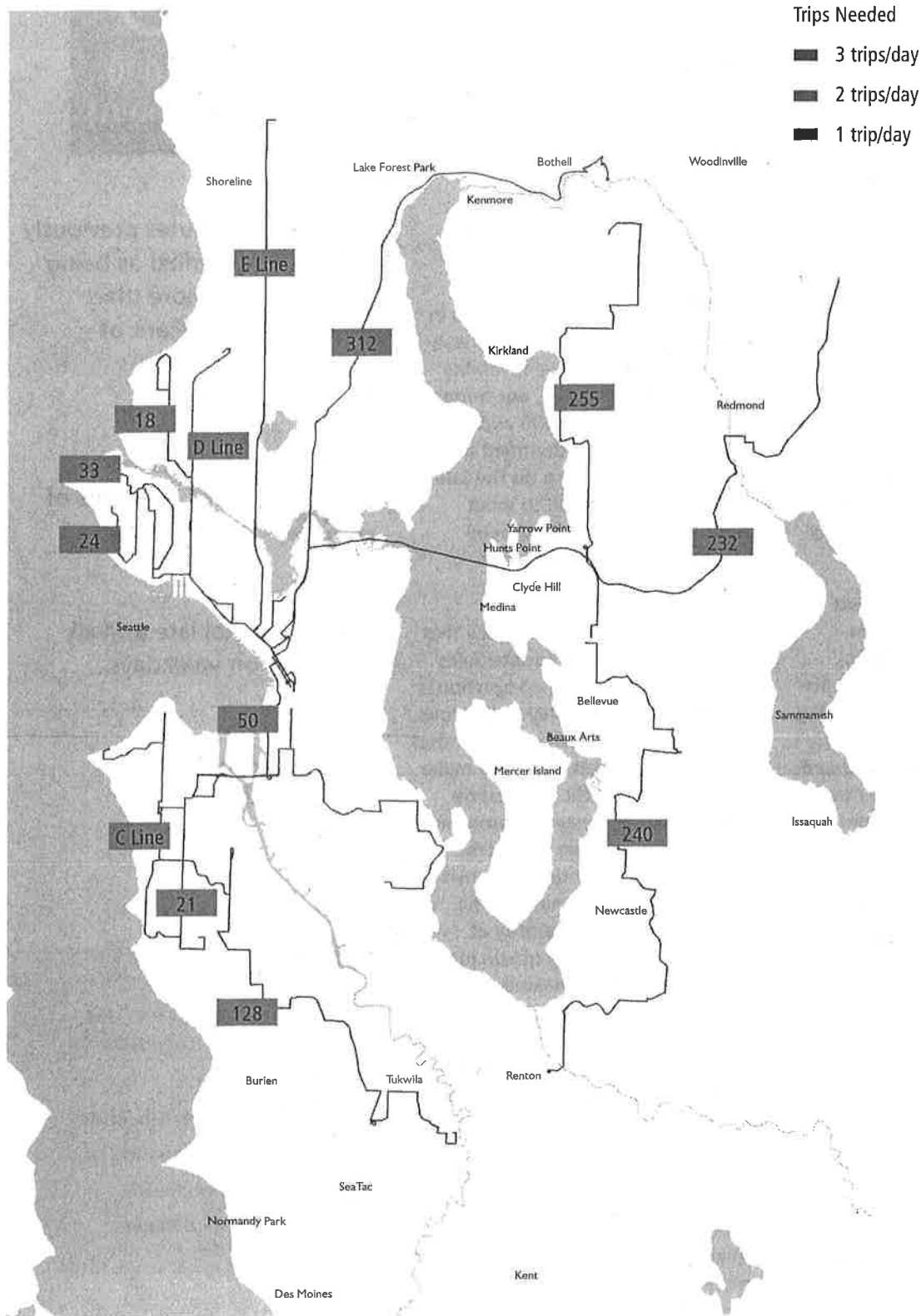
**9** remain crowded, reflecting ridership growth that exceeded our investment. Eight of these nine routes do not exceed the crowding threshold, but rather have standing loads in excess of 20 consecutive minutes



## King County Water Taxi

The capacity of Water Taxi vessels is capped by maritime regulations. From November 2016 to March 2017, only two West Seattle Water Taxi trips were at 100 percent capacity (278 passengers). Those at-capacity trips occurred because of a tanker truck accident on I-5 in February—highlighting the role the Water Taxi plays when our transportation network is disrupted. No trips on the Vashon Island Water Taxi were at 100 percent capacity. New vessels introduced in 2015 with a useful life of 25 years were sized to accommodate future growth on both routes. As interest in waterborne services increases throughout the region, work will need to be done to identify and plan for future service and facility needs.

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



## Reliability (Priority 2)

### What is Reliability?

Reliability is our measure of on-time performance. Metro routinely tracks metrics of on-time performance, early arrivals, and late arrivals of buses at bus stops. To identify routes needing investment, we calculate the percentage of time that buses arrive late. Routes whose buses arrive late more than 20 percent of the time all day, or more than 35 percent of the time during the PM peak period, are identified as candidates for investment.

Investment need



**17,000  
bus hours**

### What We Found

In April, Metro hit our target of 80 percent on-time, system-wide, for the first time since January 2014. The significant investments in improving reliability by both Metro and the City of Seattle made this possible. However, some of our buses continue to have difficulty arriving on time, as reflected by the 17,000 hours of need our analysis found. See Appendix F for reliability statistics by route.

Thirty-five routes show persistent reliability problems; 23 are new to the list, indicating that traffic congestion and ridership growth are causing routes previously performing to standard to fall below standard. Five of the routes were on our U-Link restructure watch list and are now identified as needing investment. The remaining five routes were previously identified as needing improvement; even though they received investment, they continue to fall below our standard.

### What We've Done

In March, we invested more than 16,000 hours directly in service schedules to improve reliability. An additional 13,000 hours were added to schedules to improve operator access to comfort stations during layovers; some of these hours were added to running time, while some were added to layover time.

### What's Next?

When this report was compiled, Metro planned to add 16,000 hours for comfort station access in September 2017. We expect these investments to improve reliability as well. In March 2018, our budget calls for investing 10,000 additional hours in the routes identified in this report. Depending on the latest data, additional hours to meet the total 17,000 hours of need may be harvested from other investment areas.

Our findings reinforce the idea that adding running time to schedules to deal with increased congestion is not always the best way to improve reliability—it just acknowledges that it takes longer than before to make the same trip. Traffic congestion, especially on freeways, is worsening, and a better solution to chronic unreliability is to prioritize transit on our roadways. Timing traffic lights, giving transit priority at intersections, building queue jumps and bus lanes, and making other minor modifications to roadways can make trips faster. Other ways to keep buses moving include simplifying fares, increasing opportunities for off-board fare payment, improving signage, and consolidating stops. We will be exploring these options, and we value partnerships with jurisdictions to help make reliability improvements as we implement METRO CONNECTS through the METRO CONNECTS Development Program.



On routes previously identified as being late more than **20 percent** of the time...



that received at least **150 hours** of investment...



total late arrivals on weekdays...



dropped **26 percent**.



### King County Water Taxi On-Time Performance

Spring 2017



West Seattle Route:

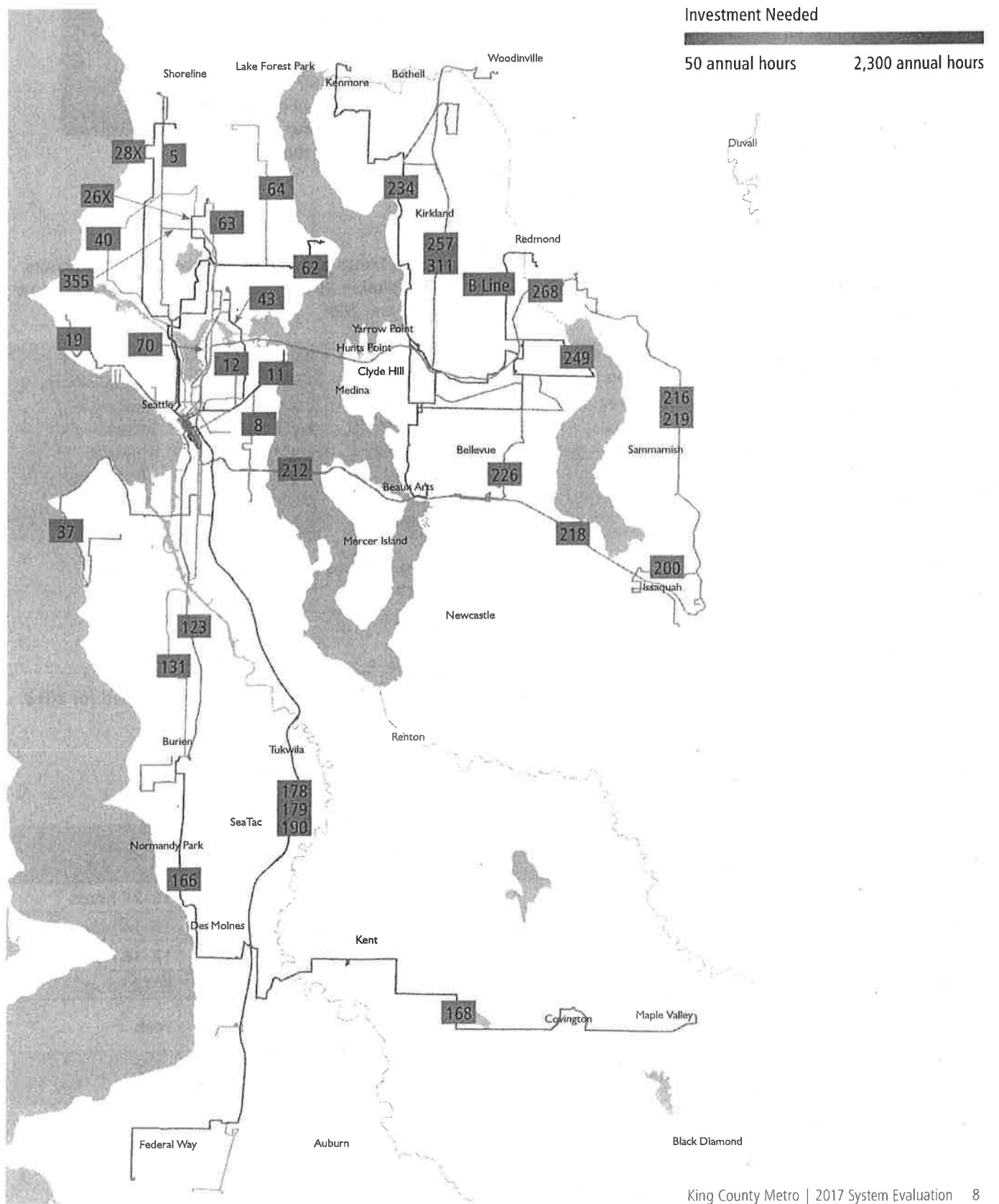
**99.4 percent**

Vashon Route:

**98.4 percent**



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





## Service Growth (Priority 3)

### What is Service Growth?

The Service Guidelines set policies that determine how often buses should come throughout the day on major transit corridors in our existing system (referred to in the Service Guidelines as target service levels). This analysis is based on a combination of land use productivity, social equity factors, and how well each corridor connects centers in our county. The gap between how much service is currently provided and how much service is needed constitutes the investment need to meet current demand. A summary of the analysis and the investment need for each corridor is in Appendix I.

Investment need



**485,700  
bus hours**

### What We Found

Service needs to grow on 58 corridors. Total Priority 3 investment need changed very little from last year, largely because last year's report excluded corridors involved in the large service restructure associated with the opening of Link light rail on Capitol Hill and at the University of Washington. We excluded these corridors because our data pre-dated the restructures and was therefore not applicable moving forward. This year's analysis revealed that not all of these corridors have sufficient service. See the maps on the following pages for depictions of needs by time period.

### What We've Done

When this report was compiled, Metro planned to make about 30,800 hours of Priority 3 investments in September 2017. These hours were slated to grow service on routes 60, 131, 169, and 269:

**Route 60:**  
3,300 hours  
(increase weekday AM and PM peak-direction frequency)

**Route 131:**  
2,300 hours  
(increase weekday AM peak-direction frequency to every 15 minutes)

**Route 169:**  
16,200 hours  
(increase weekday peak and midday frequency to every 15 minutes)

**Route 269:**  
9,000 hours  
(increase weekday midday frequency to every 30 minutes)

These investments constitute the first of three phases of Priority 3 investments budgeted for 2017–2018.

### What's Next?

Additional Priority 3 investments totaling 77,000 hours are planned for 2018. This report's analysis will inform those investments.

*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
Community Connections	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 to ensure we create an integrated network with the best possible transfer environments when Link light rail is extended to Northgate and Overlake, maximizing the total regional investment in transit service.

We are proceeding with collaborative planning in association with the One Center City effort ([onecentercity.org](http://onecentercity.org)). We are determining the best alternatives to provide bus service to, from, and through the Seattle core as multiple construction projects restrict the space available for buses. Capitalizing on Link light rail will enable Metro to extend mobility benefits to new and growing markets while minimizing negative impacts on travel time.

Key corridors in King County where Sound Transit is the primary provider of two-way, all-day transit service are listed in Table 2. In many of these corridors, Metro operates mainly peak service that complements Sound Transit's all-day service.

*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

As Link service continues to expand, Sound Transit will become the backbone provider in additional corridors, such as Northgate to downtown Seattle. As services are introduced and modified, Metro and Sound Transit will integrate services to maximize mobility.



Keep an eye on Metro's Link Connections webpage, [www.kingcounty.gov/metro/linkconnections](http://www.kingcounty.gov/metro/linkconnections), for the latest news and to get involved in planning efforts to integrate bus and rail service.

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

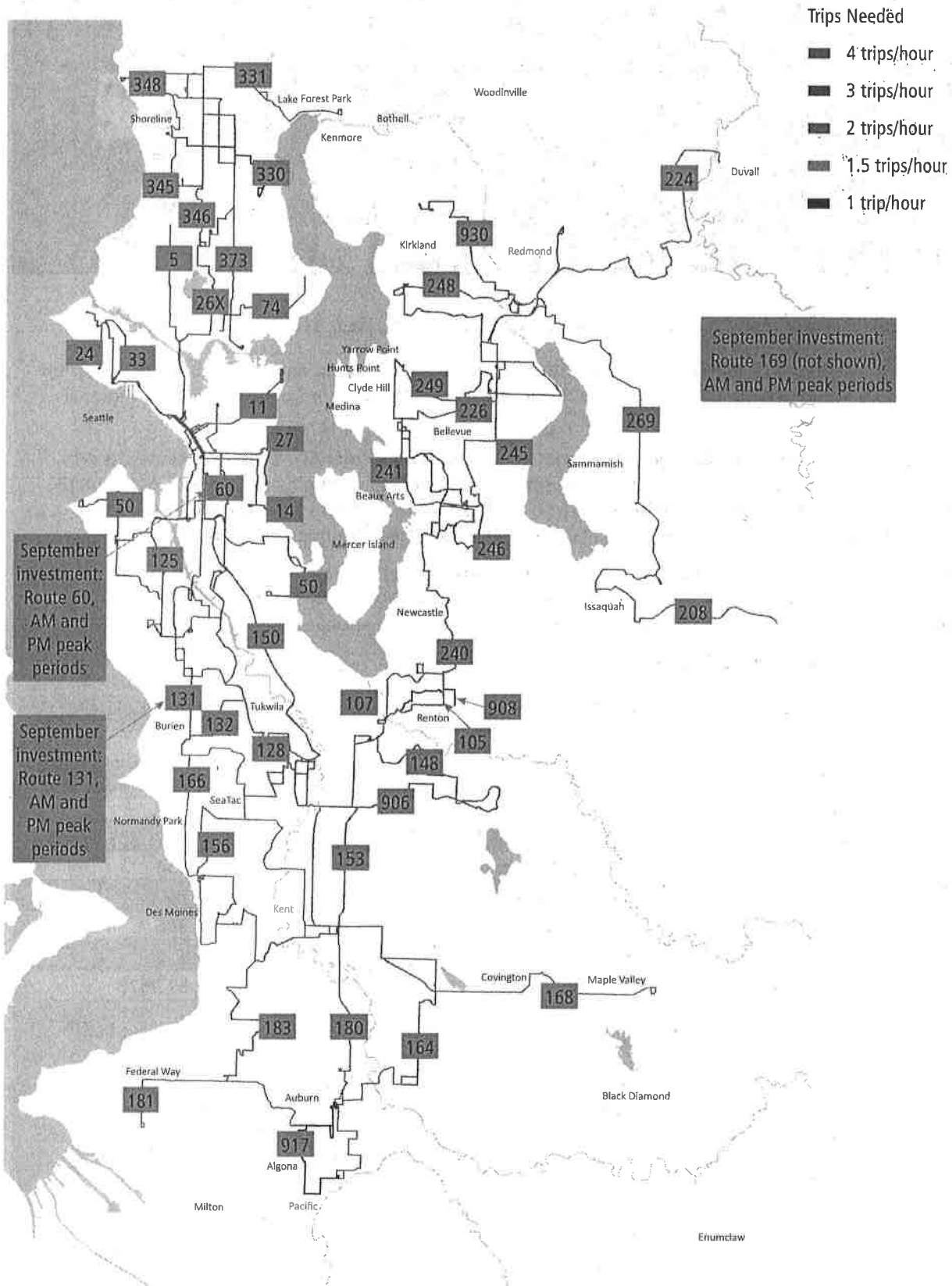


Figure 4. Metro Corridors Needing Investment per the Service Guidelines (Off-Peak Period, 9 a.m.–3 p.m.)

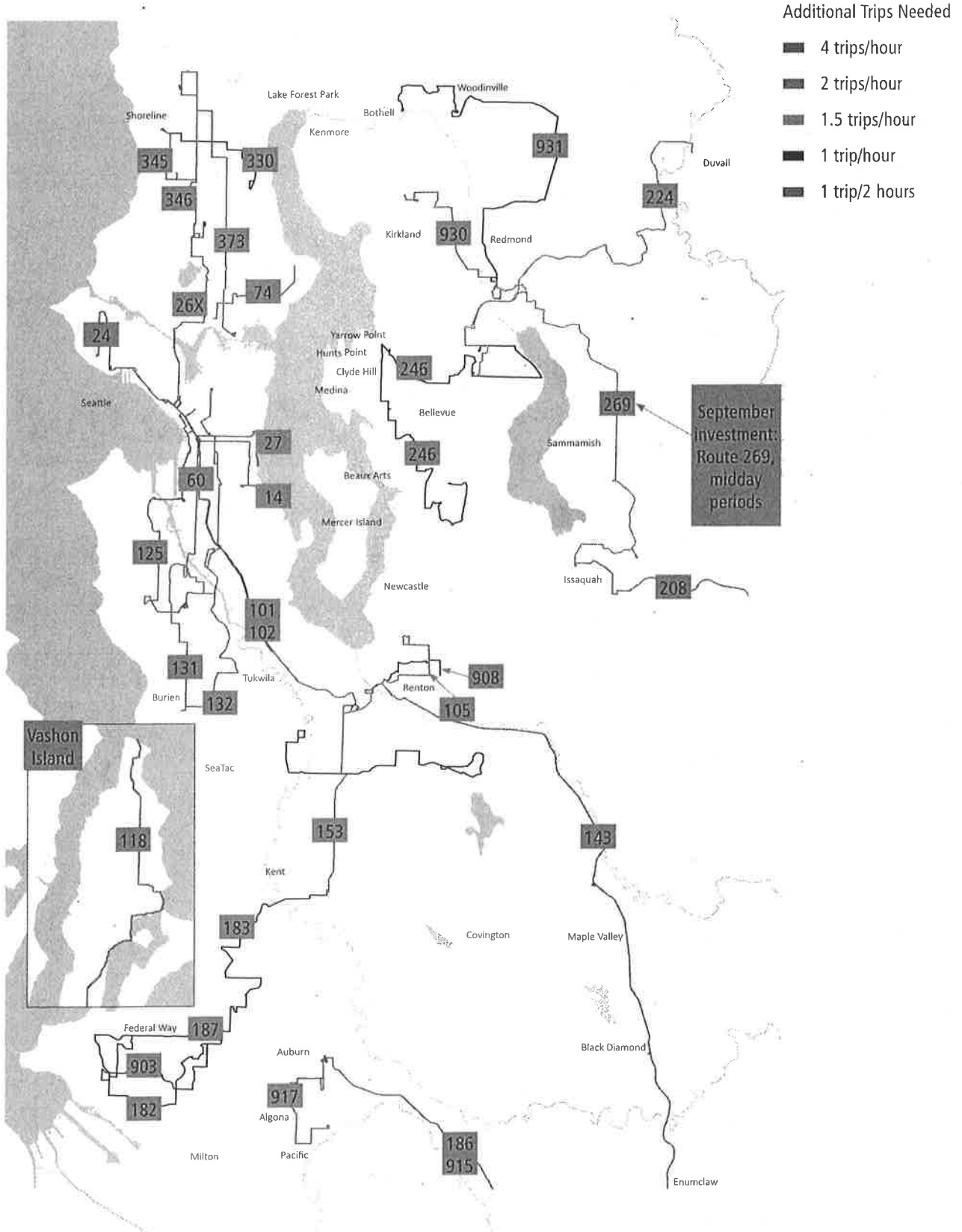
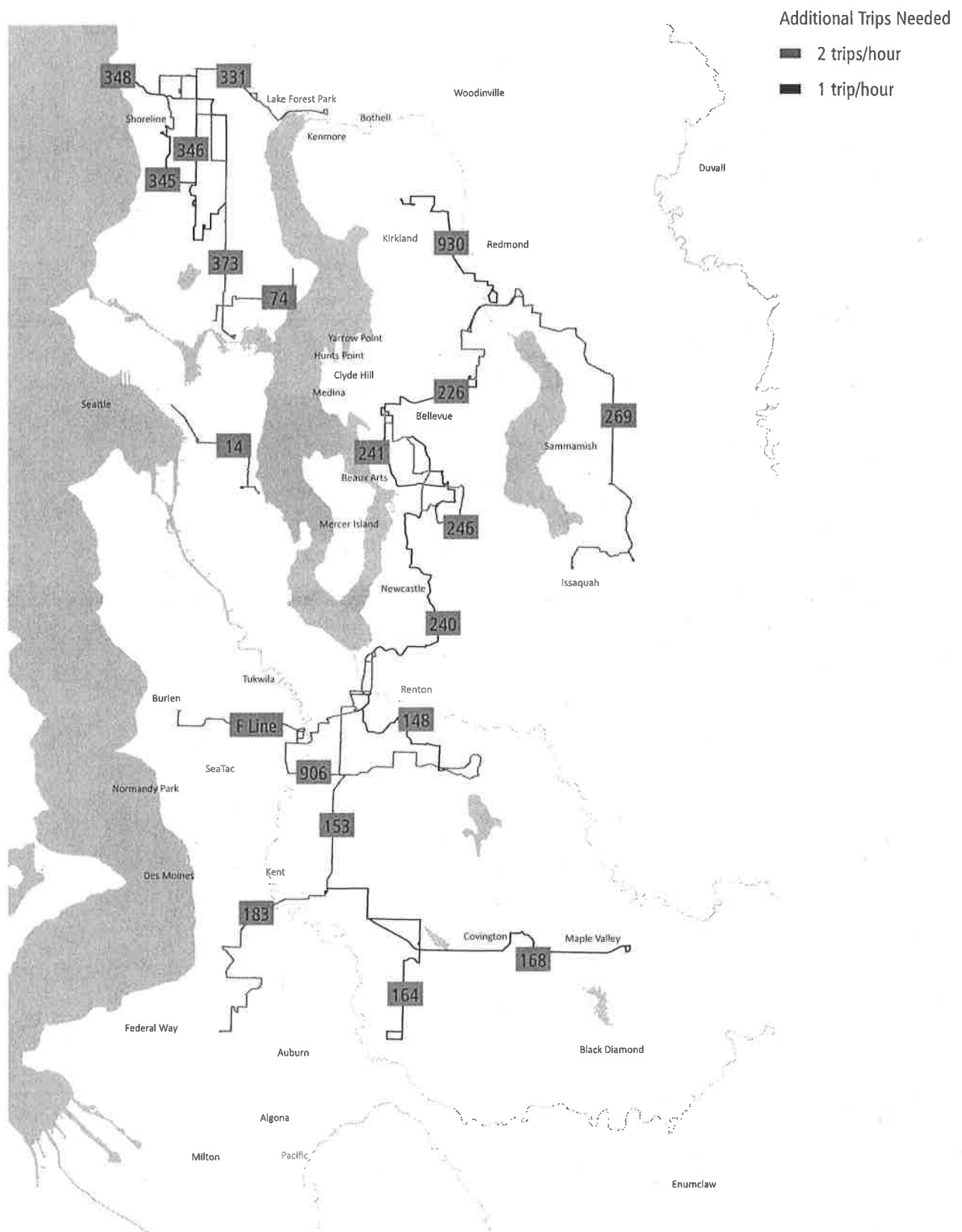


Figure 5. Metro Corridors Needing Investment per the Service Guidelines (Night Period, after 7 p.m.)



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## 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 occurs on routes and in areas that are highly productive. See Appendix A for more about how we measure productivity.



Route productivity statistics (Appendix C) inform decisions about investments, restructures, and reductions. Routes in the top 25 percent of performers are eligible for investment, and routes in the bottom 25 percent are eligible for reduction when the budget necessitates service reductions. The fixed-route 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.

In the September 2016–March 2017 period, we saw a continuation of last year’s trend of decreasing productivity nearly across the board. This is expected in periods of rapid growth, as it can take some time for ridership to build after adding large numbers of service hours to the system.

- » The largest declines were seen in Urban routes in the off-peak and night periods—the time periods that had received significant investment.
- » Link replaced some of our most productive service between the U District, Capitol Hill, and downtown Seattle; routes with redeployed service hours will take time to build new ridership.
- » Investments in reliability and in comfort station access for operators add hours to the system without adding capacity, creating downward pressure on productivity.
- » Collectively, DART routes saw modest productivity improvements in the peak periods.

See Appendix C for route-level 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 express variants of underlying local routes, that operate only during the AM and PM peak periods.

Peak-only services augment the all-day network and add value by providing more service, usually in one direction, at times of peak demand. Metro uses the results of the peak analysis when planning service and when we must reduce service. The analysis 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  $\geq 20$  percent faster than the local alternative?
- » **Ridership:** Does the peak-only route have  $\geq 90$  percent of the local alternative’s ridership during the peak hours?

Peak-only routes incur additional operating costs, as they require an increase in the size of our fleet. 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 these criteria. (Note: high-performing peak-only routes are excluded from the top priority for reduction, like all other high-performing routes.) The Service Guidelines contain more information about how we use the peak-only metrics when reducing service.

This year, we found that 58 of the 66 peak-only routes analyzed met at least one of the criteria. Only eight routes failed both. See Appendix E for the complete results of the peak-only analysis.





## Community Connections Annual Report

This section presents the annual report on Metro’s Community Connections pilot projects. The Community Connections program (formerly Alternative Services) was created in response to fluctuating funding and growing demand for mobility. Its purpose is to support growing communities, right-size and complement existing services, and develop innovative alternatives to fixed-route service in communities that do not have the land use, density, or topography to support a productive fixed-route transit network.

The alternative services concept became a four-year demonstration program with dedicated funding in the County’s 2015–2016 biennial budget (Ordinance 17941). Work on the demonstration program has been guided by the priorities established by the funding ordinance: service reduction mitigation, delivery against the Five Year Implementation Plan,<sup>1</sup> and development of complementary services.

### Community Connections Products

One of the defining features of the Community Connections program is the capability to launch, test, and refine innovative service solutions. These products leverage Metro’s long-standing success in both DART and ridesharing services in combination with emerging mobility technologies. In addition to the products described below, Metro is also considering new ideas which include vehicles that respond to requests in real-time, promotional partnerships with taxi and transportation network companies, and “space-available open door” access to eligibility-based services. As we continue to work with communities on our pilot projects, we expect to develop other ideas for innovative, customized services. Current services include:

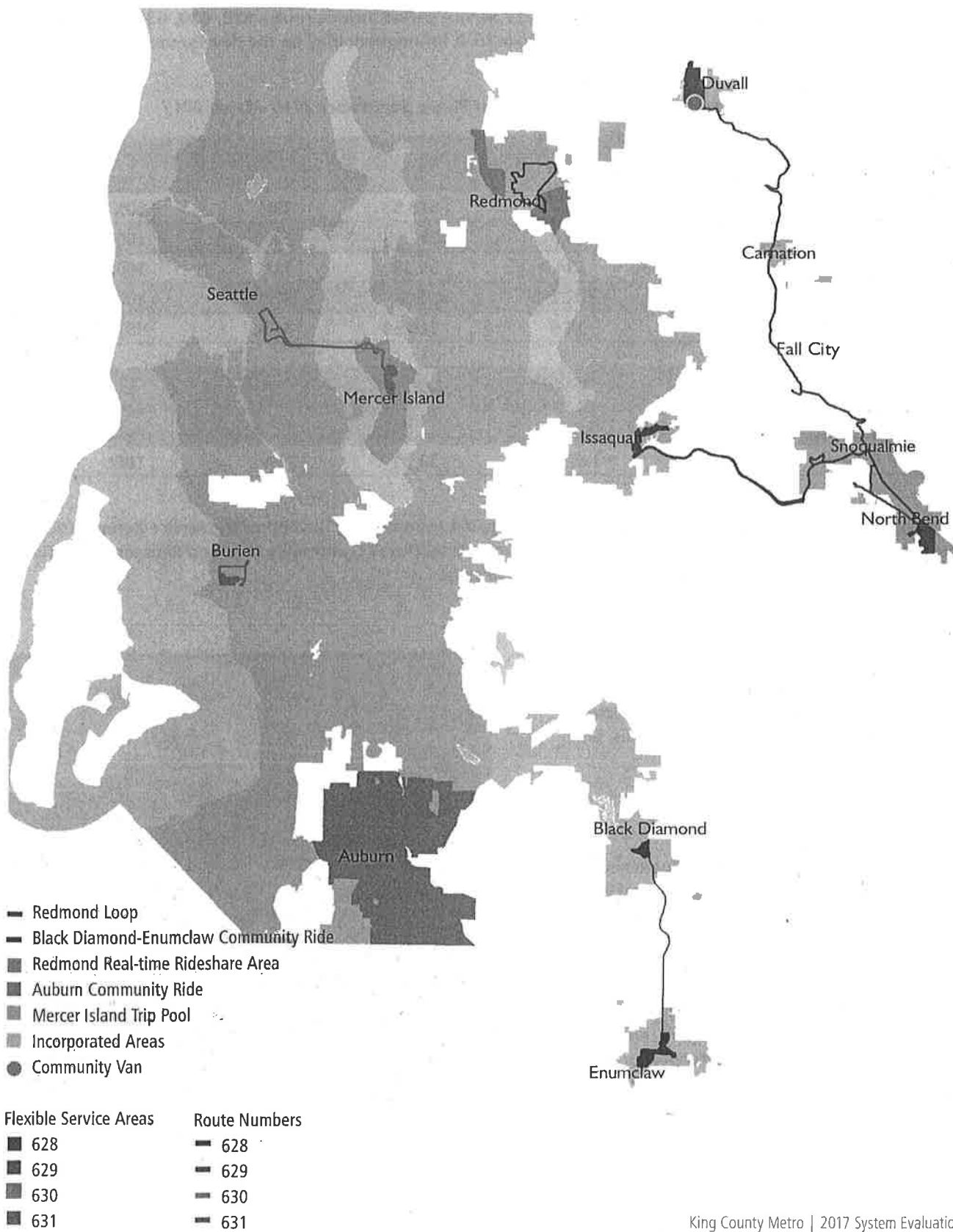
- » **Community Ride:** Reservation-based services for appointments, errands, and other local trips.
- » **Community Shuttle:** Metro route with a flexible service area, provided through community partnerships.
- » **Community Van:** Metro vans for local group trips scheduled by a community transportation coordinator to meet local needs.
- » **Community Transportation Hub:** Online or physical one-stop-shop for transportation information and resources.
- » **Real-Time Rideshare:** Promoting the use of mobile apps to enable private carpool ridematching in real-time.
- » **TripPool:** Real-time ridesharing between home neighborhood and transit center. Uses Metro vans and ORCA fares.

### Wheels on the Ground

The map in Fig. 6 shows the location of Community Connections pilot services operating during the September 2016 to March 2017 service period.

<sup>1</sup> King County Metro Transit Five-Year Implementation Plan for Alternatives to Traditional Transit Service Delivery

Figure 6: Location of Current Metro Community Connections Pilot Services





## Product Performance

Metro collects and analyzes ridership data for Community Connections service solutions. Services in their performance evaluation phase during the September 2016 to March 2017 service period include routes 628, 629, 630, 631, Redmond LOOP, and Mercer Island TripPool. Please see Appendix A for methodology on the development of performance measures.

*Table 3: Data for Community Connections Services in Evaluation Phase, September 2016–March 2017*

Route	Daily Ridership	Cost/Boarding	Vehicle Utilization	Customer Satisfaction
Snoqualmie Community Shuttle, Route 628	61.2	\$18.87	39%	90%
Snoqualmie Valley Shuttle, Route 629	69.8	\$17.38	60%	100%
Mercer Island Community Shuttle, Route 630	134.8	\$5.28	71%	100%
Burien Community Shuttle, Route 631	82.1	\$6.68	37%	100%
Redmond LOOP	18.9	\$19.58	42%	95%

Route	Monthly Passenger Trips Actual	Cost/Boarding Actual	Vehicle Utilization Actual	Customer Satisfaction Actual
Mercer Island TripPool	62	\$3.99	23%	TBD

Services with wheels on the ground but not yet in performance measurement by the end of the service period include Auburn Community Ride, Black Diamond-Enumclaw Community Ride, Duvall Community Van, and Redmond Real-Time Rideshare. These services were all in baseline data collection phases.

## Projects in Planning

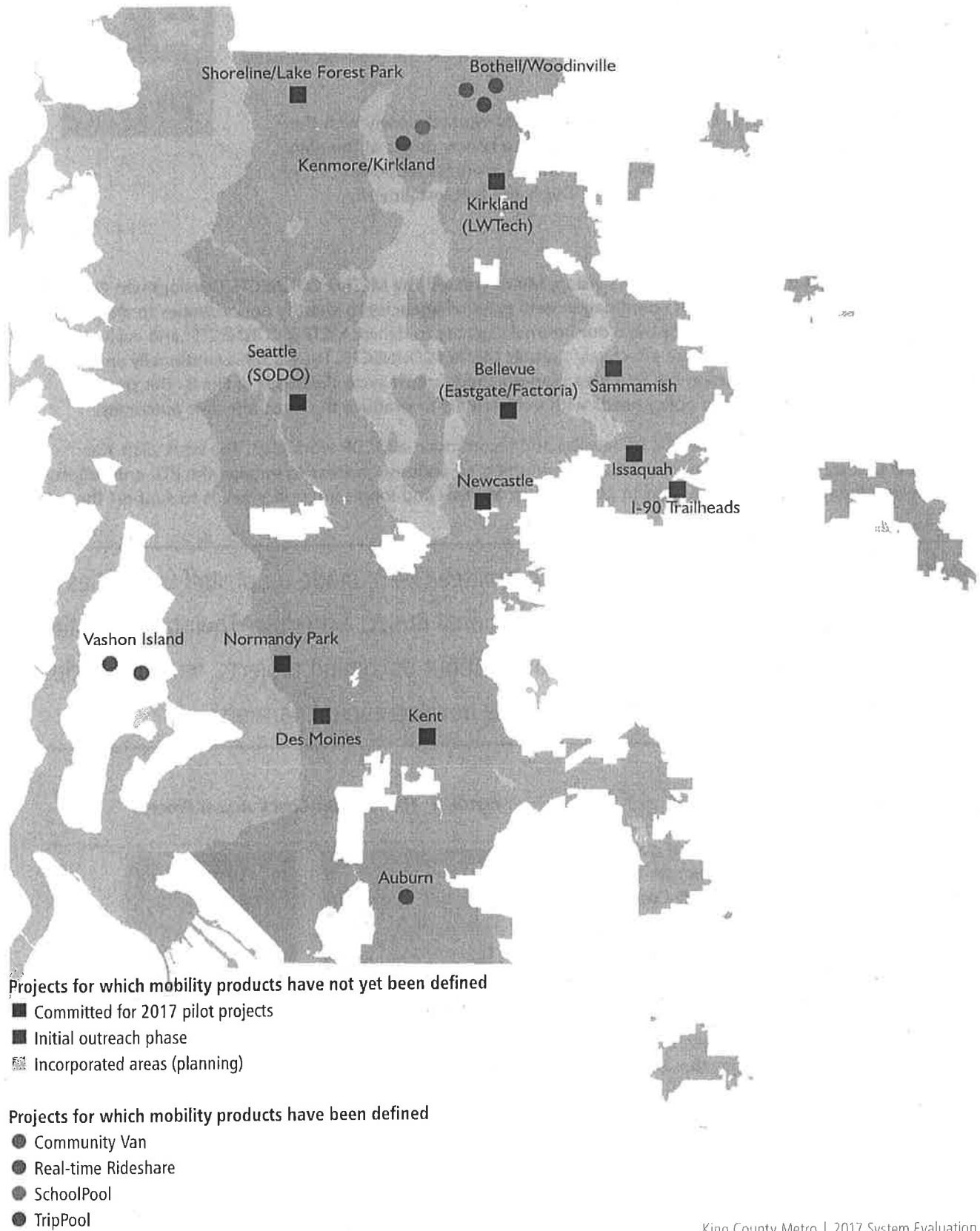
Fig. 7 shows projects that were in their planning phases as of the end of the service period (March 2017). Planning phases may include project scoping, needs assessment, concept preferential analysis, and implementation planning.

## Looking Forward

As we continue to develop, test, and evaluate new Community Connections services, we will be making the program more robust, scalable, and sustainable. This effort will include evaluating how we engage and identify jurisdictions to participate in collaborative projects. Next steps include interviewing jurisdictions to identify strategies for driving participation in the fall application process for new pilot communities in 2018, and addressing barriers that may prevent resource-strapped jurisdictions from submitting applications. The Community Connections program is also participating in service planning for the METRO CONNECTS Development Program.



Figure 7: Metro Community Connections Projects in Planning Phases as of March 2017

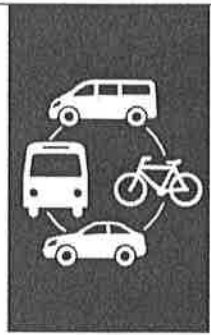


# METRO CONNECTS Progress Report

## Overview

This new section reports on Metro’s progress toward the METRO CONNECTS long-range vision: to bring more and better transit service to King County to meet the growing demand and needs of the region over the next 25 years.

During the development of METRO CONNECTS in 2016, Metro worked closely with the Regional Transit Committee (RTC) and King County Council to review drafts of the plan. During this process Metro committed to providing an annual progress report on METRO CONNECTS in the System Evaluation Report. This is the first installment.



## Making Progress

To facilitate attainment of the METRO CONNECTS vision, Metro created the METRO CONNECTS Development Program (MCDP) in late 2016. The MCDP improves coordination with external agencies to identify opportunities to deliver METRO CONNECTS efficiently and effectively, helps build our internal capacity to deliver METRO CONNECTS, and evaluates how Metro’s policies and processes could more effectively support METRO CONNECTS. The MCDP is continually engaging internal and external stakeholders using the four step plan-do-check-adjust cycle illustrated in Fig. 8. This process ensures that we address technical and policy needs with our partners to produce the most effective outcomes.

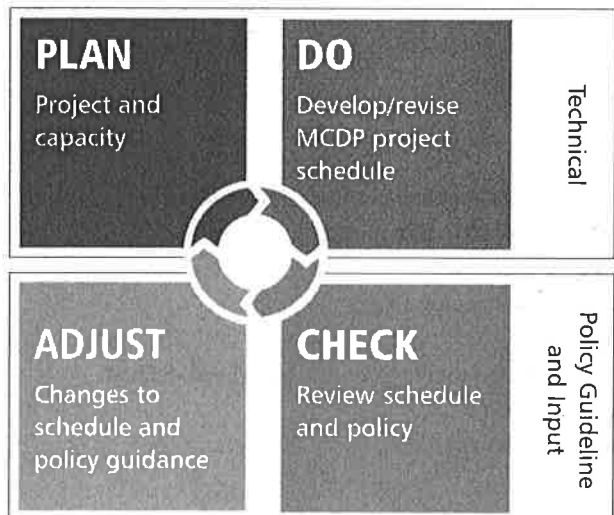
In 2017, Metro worked closely with the RTC to develop and recommend a MCDP work plan. The work plan was adopted by the County Council in September 2017, establishing an ongoing process to engage the RTC and others, and requiring the development of a Policy Report in 2017 to look at near- and long-term policy needs to support the MCDP.

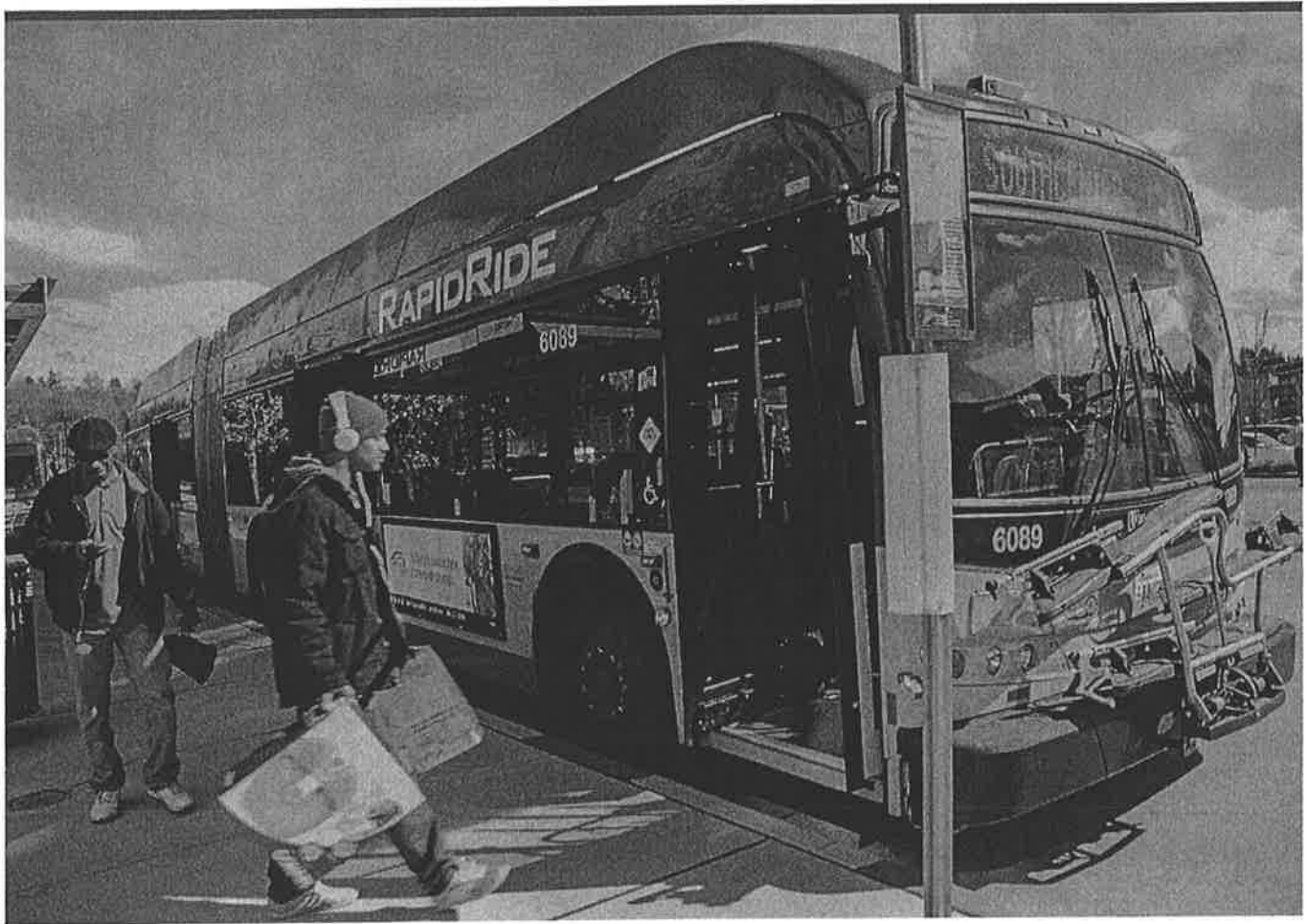
The MCDP engaged the Technical Advisory Committee (TAC), made up of staff from cities and other transportation agencies, to develop the Regional Project Schedule. Their task: identify potential partnerships to improve communication about upcoming projects, find efficiencies in working together, and create a process to formally develop capital partnerships.

## MCDP Policy Report

To better understand how Metro’s current policies guide decision making and identify policy changes that could be needed in the future, the King County Council and Regional Transit Committee requested the development of a Policy Report in 2017. The report describes the current policy guidance that influences service and capital decisions that are used in the Regional Project Schedule, provides a gap analysis of additional policy that could make the MCDP more effective, and gives preliminary recommendations on policy changes that could be considered and the potential timing and method for making those changes.

Figure 8: The Plan-Do-Check-Adjust Process





## Jurisdiction Input

The MCDP engaged the Technical Advisory Committee (TAC), made up of staff from cities and other transportation agencies that participated in the development of METRO CONNECTS, to improve communication about upcoming projects, find efficiencies in working together, and create a process to formally develop capital partnerships. Together, Metro and the TAC are building a Regional Project Schedule that:

- » Provides a comprehensive list of capital projects planned in jurisdictions that could have a relationship to transit
- » Shows potential capital project alignment between agencies to facilitate new or enhanced partnerships
- » Creates a resource for Metro and jurisdictions to review and suggest revisions to projects by establishing partnerships to reduce capital costs and improve transit service.



## Major System Redesign and Service Investments

Working with our city and agency partners, Metro is identifying future project areas and the ongoing need to develop a 10-year look at service and capital, the opportunities for major network changes, and the organizational capacity needs of the agency to maintain the system. The MCDP will identify high-level investments to move the agency and service network toward the METRO CONNECTS vision, and the policies that need to change to continue implementing METRO CONNECTS.

## Next Steps

As discussed above, the County Executive submitted a Policy Report to the County Council in October 2017 describing the policy guidance that influences service and capital decisions in the Regional Project Schedule. Additionally, the MCDP will consider how Metro is integrating service investment needs identified in the Service Guidelines with the overall service redesign strategy outlined in the Regional Project Schedule.



For more information, you can view the METRO CONNECTS plan at [metro.kingcounty.gov/planning/long-range-plan/](http://metro.kingcounty.gov/planning/long-range-plan/)



## Potential Changes to the Service Guidelines and Strategic Plan Integration with METRO CONNECTS

As part of tracking the progress and success of implementing METRO CONNECTS, Metro is developing progress measures. These measures will be included in future System Evaluation reports. Additionally, Metro staff, in coordination with regional stakeholders and the King County Council, have been exploring the policy principles associated with implementing Metro's long-range plan. This fall, Metro submitted a policy report to the Regional Transit Committee outlining these principles. The report also identified where policy needs exist to more effectively achieve the METRO CONNECTS vision.

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## 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 departing Shoreline Community College at 5:15 am on weekdays). Several months of data are averaged 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 seats on the coach to the number of standing passengers the coach can accommodate if each passenger is given no less than 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 exceeds the crowding threshold, staff then determine 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. Investment need is estimated based on the number of hours it takes to provide a trip on the identified route in the identified time period; this figure is only an estimate.

**20-minute standing loads.** Data from APCs are compiled for each unique trip in the system. Several months of data are averaged to determine the average departing load from each bus stop served by the trip. Additionally, the data are averaged to determine the average time that 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. If 20 consecutive minutes of standing loads occur, staff then determine if other trips that arrive within 15 minutes have the capacity to take those standing passengers without having standing loads themselves. If excess capacity does not exist, 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 timepoints to scheduled arrival times. Buses that arrive at timepoints 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 to occur without prompting an unnecessary allocation of resources. All arrivals at timepoints are recorded by systems on the bus; this data then undergoes validation and cleaning processes. For the System Evaluation, late arrivals are analyzed by route and by time period. Four time periods are analyzed: weekdays all day, weekday PM peak, Saturdays all day, and Sundays all day. For each route and each time period, the percent of recorded arrivals at timepoints that are late (more than 5.5 minutes after the scheduled arrival time) is 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.



## Methodologies and Process Descriptions continued

### Service Growth (Priority 3)

Target service levels are determined for corridors. 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.** The number of housing units falling within a ¼-mile network-based walkshed of each stop served by the corridor is calculated. 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 falling within the same walkshed is calculated. This proprietary information is provided by the PSRC. The number of in-person students at campuses of degree-conferring institutes of higher learning falling within the same walkshed is added to this number. 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 to travel between two centers. Each corridor serving each pair of centers is evaluated 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 occurring in low-income tracts is compared to the systemwide average of boardings occurring 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.

The process is then repeated for the measure of boardings from minority census tracts.

**Initial target and final target.** The aggregate score of the three measures above determines each corridor's initial service level. Staff then conduct an analysis 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, final target service levels are adjusted upward to ensure the target at least matches current demand. Additional policy considerations for night service are then applied to arrive at target service levels for peak, off-peak, and night time periods. The target is then compared to the 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, ordering 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 change. 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 segregated into three service types: urban, suburban, and DART/Shuttle. For each group of routes, in each time period, for each measure, quartiles are calculated based on the calculation of the measure. 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; this informs investment and reduction decisions in accordance with the Service Guidelines.

### Peak Analysis

Routes that operate only 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  $\geq 90$  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. The results of the analysis are used when Metro is forced to reduce service, in accordance with the Service Guidelines.

### Community Connections

This section describes the methodology for performance measurement for Community Shuttle routes and TripPool services.

## Methodologies and Process Descriptions continued

### Community Shuttle

Community Shuttle performance measures are based on DART performance measures. The table below shows the performance measures used to evaluate Community Shuttle routes. The description for each measure includes its purpose and how its outcome may inform changes to service.

Measure	Description
Average daily ridership	<ul style="list-style-type: none"> <li>» Purpose: This metric is designed to measure the level of use of alternative services over time.</li> <li>» High ridership may trigger additional trips and/or conditional conversion to fixed-route</li> <li>» Low ridership may trigger a re-evaluation of the service and potential right-sizing</li> </ul>
Cost per boarding	<p>Direct fixed costs/ number of boardings</p> <ul style="list-style-type: none"> <li>» Purpose: This measure compares the direct cost of the service on a per-passenger basis. Direct cost is defined as the fixed cost of operating the service. In the case of this service, the direct cost is determined through a contract with Hopelink. This cost includes service operation, vehicle maintenance and administration conducted by the service provider. Due to the highly variable nature of fuel prices, this cost is excluded from this measure in order to be able to generate numerical targets in this measure for a particular route. Including fuel prices into this measure would require Metro to forecast the future price of fuel in order to set realistic performance targets.</li> <li>» Example: a shuttle which costs \$1,200 per day to operate and provides an average of 100 boardings per day costs \$12 per boarding to provide the service.</li> <li>» An uncharacteristically high cost per boarding may trigger a re-evaluation of the service and potential right-sizing</li> </ul>
Vehicle capacity used	<p>Rides / seats provided</p> <ul style="list-style-type: none"> <li>» Purpose: This metric is designed to measure the level of use of alternative services relative to the capacity of the service provided.</li> <li>» Example: a shuttle with 16 seats making four one-way trips per weekday will provide 1,280 seats over the course of a month. This measure compares the rides provided in that month to the number of seats.</li> <li>» High vehicle capacity use may trigger additional trips and/or conditional conversion to fixed-route</li> <li>» Low vehicle capacity use may trigger a re-evaluation of the service and potential right-sizing</li> </ul>
Customer satisfaction	<p>Measures customer satisfaction with a given service based on intercept surveys of current riders.</p> <ul style="list-style-type: none"> <li>» Purpose: This metric is designed to determine if a given service is meeting the community-identified transportation need effectively.</li> <li>» Highly-satisfied customers suggest that an Alternative Service solution is meeting the needs of the community effectively.</li> <li>» Low customer satisfaction suggests that the service in its current form is not effectively meeting the needs of the community and may trigger a re-evaluation of the service to better fit customer needs.</li> </ul>

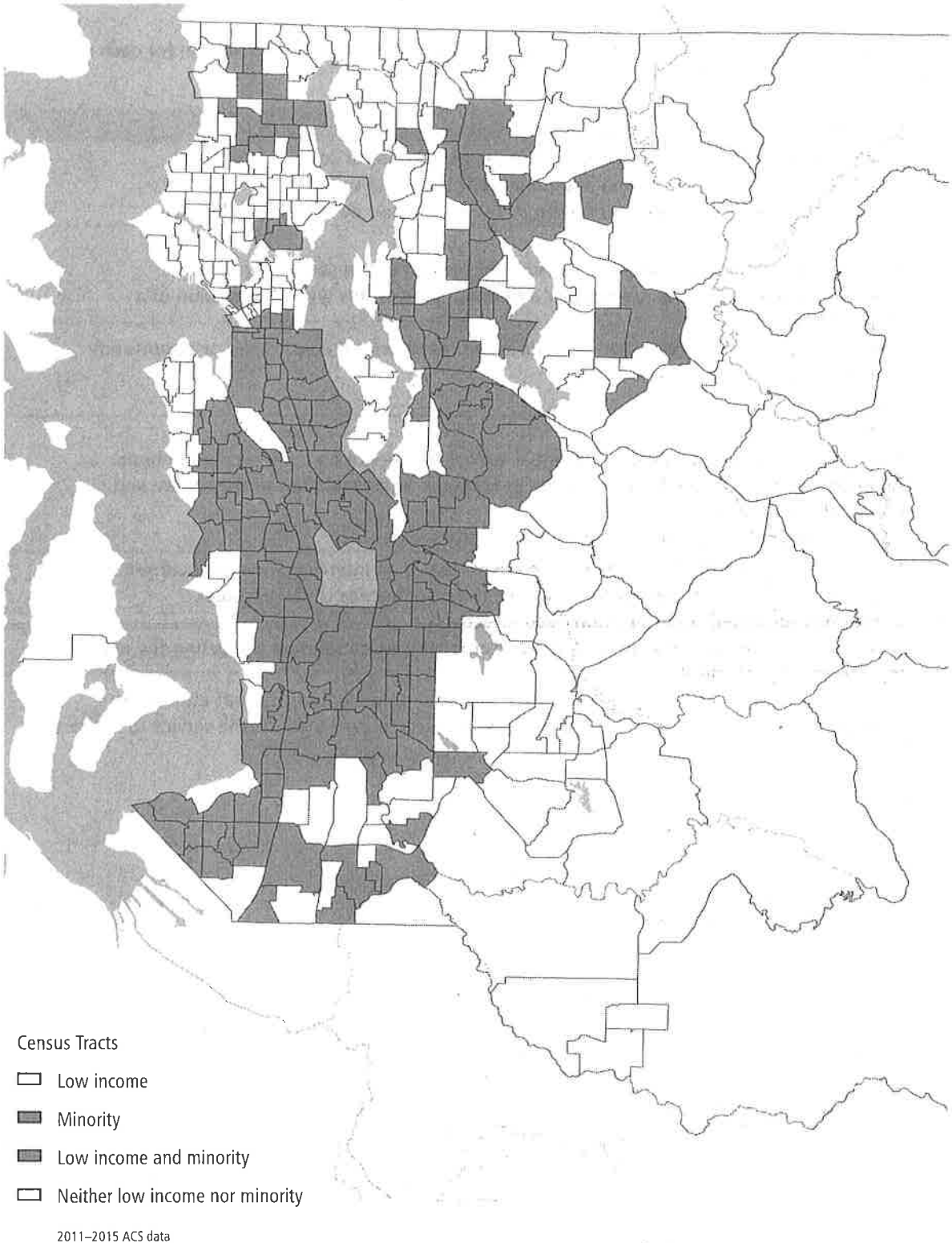
## Methodologies and Process Descriptions continued

### TripPool

The table below shows the performance measures used to evaluate TripPool services. The description for each measure includes its purpose and how its outcome may inform changes to service.

Measure	Description
Average daily ridership	<ul style="list-style-type: none"> <li>» Purpose: This metric is designed to measure the level of use of services over time.</li> <li>» High ridership may trigger adding additional vehicles to the system</li> <li>» Low ridership may trigger a re-evaluation of the service and potential right-sizing</li> </ul>
Vehicle capacity used	<p>Average participants/trip</p> <ul style="list-style-type: none"> <li>» Purpose: This metric is designed to measure the level of use of service for a trip.</li> <li>» High participation for a trip may trigger additional trips of this type, or provision of a larger vehicle.</li> <li>» Low use may trigger re-evaluation of a trip when resources are constrained or opportunity costs are high</li> </ul>
Operating cost per boarding	<p>Operating cost/ boarding</p> <ul style="list-style-type: none"> <li>» Purpose: This measure compares the actual cost of the service on a per-passenger basis.</li> <li>» An uncharacteristically high cost per rider may trigger a re-evaluation of the service and potential right-sizing</li> <li>» Low cost per rider may trigger an expansion of the service</li> </ul>
Customer satisfaction	<p>Measures customer satisfaction with a given service based on intercept surveys of current riders.</p> <ul style="list-style-type: none"> <li>» Purpose: This metric is designed to determine if a given service is meeting the community-identified transportation need effectively.</li> <li>» Highly-satisfied customers suggest that an Alternative Service solution is meeting the needs of the community effectively.</li> <li>» Low customer satisfaction suggests that the service in its current form is not effectively meeting the needs of the community and may trigger a re-evaluation of the service to better fit customer needs.</li> </ul>

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 2016 Thresholds: Suburban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>14.5</b>	<b>4.6</b>	<b>12.6</b>	<b>4.3</b>	<b>10.0</b>	<b>2.8</b>
Top 25%		25.7	8.8	26.0	9.1	16.2	5.7

22	Arbor Heights - Westwood Village - Alaska Junction	17.9	3.9	9.7	2.2	5.7	1.4
50	Alki - Columbia City - Othello Station	24.5	6.0	18.9	5.3	8.4	2.4
105	Renton Highlands - Renton TC	28	7.7	26.1	7.7	12.9	3.5
107	Renton TC - Rainier Beach	25.1	5.6	18.9	4.7	10.4	2.7
118	Tahlequah - Vashon	12.0	3.0	11.2	1.9	10.6	3
119	Dockton - Vashon	15.3	2.5	7.7	1.2		
128	Southcenter - Westwood Village - Admiral District	27.7	9.2	26.5	8.8	12.6	4.1
148	Fairwood - Renton TC	13.8	5.2	15.0	6.2	12.8	5.4
153	Kent Station - Renton TC	20.2	6.0				
154	Tukwila Station - Boeing Industrial	20.0	6.0				
156	Southcenter - SeaTac Airport - Highline CC	18.1	5.6	16.9	6.3	9.2	3.5
164	Green River College - Kent Station	41.2	12.2	39.8	14.7	21.1	6.1
166	Kent Station - Burien TC	22.6	9.0	25.8	10.0	14.7	5.3
168	Maple Valley - Kent Station	23.5	7.1	23.1	7.4	17.2	4.5
169	Kent Station - East Hill - Renton TC	39.4	16.6	37.4	15.4	22.9	8.9
180	Auburn - SeaTac Airport - Burien TC	33.8	11.5	32.1	12.2	16.0	6.5
181	Twin Lakes P&R - Green River CC	26.1	8.7	24.9	9.2	13.6	3.4
182	NE Tacoma - Federal Way TC	14.5	3.7	19.8	6.3		
183	Federal Way - Kent Station	20.3	7.0	19.7	9.7		
186	Enumclaw - Auburn Station	10.1	2.6				
187	Federal Way TC - Twin Lakes	21.6	5.6	26.3	7.3	13.0	2.8
200	Downtown Issaquah - North Issaquah			9.1	2.2		

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 2016 Thresholds: Suburban Routes		Peak		Off Peak		Night	
Bottom 25%		14.5	4.6	12.6	4.3	10.0	2.8
Top 25%		25.7	8.8	26.0	9.1	16.2	5.7
201	South Mercer Island - Mercer Island P&R via Mercer Wy	2.3	0.4				
204	South Mercer Island - Mercer Island P&R via Island Crest	9.8	1.9	9.7	2.4		
208	Issaquah - North Bend	7.8	4.3	9.3	5.7	3.5	1.6
221	Education Hill - Overlake - Eastgate	18.6	5.7	17.3	5.1	8.0	1.9
224	Duvall - Redmond TC	7.6	3.1	8.1	3.7		
226	Eastgate - Crossroads - Bellevue	25.5	7.3	22.2	6.0	10.3	2.9
232	Duvall - Bellevue	17.9	7.1				
234	Kenmore - Kirkland TC - Bellevue	21.7	8.1	16.5	5.8	10.4	3.3
235	Kingsgate - Kirkland TC - Bellevue	20.3	7.1	15.1	6.1	9.8	3.8
236	Woodinville - Totem Lake - Kirkland	7.3	2.1	7.8	2.4		
237	Woodinville - Bellevue	19.0	9.0				
238	Bothell - Totem Lake - Kirkland	10.2	2.7	12.0	3.7		
240	Bellevue - Newcastle - Renton	24.1	9.7	21.2	10.1	12.6	6.4
241	Eastgate - Factoria - Bellevue	19.6	5.4	13.3	4.0	9.9	2.8
243EX	Overlake - Kenmore	1.8	0.7				
244	Kenmore - Overlake	14.3	6.3				
245	Kirkland - Overlake - Factoria	25.9	7.7	21.9	6.8	13.9	3.7
246	Eastgate - Factoria - Bellevue	12.9	3.0	8.4	2.3		
248	Avondale - Redmond TC - Kirkland	19.5	5.5	16.6	4.7	8.8	2.2
249	Overlake - South Kirkland - South Bellevue	17.3	4.7	11.7	3.8		
269	Issaquah - Overlake	11.0	4.8				
330	Shoreline CC - Lake City	22.7	6.3	30.1	9.6		
331	Shoreline CC - Kenmore	16.2	5.8	17.9	5.7		

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 2016 Thresholds: Suburban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>14.5</b>	<b>4.6</b>	<b>12.6</b>	<b>4.3</b>	<b>10.0</b>	<b>2.8</b>
Top 25%		25.7	8.8	26.0	9.1	16.2	5.7

342	Shoreline - Bellevue TC - Renton	18.1	10.4				
345	Shoreline CC - Northgate	34.3	9.2	33.3	8.9	10.0	4.1
346	Aurora Village - Northgate	32.5	9.1	25.7	7.8	10.7	4.5
347	Mountlake Terrace - Northgate	26.6	7.6	24.1	6.4	18.3	6.0
348	Richmond Beach - Northgate	25.6	6.4	25.1	6.4	16.3	5.1
A Line	Federal Way - Tukwila	53.9	16.1	58.0	19.6	38.8	11.9
B Line	Bellevue - Crossroads - Redmond	42.4	12.4	35.6	10.9	24.8	6.9
F Line	Burien - Tukwila Int'l Blvd - Renton	30.8	9.5	33.5	11.8	22.2	7.4

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 2016 Thresholds: DART/Shuttle Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>9.1</b>	<b>1.3</b>	<b>10.0</b>	<b>2.0</b>	<b>16.8</b>	<b>2.9</b>
Top 25%		14.0	2.7	16.5	3.2	16.8	2.9

901DART	Mirror Lake - Federal Way TC	20.6	3.9	21.3	3.3	16.8	2.9
903DART	Twin Lakes - Federal Way TC	9.7	1.7	12.7	2.7		
906DART	Fairwood - Southcenter	13.2	5.3	13.6	6.7		
907DART	Enumclaw - Renton TC	2.9	1.1	4.6	2.3		
908DART	Renton Highlands - Renton TC	9.7	1.7	6.9	1.7		
910DART	North Auburn - SuperMall			11.9	1.9		



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 2016 Thresholds: DART/Shuttle Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>9.1</b>	<b>1.3</b>	<b>10.0</b>	<b>2.0</b>	<b>16.8</b>	<b>2.9</b>
<b>Top 25%</b>		<b>14.0</b>	<b>2.7</b>	<b>16.5</b>	<b>3.2</b>	<b>16.8</b>	<b>2.9</b>

913DART	Kent Station - Riverview	16.2	2.4				
914DART	Kent - Kent East Hill			17.4	3.2		
915DART	Enumclaw - Auburn Station			19.4	0.0		
916DART	Kent - Kent East Hill			13.8	3.2		
917DART	Pacific - Auburn	14.0	2.7	9.3	2.2		
930DART	Kingsgate - Redmond	9.1	1.3				
931DART	Bothell - Redmond	4.8	1.0				

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>23.6</b>	<b>10.7</b>	<b>25.6</b>	<b>7.6</b>	<b>15.4</b>	<b>4.4</b>
<b>Top 25%</b>		<b>43.2</b>	<b>17.2</b>	<b>40.5</b>	<b>12.8</b>	<b>25.4</b>	<b>7.8</b>

1*	Kinnear - Seattle CBD	46.8	12.0	34.4	7.9	16.3	4.3
2*	West Queen Anne - Seattle CBD - Madrona Park	49.0	11.7	43.5	9.7	20.6	4.8
3*	North Queen Anne - Seattle CBD - Madrona Park	52.3	11.2	44.1	9.4	20.0	4.4
4*	East Queen Anne - Seattle CBD - Judkins Park	48.0	10.1	36.3	7.8	18.7	4.1
5*	Shoreline CC - Seattle CBD	58.7	21.3	41.9	15.0	22.5	7.8
5EX*	Shoreline CC - Seattle CBD	42.5	16.2				
7*	Rainier Beach - Seattle CBD	42.3	13.3	48.1	14.3	28.3	9.7
8*	Seattle Center - Capitol Hill - Rainier Beach	55.1	12.9	40.2	10.4	25.4	6.2
9EX*	Rainier Beach - Capitol Hill	34.8	9.2				
10*	Capitol Hill - Seattle CBD	36.0	7.1	36.8	7.5	19.6	3.9
11*	Madison Park - Seattle CBD	55.4	12.8	43.4	9.4	27.4	4.8
12*	Interlaken Park - Seattle CBD	49.9	9.1	32.9	6.2	11.7	2.4

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
Bottom 25%		23.6	10.7	25.6	7.6	15.4	4.4
Top 25%		43.2	17.2	40.5	12.8	25.4	7.8

13*	Seattle Pacific University - Queen Anne - Seattle CBD	54.5	13.6	52.2	12.2	30.0	6.5
14	Mount Baker - Seattle CBD	42.5	9.4	36.8	7.5	18.3	4.0
15EX	Blue Ridge - Ballard - Seattle CBD	45.4	19.0				
17EX	Sunset Hill - Ballard - Seattle CBD	48.5	18.8				
18EX	North Beach - Ballard - Seattle CBD	44.7	18.1				
19*	West Magnolia - Seattle CBD	27.8	9.4				
21*	Arbor Heights - Westwood Village - Seattle CBD	41.8	15.1	27.9	10.8	16.6	6.2
21EX*	Arbor Heights - Westwood Village - Seattle CBD	35.5	16.5				
24*	Magnolia - Seattle CBD	44.8	13.2	23.2	8.1	12.3	4.0
26EX*	East Green Lake - Wallingford - Seattle CBD	43.2	14.5	24.2	10.0	12.0	4.7
27*	Colman Park - Leschi Park - Seattle CBD	21.5	5.0	16.1	3.8	12.5	2.7
28EX*	Whittier Heights - Ballard - Seattle CBD via Leary Av NW	43.3	14.7	20.5	7.5	11.2	4.1
29	Ballard - Queen Anne - Seattle CBD	37.0	8.9				
31*	University District - Fremont - Magnolia	31.4	8.3	24.3	6.7		
32*	University District - Fremont - Seattle Center	38.4	11.2	28.7	9.5	20.5	5.7
33*	Discovery Park - Seattle CBD	48.5	13.7	28.4	7.3	11.3	3.4
36	Othello Station - Beacon Hill - Seattle CBD	43.4	12.0	41.2	11.5	21.3	5.9
37	Alaska Junction - Alki - Seattle CBD	18.2	8.3				
40*	Northgate TC - Ballard - Seattle CBD via Leary Av NW	46.0	14.4	38.4	12.5	20.4	6.9
41*	Lake City - Seattle CBD via Northgate	57.0	28.2	47.0	23.2	28.0	15.1

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>23.6</b>	<b>10.7</b>	<b>25.6</b>	<b>7.6</b>	<b>15.4</b>	<b>4.4</b>
<b>Top 25%</b>		<b>43.2</b>	<b>17.2</b>	<b>40.5</b>	<b>12.8</b>	<b>25.4</b>	<b>7.8</b>

43*	University District - Capitol Hill - Seattle CBD	29.2	7.1	26.0	4.7	11.6	4.0
44*	Ballard - Wallingford - Montlake	59.2	16.4	43.8	12.1	30.9	8.0
45*	Loyal Heights - University District	41.6	9.9	39.9	10.0	25.3	5.2
47*	Summit - Seattle CBD	25.7	5.4	19.2	3.9		
48*	Mount Baker - University District - Loyal Heights	36.3	11.5	25.6	7.6	16.6	4.7
49*	University District - Capitol Hill - Seattle CBD	44.5	15.2	40.0	13.5	28.8	9.7
55*	Admiral District - Alaska Junction - Seattle CBD	32.3	13.8				
56	Alki - Seattle CBD	38.5	15.3				
57	Alaska Junction - Seattle CBD	38.3	16.3				
60*	Westwood Village - Georgetown - Capitol Hill	36.4	11.1	31.3	9.9	15.4	4.8
62	Sand Point - Green Lake - Seattle CBD	40.7	11.6	26.0	8.5	14.9	4.6
63	Northgate - Cherry Hill	21.4	7.8	10.2	4.0		
64EX	Jackson Park - Cherry Hill	27.3	8.5				
65*	Jackson Park - Lake City - University District	47.3	11.6	34.0	9.0	23.9	7.0
67*	Northgate TC - University District	41.3	12.3	42.0	12.6	34.2	7.8
70*	University District - Seattle CBD	49.7	17.2	40.5	15.5	17.8	6.9
71*	Wedgwood - University District	29.8	7.3	25.2	6.7	19.4	4.1
73*	Jackson Park - Cowen Park - University District	21.3	4.7	29.2	9.0	26.9	7.1
74	Sand Point - Seattle CBD	33.4	11.4				
75	Northgate TC - Lake City - Seattle CBD	43.2	11.2	34.1	9.0	25.2	6.3
76*	Wedgwood - Seattle CBD	34.2	13.7	17.3	6.2		

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>23.6</b>	<b>10.7</b>	<b>25.6</b>	<b>7.6</b>	<b>15.4</b>	<b>4.4</b>
<b>Top 25%</b>		<b>43.2</b>	<b>17.2</b>	<b>40.5</b>	<b>12.8</b>	<b>25.4</b>	<b>7.8</b>
77EX	North City - Seattle CBD	36.4	18.6				
78	Children's Hospital - UW Station	16.1	3.2	14.9	2.8		
82*	Seattle CBD - Greenwood					9.8	5.0
83*	Seattle CBD - Ravenna					12.0	4.4
84*	Seattle CBD - Madison Park - Madrona					11.5	5.2
98	South Lake Union Streetcar	59.6	7.9	38.3	5.6	13.1	1.9
99	International District - Waterfront	21.4	5.5	10.6	2.2		
101	Renton TC - Seattle CBD	42.3	23.3	43.7	27.4	31.8	19.2
102	South Lake Union Streetcar	37.3	19.9				
106	Renton TC - Rainier Beach - Seattle CBD	33.2	8.5	29.0	8.5	16.1	5.5
111	Lake Kathleen - Seattle CBD	22.1	15.0				
113	Shorewood - Seattle CBD	21.3	10.8				
114	Renton Highlands - Seattle CBD	18.8	12.1				
116EX	Fauntleroy Ferry - Seattle CBD	18.2	6.5				
118EX	Tahlequah - Vashon	15.8	7.7				
119EX	Dockton - Vashon	16.5	7.7				
120*	Burien TC - Westwood Village - Seattle CBD	39.0	17.9	40.7	18.7	28.9	13.8
121	Highline College -Burien TC - Seattle CBD via 1st Av S	18.4	8.6				
122	Highline College -Burien TC - Seattle CBD via Des Moines Memorial Dr S	21.1	10.4				
123	Burien - Seattle CBD	27.6	18.2				
124*	Tukwila - Georgetown - Seattle CBD	32.2	11.6	27.5	9.6	20.0	7.5
125*	Westwood Village - Seattle CBD	34.7	13.8	21.7	9.4	13.9	5.9

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>23.6</b>	<b>10.7</b>	<b>25.6</b>	<b>7.6</b>	<b>15.4</b>	<b>4.4</b>
Top 25%		43.2	17.2	40.5	12.8	25.4	7.8

131	Burien TC - Highland Park - Seattle CBD	40.3	17.2	35.3	14.7	19.2	8.6
132	Burien TC - South Park - Seattle CBD	34.8	15.3	25.7	10.9	17.4	7.6
143	Black Diamond - Renton TC - Seattle CBD	15.9	10.8				
150	Kent Station - Southcenter - Seattle CBD	38.3	19.7	35.6	18.5	27.0	17.3
157	Lake Meridian - Seattle CBD	14.0	10.7				
158	Kent East Hill - Seattle CBD	22.7	16.6				
159	Timberlane - Seattle CBD	17.8	12.7				
167	Renton - Newport Hills - University District	22.9	19.4				
177	Federal Way - Seattle CBD	15.9	11.1				
178	South Federal Way - Seattle CBD	17.3	12.2				
179	Twin Lakes - Seattle CBD	20.2	15.9				
190	Redondo Heights - Seattle CBD	16.3	10.5				
192	Star Lake - Seattle CBD	13.7	10.7				
193	Federal Way - First Hill	17.1	13.3				
197	Twin Lakes - University District	14.8	12.1				
212	Eastgate - Seattle CBD	35.1	19.5	49.2	23.6		
214	Issaquah - Seattle CBD	24.8	17.2				
216	Sammamish - Seattle CBD	28.9	21.0				
217	Issaquah - Eastgate - Seattle CBD	23.8	15.9				
218	Issaquah Highlands - Seattle CBD	34.3	22.6				
219	Redmond - Sammamish - Seattle CBD	27.4	23.0				
252	Kingsgate - Seattle CBD	29.2	19.0				

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 2016 Thresholds: Urban Routes		Peak		Off Peak		Night	
<b>Bottom 25%</b>		<b>23.6</b>	<b>10.7</b>	<b>25.6</b>	<b>7.6</b>	<b>15.4</b>	<b>4.4</b>
Top 25%		43.2	17.2	40.5	12.8	25.4	7.8

255	Brickyard - Kirkland TC - Seattle CBD	34.6	18.8	25.5	13.5	21.2	11.5
257	Brickyard - Seattle CBD	28.0	19.0				
268	Redmond - Seattle CBD	30.0	20.2				
271	Issaquah - Bellevue - University District	26.7	12.0	23.0	10.6	16.1	7.5
277	Juanita - University District	13.1	6.0				
301	Aurora Village - Seattle CBD	32.0	22.2	31.7	20.0		
303	Shoreline - First Hill	28.0	14.7				
304	Richmond Beach - Seattle CBD	28.5	17.0				
308	Horizon View - Seattle CBD	22.4	14.2				
309	Kenmore - First Hill	26.3	15.1				
311	Woodinville - Seattle CBD	26.5	18.4				
312	Bothell - Seattle CBD	32.3	17.1	21.2	11.2		
316	Meridian Park - Seattle CBD	38.9	14.9				
355	Shoreline CC - University District - Seattle CBD	31.9	11.2				
372*	Woodinville - Lake City - University District	38.2	11.3	38.5	11.3	23.9	6.5
373	Aurora Village - University Village	45.1	15.3	34.7	10.5		
601	Seattle CBD - Group Health (Tukwila)	4.7	2.2				
C Line*	Westwood Village - Alaska Junction - Seattle CBD	46.5	19.2	32.9	15.3	19.7	9.1
D Line*	Crown Hill - Ballard - Seattle Center - Seattle CBD	65.4	20.2	51.7	17.4	31.3	10.0
E Line*	Aurora Village - Seattle CBD	61.4	23.9	57.8	24.8	39.2	15.4
--	West Seattle Water Taxi **	103.0	26.0				
--	Vashon Island Water Taxi **	145.0	72.0				

\* Designates routes receiving Seattle investments

\*\* Water Taxi is operated by the King County 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	2017	25.7	8.8	26.0	9.1	16.2	5.7
	2016	27.0	8.8	27.3	9.5	17.8	6.2
	Change	-1.3	0.0	-1.3	-0.4	-1.6	-0.5
Urban	2017	43.2	17.2	40.5	12.8	25.4	7.8
	2016	47.2	18.1	48.2	14.9	28.0	8.9
	Change	-4.0	-0.9	-7.7	-2.1	-2.6	-1.1
DART/Shuttle	2017	14.0	2.7	16.5	3.2	16.8	2.9
	2016	13.4	2.5	15.3	3.5	12.4	2.2
	Change	0.6	0.2	1.2	-0.3	4.4	0.7

### 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	2017	14.5	4.6	12.6	4.3	10.0	2.8
	2016	14.9	4.6	14.5	4.6	10.5	3.1
	Change	-0.4	0.1	-1.9	-0.3	-0.6	-0.3
Urban	2017	23.6	10.7	25.6	7.6	15.4	4.4
	2016	27.5	11.4	33.1	9.3	17.5	4.8
	Change	-3.9	-0.7	-7.5	-1.7	-2.1	-0.4
DART/Shuttle	2017	9.1	1.3	10.0	2.0	16.8	2.9
	2016	8.4	1.3	9.3	2.2	12.4	2.2
	Change	0.7	0.0	0.7	-0.2	4.4	0.7



## 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
21EX	Arbor Heights - Westwood Village - Seattle CBD	21	Yes	Yes
29	Ballard - Queen Anne - Seattle CBD	2	Yes	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
64EX	Lake City - First Hill	76	No	Yes
74	Sand Point - Seattle CBD	75	Yes	No
76	Wedgwood - Seattle CBD	71	Yes	No
77EX	North City - Seattle CBD	373EX	No	Yes
99	International District - Waterfront	None	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 College -Burien TC - Seattle CBD via 1st Av S	166	Yes	Yes
122	Highline College -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
158	Kent East Hill - Seattle CBD	164	Yes	No
159	Timberlane - Seattle CBD	164	Yes	No
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	Yes	Yes
192	Star Lake - Seattle CBD	574EX	No	Yes

Peak Route Analysis continued

Route	Description	Alternative Route(s)*	Ridership ≥ 90% of alternative	Travel Time ≥ 20% faster than alternative
193	Federal Way - First Hill	None	Yes	Yes
197	Twin Lakes - University District	181	Yes	Yes
201	South Mercer Island - Mercer Island P&R via Mercer Wy	None	Yes	Yes
212	Eastgate - Seattle CBD	554EX	Yes	No
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
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
277	Juanita - University District	235	Yes	Yes
301	Aurora Village - Seattle CBD	675	No	Yes
303	Shoreline - First Hill	None	Yes	Yes
304	Richmond Beach - Seattle CBD	348	Yes	Yes
308	Horizon View - Seattle CBD	331	Yes	No
309	Kenmore - First Hill	312EX	No	Yes
311	Woodinville - Seattle CBD	232	Yes	Yes
312	Bothell - Seattle CBD	522EX	Yes	No
316	Meridian Park - Seattle CBD	26EX	Yes	Yes
342	Shoreline - Bellevue TC - Renton	None	Yes	Yes
355	Shoreline CC - University District - Seattle CBD	5	No	No
601	Seattle CBD - Group Health (Tukwila)	None	Yes	Yes
913DART	Kent Station - Riverview	None	Yes	Yes
Vashon Water Taxi **	Vashon - Seattle CBD	118	Yes	Yes
West Seattle Water Taxi **	West Seattle - Seattle CBD	37	Yes	Yes

Peak-only routes 27, 143, 153, 186, 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 the King County Marine Division

## Appendix F: Route-level Reliability

■ over the lateness threshold

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
1	13%	15%	19%	12%
2	13%	14%	7%	10%
3	15%	19%	10%	13%
4	14%	18%	7%	14%
5EX	17%	16%	--	--
5	23%	32%	21%	13%
7	19%	21%	17%	11%
8	23%	32%	19%	18%
9	37%	38%	--	--
10	14%	20%	6%	6%
11	31%	43%	23%	26%
12	25%	31%	4%	8%
13	16%	17%	7%	11%
14	15%	20%	8%	8%
15EX	20%	16%	--	--
17EX	20%	20%	--	--
18EX	20%	24%	--	--
19	21%	28%	--	--
21EX	27%	35%	--	--
21	18%	27%	21%	10%
22	5%	11%	8%	3%
24	19%	26%	16%	16%
26EX	29%	38%	33%	23%
27	22%	29%	8%	22%
28EX	28%	33%	30%	22%
29	36%	49%	--	--
31	16%	20%	10%	--
32	13%	16%	9%	16%
33	18%	29%	16%	19%
36	14%	20%	7%	8%
37	32%	41%	--	--
40	18%	28%	20%	29%
41	12%	21%	6%	8%
43	17%	20%	23%	14%
44	10%	11%	16%	8%
45	11%	13%	13%	8%
47	8%	20%	4%	2%

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
48	9%	16%	11%	8%
49	12%	15%	9%	9%
50	18%	30%	10%	13%
55	31%	45%	--	--
56	15%	20%	--	--
57	29%	41%	--	--
60	20%	33%	9%	10%
62	27%	38%	25%	16%
63	33%	46%	--	--
64EX	38%	43%	--	--
65	12%	20%	7%	4%
67	15%	19%	10%	6%
70	20%	36%	19%	11%
71	6%	9%	8%	--
73	11%	9%	6%	4%
74	7%	11%	--	--
75	14%	21%	6%	11%
76	12%	14%	--	--
77EX	17%	18%	--	--
78	6%	7%	--	--
82	8%	--	20%	5%
83	17%	--	43%	25%
84	29%	--	43%	16%
99	21%	26%	--	--
101	15%	19%	7%	7%
102	26%	34%	--	--
105	13%	27%	3%	3%
106	17%	19%	13%	14%
107	20%	32%	17%	14%
111	36%	47%	--	--
113	31%	30%	--	--
114	26%	40%	--	--
116	16%	6%	--	--
118EX	16%	11%	--	--
118	7%	6%	3%	1%
119EX	21%	11%	--	--
119	6%	4%	--	--

Route-level Reliability continued

■ over the lateness threshold

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
120	13%	20%	11%	18%
121	26%	30%	--	--
122	28%	39%	--	--
123	23%	25%	--	--
124	16%	24%	14%	10%
125	14%	18%	12%	7%
128	16%	23%	9%	12%
131	27%	40%	27%	14%
132	20%	23%	20%	16%
143	37%	39%	--	--
148	18%	37%	17%	12%
150	17%	22%	16%	19%
153	33%	35%	--	--
154	19%	6%	--	--
156	7%	11%	7%	17%
157	37%	50%	--	--
158	37%	51%	--	--
159	31%	48%	--	--
164	23%	34%	8%	--
166	13%	23%	14%	24%
167	18%	27%	--	--
168	15%	25%	16%	28%
169	16%	24%	15%	15%
177	25%	20%	--	--
178	42%	42%	--	--
179	41%	42%	--	--
180	22%	39%	13%	13%
181	17%	31%	23%	14%
182	17%	22%	13%	11%
183	13%	19%	6%	--
186	25%	41%	--	--
187	13%	21%	16%	15%
190	44%	26%	--	--
192	30%	24%	--	--
193	28%	29%	--	--
197	29%	32%	--	--
200	21%	--	--	--
201	3%	0%	--	--

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
204	4%	8%	--	--
208	11%	25%	17%	--
212	25%	31%	--	--
214	19%	20%	--	--
216	29%	37%	--	--
217	23%	30%	--	--
218	22%	11%	--	--
219	29%	38%	--	--
221	16%	29%	10%	7%
224	9%	25%	--	--
226	20%	36%	10%	10%
232	26%	23%	--	--
234	19%	27%	21%	9%
235	16%	20%	4%	14%
236	15%	20%	19%	18%
237	18%	7%	--	--
238	20%	25%	11%	8%
240	18%	27%	7%	9%
241	23%	36%	11%	9%
243	39%	78%	--	--
244	33%	41%	--	--
245	11%	16%	9%	6%
246	25%	48%	--	--
248	13%	19%	16%	7%
249	25%	28%	29%	8%
252	23%	25%	--	--
255	14%	21%	15%	7%
257	27%	33%	--	--
268	27%	20%	--	--
269	29%	40%	--	--
271	13%	22%	23%	11%
277	28%	30%	--	--
301	20%	27%	--	--
301	15%	28%	--	--
303	30%	48%	--	--
304	23%	27%	--	--
308	18%	27%	--	--
309	32%	55%	--	--

Route-level Ridership continued

■ over the lateness threshold

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
311	21%	31%	--	--
312	22%	30%	--	--
316	23%	24%	--	--
330	19%	29%	--	--
331	9%	12%	13%	7%
342	22%	42%	--	--
345	8%	14%	13%	6%
346	4%	9%	2%	4%
347	8%	16%	6%	8%
348	12%	21%	14%	7%
355	42%	63%	--	--
372	15%	23%	8%	8%
373	14%	20%	--	--
A Line	14%	23%	8%	10%
B Line	25%	34%	18%	12%
C Line	9%	16%	6%	5%
D Line	10%	13%	10%	6%
E Line	19%	29%	12%	10%
F Line	8%	8%	4%	5%
King County Marine Division	All-Day Weekday % Late			
West Seattle Water Taxi **	0.60%			
Vashon Island Water Taxi **	1.60%			

\*\* Water Taxi is operated by the King County Marine Division

## Appendix G: Route-level Ridership and Hours

We adopted a more accurate methodology to process data from our 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 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
1	2,500	2,400	-100	65	66	1
2	5,800	5,600	-200	136	135	-1
3	7,200	6,200	-1,000	150	135	-15
4	3,500	4,600	1,100	99	116	17
5	8,100	8,300	200	183	184	1
7	11,500	10,800	-700	259	255	-4
8	9,100	8,400	-700	212	188	-24
9	2,800	1,200	-1,600	77	34	-43
10	4,500	3,100	-1,400	94	94	0
11	3,800	4,000	200	89	86	-3
12	3,500	3,300	-200	84	84	0
13	2,700	3,000	300	60	61	1
14	3,200	3,100	-100	84	84	0
15EX	1,200	1,300	100	27	30	3
16	4,700	0	-4,700	177	0	-177
17EX	900	900	0	18	19	1
18EX	1,000	1,100	100	21	24	3
19	300	300	0	12	12	0
21	4,700	4,900	200	141	144	3
22	200	200	0	16	16	0
24	2,300	2,300	0	69	71	2
25	600	0	-600	33	0	-33
26EX	700	2,900	2,200	15	94	79
26	2,800	0	-2,800	75	0	-75
27	1,200	1,000	-200	41	49	8
28EX	1,200	3,100	1,900	28	95	67
28	2,800	0	-2,800	81	0	-81
29	1,200	1,300	100	33	34	1
30	500	0	-500	26	0	-26
31	1,900	1,600	-300	52	56	4
32	2,600	2,500	-100	71	77	6
33	1,900	2,200	300	58	59	1
36	10,000	9,300	-700	232	232	0
37	200	200	0	11	11	0

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
40	10,600	11,400	800	273	284	11
41	9,900	10,000	100	190	194	4
43	6,500	800	-5,700	152	30	-122
44	7,500	8,400	900	154	167	13
45	0	7,100	7,100	0	176	176
47	700	600	-100	23	23	0
48	11,200	5,500	-5,700	239	183	-56
49	6,800	6,500	-300	142	168	26
50	2,300	2,200	-100	109	109	0
55	900	1,000	100	30	32	2
56	700	700	0	20	19	-1
57	400	400	0	11	11	0
60	5,200	4,800	-400	151	151	0
62	0	7,400	7,400	0	233	233
63	0	500	500	0	26	26
64EX	700	700	0	26	26	0
65	3,200	5,000	1,800	88	123	35
66EX	3,100	0	-3,100	92	0	-92
67	1,600	4,900	3,300	41	117	76
68	2,200	0	-2,200	47	0	-47
70	5,300	7,500	2,200	147	182	35
71	4,700	1,400	-3,300	96	49	-47
72	4,700	0	-4,700	95	0	-95
73	5,800	1,100	-4,700	114	41	-73
74	1,300	1,100	-200	24	34	10
75	4,300	4,700	400	99	124	25
76	1,100	1,500	400	32	47	15
77EX	900	1,000	100	20	28	8
78	0	200	200	0	14	14
82	<50	<50	0	4	4	0
83	<50	<50	0	4	4	0
84	<50	<50	0	3	3	0
99	300	300	0	16	16	0
101	4,900	5,100	200	110	116	6
102	900	1,000	100	25	26	1
105	1,000	900	-100	37	38	1

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
106	5,000	5,300	300	135	177	42
107	1,400	2,500	1,100	66	116	50
111	900	800	-100	35	37	2
113	300	300	0	12	12	0
114	400	400	0	18	20	2
116EX	600	600	0	31	30	-1
118EX	200	200	0	11	11	0
118	300	400	100	33	30	-3
119EX	100	100	0	5	5	0
119	200	200	0	13	12	-1
120	8,700	8,600	-100	213	226	13
121	900	900	0	47	47	0
122	600	500	-100	25	25	0
123	300	300	0	12	13	1
124	3,100	4,000	900	100	135	35
125	1,900	1,800	-100	58	58	0
128	3,800	3,500	-300	134	139	5
131	3,000	3,100	100	80	84	4
132	2,900	2,900	0	99	101	2
143	500	500	0	33	33	0
148	600	600	0	40	42	2
150	7,000	6,900	-100	186	192	6
153	400	400	0	21	21	0
154	100	200	100	8	8	0
156	1,100	1,100	0	65	65	0
157	200	200	0	16	16	0
158	600	600	0	25	25	0
159	400	400	0	24	24	0
164	1,900	1,900	0	48	48	0
166	2,000	1,900	-100	80	84	4
167	400	400	0	16	16	0
168	1,600	1,500	-100	68	68	0
169	3,000	2,900	-100	79	79	0
177	600	500	-100	30	34	4
178	600	500	-100	29	30	1
179	600	800	200	30	38	8
180	4,300	4,600	300	148	150	2



Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
181	2,100	2,100	0	87	86	-1
182	500	500	0	28	28	0
183	700	700	0	34	33	-1
186	200	200	0	20	21	1
187	500	400	-100	20	20	0
190	400	400	0	19	27	8
192	200	200	0	12	14	2
193	600	500	-100	27	29	2
197	800	600	-200	37	38	1
200	100	100	0	13	13	0
201	<50	<50	0	3	3	0
204	200	200	0	19	19	0
208	100	100	0	17	17	0
212	2,800	2,400	-400	68	68	0
214	1,100	1,100	0	41	45	4
216	800	800	0	26	28	2
217	200	200	0	8	8	0
218	1,000	1,000	0	29	30	1
219	800	800	0	28	30	2
221	1,500	1,400	-100	80	80	0
224	100	100	0	16	16	0
226	1,600	1,500	-100	63	64	1
232	400	400	0	23	23	0
234	1,400	1,400	0	74	74	0
235	1,100	1,100	0	66	66	0
236	500	500	0	61	62	1
237	100	100	0	6	6	0
238	800	900	100	65	77	12
240	2,300	2,300	0	97	102	5
241	800	700	-100	41	42	1
242	400	0	-400	24	10	-14
244	200	200	0	18	15	-3
245	3,600	3,500	-100	148	148	0
246	400	300	-100	29	29	0
248	1,000	900	-100	55	55	0
249	1,000	900	-100	56	54	-2
252	700	700	0	25	25	0

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
255	6,700	6,800	100	218	222	4
257	600	600	0	22	22	0
268	500	400	-100	15	15	0
269	500	500	0	50	50	0
271	5,600	5,700	100	223	224	1
277	200	200	0	19	19	0
301	1,600	1,600	0	48	51	3
303	1,200	1,100	-100	40	40	0
304	400	400	0	15	14	-1
308	200	200	0	9	10	1
309	500	500	0	15	17	2
311	1,100	1,200	100	42	45	3
312	2,400	2,500	100	76	77	1
316	800	1,100	300	17	28	11
330	400	400	0	14	14	0
331	900	900	0	47	48	1
342	300	300	0	17	17	0
345	1,200	1,200	0	38	38	0
346	1,200	1,200	0	43	43	0
347	1,400	1,400	0	56	56	0
348	1,400	1,400	0	56	56	0
355	900	1,000	100	30	30	0
372	4,800	7,700	2,900	129	207	78
373	900	1,600	700	31	36	5
601	<50	<50	0	5	5	0
A Line	9,400	9,700	300	179	179	0
B Line	6,200	6,300	100	161	161	0
C Line	8,800	11,100	2,300	196	289	93
D Line	11,800	14,300	2,500	183	256	73
E Line	15,800	17,000	1,200	284	299	15
F Line	5,400	5,500	100	178	178	0
773	200	300	100	16	16	0
775	200	400	200	9	9	0
823	<50	100	50	1	2	1
824	100	100	0	1	2	1
886	0	<50	0	0	2	

Route-level Ridership and Hours continued

Route	Weekday Rides in Fall 2015	Weekday Rides in Fall 2016	Change in Rides	Weekday Platform Hours in Fall 2015	Weekday Platform Hours in Fall 2016	Change in Platform Hours
887	100	100	0	2	2	0
888	100	100	0	2	2	0
889	100	100	0	2	2	0
891	100	100	0	3	3	0
892	100	100	0	2	2	0
893	100	100	0	1	0	-1
894	100	100	0	2	2	0
895	100	100	0	1	0	-1
901DART	300	400	100	18	18	0
903DART	300	300	0	24	24	0
906DART	300	400	100	26	26	0
907DART	100	100	0	19	19	0
908DART	100	100	0	10	10	0
910DART	100	100	0	9	9	0
913DART	200	200	0	12	12	0
914DART	200	200	0	10	10	0
915DART	100	300	200	7	15	8
916DART	200	200	0	11	11	0
917DART	200	200	0	14	14	0
930DART	100	100	0	13	13	0
931DART	100	100	0	28	28	0
952	300	300	0	26	26	0
980	<50	<50	0	1	1	0
981	<50	<50	0	2	2	0
982	100	100	0	3	4	1
984	<50	<50	0	2	2	0
986	100	100	0	3	3	0
987	100	100	0	3	4	1
988	100	100	0	3	3	0
989	100	100	0	3	4	1
994	100	100	0	3	4	1
995	100	100	0	3	4	1
West Seattle Water Taxi	579	669	90	7	7	0
Vashon Water Taxi	825	849	24	6	6	0

## Appendix H: Service Changes and Corridor Changes

### Service Changes

Route(s)	Summary of Change	Type of Change
<b>MARCH SERVICE CHANGE</b>		
1,* 14*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
2,* 13	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
3,* 4*	Extend route to Seattle Pacific University; add hours to allow more time for drivers to access comfort stations	Revised routing, comfort station improvement
5*	Add two a.m. peak trips; add hours to improve reliability	Added trips, reliability improvement
7*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
8*	Extend 15-minute frequency later on weekdays; extend 20 minute frequency earlier and later on Saturdays	Increased frequency
9*	Add hours to improve reliability	Reliability improvement
15	Add hours to improve reliability; add one a.m. and one p.m. peak trip	Reliability improvement, added trips
15EX	Add southbound a.m. peak trip	Added trips
17EX	Add one a.m. and one p.m. peak trip	Added trips
17EX, 18EX	Add hours to improve reliability and overcrowding	Reliability improvement
21EX*	Add hours to allow more time for drivers to access comfort stations and improve reliability; add one p.m. peak trip	Comfort station improvement, reliability improvement, added trips
22	Add hours to improve reliability	Reliability improvement
26EX*	Add one a.m. peak trip to help relieve overcrowding	Added trips
28EX*	Add one a.m. peak trip to help relieve overcrowding	Added trips
29	Add hours to improve reliability; revise route that previously addressed a zone access issue; northbound trips begin operating in service at 4th Ave S/S Royal Brougham Way	Reliability improvement, revised routing
31,* 32,* 75*	Add new eastbound Route 32 evening trip; add new northbound Route 75 evening trip; convert one eastbound Route 32 evening trip to a Route 31 trip	Added trips, schedule adjustment
32*	Revise terminal for the single p.m. trip beginning at UW to now layover on 12th Ave NE at NE 47th St	Terminal change
36	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
37	Add hours to improve reliability	Reliability improvement
40*	Add two p.m. peak trips; add hours to allow more time for drivers to access comfort stations; change from North Base to Central Base on Sundays	Added trips, comfort station improvement, terminal change
41*	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability; add one a.m. and one p.m. peak trip	Comfort station improvement, reliability improvement, added trips
44*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
48*	Add hours to allow more time for drivers to access comfort stations; return to normal northbound route	Comfort station improvement, revised routing
49*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
55*	Add hours to improve reliability	Reliability improvement
57	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability	Comfort station improvement, reliability improvement
60*	Add hours to improve reliability	Reliability improvement
62	Add one a.m. and one p.m. trip	Added trips
63, 64EX	Add one p.m. peak trip and adjust one a.m. trip to improve overcrowding	Added trips, schedule adjustment
65,* 67*	Extend 15 minute frequency later in the evenings on weekdays and Saturday; add one a.m. and one p.m. peak trip	Increased frequency, added trips
70*	Add two a.m. and one p.m. peak trips to improve overcrowding; add hours to allow more time for drivers to access comfort stations; layover change for some trips	Added trips, comfort station improvement, terminal change
71*	Change from North Base to Central Base	Terminal change
73*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
74	Add two a.m. peak trips to improve overcrowding; revise trip times	Added trips, schedule adjustment
75	Add one p.m. peak trip	Added trips
99	Add hours to improve reliability	Reliability improvement
101, 102	Added trips to relieve overcrowding; add hours to improve reliability; add hours to allow more time for drivers to access comfort stations	Improve frequency, reliability improvement, comfort station improvement
106	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
111	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability; extend the 1 a.m. and p.m. trips so all Route 111 trips either begin or end at Lake Kathleen; terminal relocation in the a.m.	Comfort station improvement, reliability improvement, schedule adjustment, terminal change
113	Add hours to improve reliability	Reliability improvement
114	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability	Comfort station improvement, reliability improvement
119	Add hours to improve reliability	Reliability improvement
120*	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
121, 122	Terminal relocation from Blanchard St/7th Ave to Eagle St	Terminal change
121, 122, 123	Add two a.m. and one p.m. peak trips to improve overcrowding	Added trips
125*	Add hours to allow more time for drivers to access comfort stations; change from Ryerson Base to Central Base	Comfort station Improvement, terminal change
128	Add hours to improve reliability	Reliability improvement

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
143	Add hours to improve reliability; add one a.m. peak trip to improve overcrowding	Reliability improvement, added trips
148	Add hours to improve reliability	Reliability improvement
150	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability	Comfort station improvement, reliability improvement
153	Add hours to improve reliability	Reliability improvement
157	Add hours to improve reliability	Reliability improvement
157, 158, 159	Terminal relocation from Blanchard St/7th Ave to Eagle St	Terminal change
158, 159, 192	Add trips to improve overcrowding; add hours to allow more time for drivers to access comfort station	Increased frequency, comfort station improvement
164	Add hours to improve reliability	Reliability improvement
168	Add hours to improve reliability	Reliability improvement
177	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability	Comfort station improvement, reliability improvement
179	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
180	Add hours to improve reliability	Reliability improvement
182	Add hours to improve reliability	Reliability improvement
187	Add hours to improve reliability	Reliability improvement
193	Add hours to improve reliability	Reliability improvement
197	Add hours to improve reliability	Reliability improvement
212	Add three a.m. and one p.m. peak trip to improve overcrowding	Added trips
216, 218	Add two a.m. trips and one p.m. trip on Route 218; add one p.m. trip on Route 216 to improve overcrowding	Added trips
217	Add hours to improve reliability	Reliability improvement
221	Add hours to improve reliability	Reliability improvement
232	Add hours to improve reliability	Reliability improvement
241	Adjust routing patterns in response to closure of the South Bellevue Park & Ride	Revised routing
244	Add hours to improve reliability	Reliability improvement
246	Add hours to improve reliability	Reliability improvement
252, 257	Add one a.m. trip on route 257; reschedule other trips	Added trips, schedule adjustment
255	Add two a.m. and one p.m. trips to improve overcrowding	Added trips
269	Add hours to improve reliability	Reliability improvement
271	Add two a.m. and one p.m. trips to improve overcrowding	Added trips
303	Add hours to improve reliability; change from Central Base to Ryerson Base	Reliability improvement, terminal change
304	Add hours to improve reliability	Reliability improvement
308	Add hours to improve reliability	Reliability improvement

## Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
309	Add hours to improve reliability	Reliability improvement
311	Add one a.m. trip and one p.m. trip to improve overcrowding	Added trips
312	Add hours to allow more time for drivers to access comfort stations; add hours to improve reliability	Comfort station improvement, reliability improvement
330	Add hours to improve reliability; starting terminal adjustment	Reliability improvement, terminal change
331, 345	Add hours to improve reliability	Reliability improvement
345	Revise routing within Northwest Hospital campus	Revised routing
346	Add hours to improve overcrowding	Improve frequency
355	Add hours to improve overcrowding and reliability	Reliability improvement
372*	Remove four a.m. trips from the RUW designation to improve overcrowding, extend 15-minute service later on weekdays; Improve Sunday frequency; Add one p.m. peak trip	Schedule adjustment, increased frequency, added trips
630	Add inbound stop at Rainier Ave at Dearborn St.	Revised routing
A Line	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
C Line*	Add hours to allow more time for drivers to access comfort stations; add one a.m. and one p.m. trip to reduce overcrowding	Comfort station improvement, Added trips
D Line*	Add hours to allow more time for drivers to access comfort stations; increase frequency to accommodate for Ballard High School	Comfort station improvement, improve frequency
E Line*	Add one a.m. and one p.m. trip to reduce overcrowding; add hours to improve reliability; layover change	Added trips, reliability improvement, terminal change
F Line	Add hours to allow more time for drivers to access comfort stations	Comfort station improvement
886	Relocate p.m. terminal to 124 Ave SE from Newport HS access road	Terminal change
907	Delete routing between Black Diamond and Enumclaw; an upcoming Community Connections project will mitigate loss of this segment	Revised routing
910	Revise routing to provide more convenient service for riders	Revised routing
915	Revise routing as part of the SE King County Community Connections project in Enumclaw	Revised routing



Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
<b>JUNE SERVICE CHANGE</b>		
26EX*	Stop closures through North Seattle College campus weekdays 10 p.m. to 7 a.m. and weekends 10 p.m. to 8 a.m.	Revised routing
99	Seasonal adjustment to add frequency, span and weekend service	Improve frequency, increased span
634	New Trailhead Direct route	New route
980	Adjustment to add stops and streamline school service; seasonal activation/cancellation of service	Schedule adjustment
981	Seasonal activation/cancellation of service	Schedule adjustment
982	Stop adjustment; seasonal activation/cancellation of service	Schedule adjustment
984	Revised routing; additional stop at Lakeside's request; seasonal activation/cancellation of service; stop change on Boyer from 16th Ave E to 19th Ave E	Revised routing, schedule adjustment
986	Revised routing; additional stops on southern end of route; seasonal activation/cancellation of service; turn-by-turn direction adjustment	Revised routing, schedule adjustment
987	Revised routing; additional stops on southern end of route; seasonal activation/cancellation of service; layover addition to start of route in a.m. on Henderson St at Rainier Ave S	Revised routing, schedule adjustment, terminal change
988	Route extension to serve additional locations along E Cherry St in p.m.; seasonal activation/cancellation of service; stop change on Boyer from 16th Ave E to 19th Ave E	Revised routing, schedule adjustment
989	Revised routing; additional stops at Lakeside's request; seasonal activation/cancellation of service; turn-by-turn direction clarification; delete Rainier Ave Freeway Station stop; simplify a.m. routing	Revised routing, schedule adjustment
992	Seasonal activation/cancellation of service; stop adjustment during summer route	Schedule adjustment, revised routing
994	Revised routing; additional stops at Lakeside's request; seasonal activation/cancellation of service	Revised routing, schedule adjustment
995	Revised routing; additional stops at Lakeside's request; seasonal activation/cancellation of service; turn-by-turn direction clarification	Revised routing, schedule adjustment

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
<b>SEPTEMBER SERVICE CHANGE</b>		
1,* 14*	Reliability improvements; comfort station investment; extend 30 minute service for Route 14 to 18 hours on Saturday	Reliability improvement, comfort station improvement, increased frequency
3*	Add night-owl trips; improve comfort station access during the overnight hours	Added trips, comfort station improvement
3,* 4*	Reliability improvements; comfort station investment; extend 30 minute service to 18 hours on the weekends	Reliability improvement, comfort station improvement, increased frequency
3,* 7,* 55,* 60,* 346	Schedule adjustment to account for changed school bell times	Schedule adjustment
5*	Add night-owl trips; reliability improvements; comfort station investment	Added trips, reliability improvement, comfort station improvement
7*	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
8*	Extend 30-minute service to 18 hours on Sunday	Increased frequency
11*	Simplify night-owl transit network and improve system usability	Schedule adjustment
17EX	Add one a.m. trip	Added trips
21*	Discontinue redundant terminal loop; reliability improvements; comfort station investment	Revised routing, reliability improvement, comfort station improvement
26EX,* 28EX* / 131, 132	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
27*	Revise service back to regular routing	Revised routing
28EX*	Add one a.m. trip	Added trips
31,* 32,* 75*	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
40*	Add two p.m. and one a.m. trips	Added trips
41*	Extend 30 minute service to 18 hours on weekends; Reliability improvements; comfort station investment	Increased frequency, reliability improvement, comfort station improvement
43,* 44*	Add one a.m. trip; Improve midday frequency	Added trips, increased frequency
44,* 48*	Add night-owl trips	Added trips
48*	Improve weekday frequency	Increased frequency
50	Improve weekday and weekend frequency	Increased frequency
55*	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
56	Terminal relocation in a.m.	Terminal change

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
60*	Improve frequency; add one a.m. and three p.m. trips	Increased frequency, added trips
60,* 124*	Revised northbound routing to operate along Corson Ave S instead of Carlson Ave S between E Marginal Way S and S Bailey St	Revised routing
62	Revise route in downtown Seattle; Revise evening and weekend route; add new weekday a.m. trip; reliability improvements; comfort station investment; layover moved to N/S S Jackson St	Revised routing, added trips, reliability improvement, comfort station improvement, terminal change
63	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
65,* 67*	Add night-owl trips; improve weekday frequency	Added trips, increased frequency
70*	Add night-owl trips; reliability improvements; comfort station investment	Added trips, reliability improvement, comfort station improvement
76*	Reassign route from North to Central Base	Terminal change
82*	Discontinue route	Delete route
83*	Discontinue route	Delete route
84*	Discontinue route	Delete route
106	Revised routing, no longer through Mount Baker Transit Center	Revised routing
107, 148	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
113	Reassign route from Ryerson to Central Base	Terminal change
114	Reassign route from South to Bellevue Base	Terminal change
116	Discontinue p.m. trip leaving 8th Ave/Bell St at 4:39 p.m.	Reduced trips
120*	Add night-owl trips	Added trips
124*	Extend late-night trips to serve Sea-Tac Airport; revise southbound routing	Schedule adjustment, revised routing
128	Relocate Admiral District terminal	Terminal change
131, 132	Improve frequency of route to operate every 15 minutes between 6:15 and 9:30 a.m.	Increased frequency
150	Relocate late-night terminal	Terminal change
166, 169	Improve weekday peak and mid-day frequency to every 15 minutes	Increased frequency
190	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
216, 218, 219	Revise outbound routing pattern in downtown Seattle	Revised routing
221	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
226, 241	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
240	Add one new southbound p.m. trip to relieve overcrowding	Added trips

Service Changes and Corridor Changes continued

Route(s)	Summary of Change	Type of Change
269	Add 30 minute frequency service during the off-peak period; reliability improvements; comfort station investment	Increased frequency, reliability improvement, comfort station improvement
301	Add one new southbound a.m. trip	Added trips
304, 355	Return service back to regular routing with completion of the Yesler Way bridge project; reroute 355 pathway north of N 145th St to follow that of Route 5	Revised routing
316	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
601	Discontinue route	Delete route
628	Revise routing to include serving the Preston Park-and-Ride; shift p.m. span of service to one hour earlier	Revised routing, increased span
630	Extend flexible service area; adjust p.m. route to improve efficiency	Revised routing
B Line	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
C Line*	Add night-owl trips; add one 1 a.m. trip and one p.m. trip	Added trips
D Line*	Add night-owl trips; add one a.m. trip; routing revision back to regular routing	Added trips, revised routing
E Line*	Add night-owl trips; add one p.m. trip	Added trips
F Line	Reliability improvements; comfort station investment	Reliability improvement, comfort station improvement
910	Modification of DART service area	Revised routing
913	Schedule adjustment to maintain Sounder connection	Schedule adjustment
914, 916	Last two eastbound trips weekday and Saturday extended to Kent City Hall	Revised routing
Overlake Transit Center	Routing revisions and bay reassignments due to East Link construction	Revised routing

\* Designates routes receiving Seattle investments

## Service Changes and Corridor Changes continued

### Corridor Changes

The last System Evaluation covered service from September 2015 to March 2016. Since that time, Metro has implemented two major restructures: one to integrate with the Link light rail extension to Capitol Hill and the University of Washington, and one to restructure service in southeast Seattle. These two restructures, which were approved by King County Council after significant public input, enabled Metro to extend mobility benefits and better align with the METRO CONNECTS vision. With the exception of where alignments were changed and service no longer exists, all center-to-center connections were evaluated in this report. Corridor-by-corridor changes are detailed below.

Corridor	Change
Ballard – U District	This corridor, formerly served by Route 48, was extended to connect to the Link station at the University of Washington. It is now served by Route 45.
Shoreline – U District	This corridor, formerly and presently served by Route 373, was modified to connect to the Link station at the University of Washington.
Sand Point – U District	This corridor, formerly served by Route 30, had its alignment in the U District simplified. It is now served by Route 74.
Laurelhurst – U District	This corridor, formerly served by Route 25, was significantly modified due to the deletion of the underlying route. The corridor is now served by Route 78, but portions of Laurelhurst lost service.
Northgate – Seattle CBD	This corridor, formerly served by Route 16, had its alignment straightened in the vicinity of Northgate and south of Green Lake. This corridor is now served by Route 26. The portion of this corridor south of Green Lake that was served by Route 16 is now served by Route 62 and is covered by another corridor (Sand Point – Cowen Park – Fremont).
Sand Point – Cowen Park - Fremont	This corridor, which used to serve Wedgwood under Route 71EX, was modified due to the deletion of the underlying route. Now served by Route 62, the corridor was extended east to Sand Point and west to Fremont to connect with the corridor running between Fremont and the Seattle CBD.
Fremont – Seattle CBD	This corridor, formerly served by routes 26 and 28, had its alignment adjusted slightly in downtown Seattle. It is now served by Route 62. This corridor and the corridor between Sand Point – Cowen Park – Fremont now form a seamless, cross-town pathway connecting multiple centers.
U District – Seattle CBD	<p>Three bus corridors formerly connected the U District to downtown Seattle. The corridor running along Eastlake remains served by Route 70. Changes to the other two corridors are detailed below:</p> <ul style="list-style-type: none"> <li>▪ The corridor formerly served by routes 71EX, 72EX, 73EX, and 74EX (the “70-series”): Connections to the UW Link light rail station along the former “70-series” alignments are served by routes 71, 73, 45, 373, and Sound Transit routes and are covered by other corridors.</li> <li>▪ The corridor formerly served by Route 25: Connections to Link light rail, downtown Seattle, and UW along the former alignment of Route 25 (which was deleted) are served by routes 70, 49, 10, 12, 2, and 43 and are covered by other corridors.</li> </ul>

## Service Changes and Corridor Changes continued

Corridor	Change
Northgate – U District	Two bus corridors used to connect Northgate to the U District. One was served by routes 66EX and 67, and one was served by Route 68. Service consolidation in association with the U-Link restructure resulted in the consolidation of these corridors; the resulting corridor is served by Route 67. Service previously provided by Route 68 east and northeast of the University of Washington is provided by Route 372 and is covered by another corridor (UW Bothell – U District).
Rainier Beach – Seattle CBD and Rainier Beach – Capitol Hill	All-day connections between Rainier Beach and Capitol Hill, formerly provided by Route 9EX, were modified to leverage the First Hill Streetcar. Route 9EX provides a one-seat connection between Rainier Beach and Capitol Hill in the peak periods, but mid-day and evening connections require a transfer between either Link light rail or Route 7 and the streetcar. Service along Rainier Ave is now evaluated as a single bus corridor (Rainier Beach – Seattle CBD) and includes routes 7 and 9EX.
Rainier Beach – Seattle Center	In March 2016, Route 8 was split into a) Route 8 between Seattle Center and Mount Baker, and b) Route 38 between Mount Baker and Rainier Beach. However, Route 38 was removed in September 2016, and its alignment was subsumed by a restructured Route 106 (see below). The pathway between Seattle Center and Mount Baker, which remains served by Route 8, is now evaluated as its own corridor.
Rainier Beach – Mount Baker and Renton – Seattle CBD	This is the most complicated restructure affecting the corridor system. In September 2016, the southern portion of old Route 8 (which existed as Route 38 for a short time) became part of a restructured Route 106. As a result of this restructure, the corridor between Renton and Seattle and the corridor between Rainier Beach and Mount Baker (the southern half of old Route 8) overlapped each other; they were therefore consolidated to be evaluated as a single corridor. Portions of the old corridor formerly served by Route 106 are now served by Route 107 and are evaluated as part of its corridor. Lastly, the corridor between Tukwila and Seattle CBD, served by Route 124, also had its alignment changed slightly in the SODO area. In sum, the geographic coverage of the corridor system in southeast Seattle increased slightly as a result of these changes, extending mobility benefits to more people.

Connections			Land Use - Productivity				Social Equity - Demographics			Geographic Value - Connections to Centers				Initial Target Service Levels				
BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS/ CORRIDOR MILE	POINTS	JOBS/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	1,187	2	1,111	2	68%	5	69%	5	RGC/MIC - TAC	7	21		15	30	30
Alki	SODO Station	Alaska Junction	50	1,501	4	2,329	4	29%	0	29%	0	RGC/MIC - TAC	7	15		30	30	0
Auburn	Burien	Kent, SeaTac	180	670	2	1,242	2	66%	5	98%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Auburn	Pacific	Algona	917	406	0	510	2	57%	3	100%	5	Other	2	12		30	30	0
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	745	2	1,166	2	57%	5	97%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Aurora Village	Northgate	Meridian Ave N	346	1,235	4	2,129	4	82%	5	87%	5	RGC/MIC - TAC	7	25		15	15	30
Aurora Village	Seattle CBD	Aurora Ave N	E Line	2,847	8	9,831	8	38%	3	56%	5	RGC/MIC - RGC/MIC	10	34	Yes	< 15	15	15
Avondale	Kirkland	NE 85th St, Redmond Way, Avondale Rd NE	248	1,368	4	1,611	4	83%	5	0%	0	RGC/MIC - TAC	7	20		15	30	30
Ballard	Northgate	Holman Road	40	2,750	8	3,328	6	17%	0	47%	3	RGC/MIC - RGC/MIC	10	27		15	15	30
Ballard	Seattle CBD	15th Ave W	D Line	4,229	10	15,325	10	0%	0	4%	0	RGC/MIC - RGC/MIC	10	30	Yes	< 15	15	15
Ballard	Seattle CBD	Fremont, South Lake Union	40	4,866	10	25,730	10	1%	0	9%	0	RGC/MIC - RGC/MIC	10	30		15	15	30
Ballard	University District	Green Lake, Greenwood	45	2,855	8	12,385	10	14%	0	40%	3	RGC/MIC - TAC	7	28		15	15	30
Ballard	University District	Wallingford (N 45th St)	44	3,360	10	15,364	10	19%	0	19%	0	RGC/MIC - RGC/MIC	10	30		15	15	30
Beacon Hill	Seattle CBD	Beacon Ave	36	2,013	6	12,389	10	97%	5	100%	5	Other	2	28		15	15	30
Bellevue	Eastgate	Lake Hills Connector	271	660	2	4,143	6	98%	5	9%	0	RGC/MIC - TAC	7	20		15	30	30
Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	1,567	4	5,374	6	90%	5	0%	0	RGC/MIC - RGC/MIC	10	25	Yes	< 15	15	15
Bellevue	Renton	Newcastle, Factoria	240	1,159	2	3,763	6	94%	5	15%	0	RGC/MIC - TAC	7	20		15	30	30
Burien	Seattle CBD	1st Ave S, South Park	131	1,870	6	10,249	8	64%	5	82%	5	RGC/MIC - RGC/MIC	10	34		15	15	30
Burien	Seattle CBD	Delridge, Ambaum	120	1,623	4	7,240	8	70%	5	71%	5	RGC/MIC - RGC/MIC	10	32		15	15	30
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	1,594	4	9,208	8	66%	5	83%	5	RGC/MIC - TAC	7	29		15	15	30
Capitol Hill	Seattle CBD	15th Ave E	10	6,008	10	21,735	10	0%	0	56%	5	Other	2	27		15	15	30
Capitol Hill	Seattle CBD	Madison St	12	6,963	10	44,171	10	0%	0	100%	5	Other	2	27		15	15	30
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	2,384	6	5,478	6	89%	5	88%	5	RGC/MIC - TAC	7	29		15	15	30
Central District	Seattle CBD	E Jefferson St	3/4	7,541	10	40,385	10	85%	5	86%	5	RGC/MIC - TAC	7	37		15	15	30
Colman Park	Seattle CBD	Leschi, Yesler Way	27	5,119	10	23,314	10	77%	5	87%	5	Other	2	32		15	15	30
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Ave W	33	3,494	10	14,860	10	0%	0	0%	0	Other	2	22		15	30	30
Eastgate	Bellevue	Newport Way, S. Bellevue, Beaux Arts	241	1,402	4	6,261	8	100%	5	0%	0	RGC/MIC - TAC	7	24		15	30	30
Eastgate	Bellevue	Somerset, Factoria, Woodridge	245	1,236	4	5,549	8	100%	5	0%	0	Other	2	19		15	30	30
Eastgate	Overlake	Phantom Lake	226	976	2	2,210	4	50%	3	6%	0	Other	2	11		30	30	0
Enumclaw	Auburn	Auburn Way S, SR 164	186/915	262	0	410	0	48%	3	91%	5	RGC/MIC - TAC	7	15		30	30	0
Fairwood	Renton	S Puget Dr, Royal Hills	148	931	2	976	2	100%	5	71%	5	RGC/MIC - TAC	7	21		15	30	30
Federal Way	Kent	Military Road S	183	1,031	2	822	2	97%	5	85%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Federal Way	SeaTac	SR-99	A Line	1,124	2	2,057	4	100%	5	100%	5	RGC/MIC - RGC/MIC	10	26	Yes	< 15	15	15
Fremont	Broadview	8th Ave NW	28	1,762	4	1,813	4	0%	0	11%	0	TAC - TAC	5	13		30	30	0
Fremont	Seattle CBD	Dexter Ave N	62	6,234	10	33,028	10	14%	0	10%	0	RGC/MIC - TAC	7	27		15	15	30
Fremont	University District	N 40th St	31/32	2,150	6	18,778	10	8%	0	8%	0	RGC/MIC - TAC	7	23		15	30	30
Green River CC	Kent	132nd Ave SE	164	905	2	1,598	4	83%	5	86%	5	RGC/MIC - TAC	7	23		15	30	30
Greenwood	Seattle CBD	Greenwood Ave N	5	3,550	10	11,373	10	4%	0	7%	0	RGC/MIC - TAC	7	27		15	15	30
High Point	Seattle CBD	35th Ave SW	21	2,337	6	11,397	10	60%	5	60%	5	RGC/MIC - TAC	7	33		15	15	30

Figures rounded for display purposes.  
 ^ Northbound peak period is at target when including September 2017 investments,  
 ^^ At target when including September 2017 investments.

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/ CORRIDOR MILE	POINTS	JOBS/ CORRIDOR MILE	POINTS	% BOARDINGS IN MINORITY TRACTS	POINTS	% BOARDINGS IN LOW-INCOME TRACTS	POINTS	CONNECTION TYPE	POINTS	TOTAL SCORE	RAPID/RISE	PEAK	OFFPEAK	NIGHT
Issaquah	Eastgate	SE Newport Way	271	575	0	2,252	4	68%	5	15%	0	Other	2	11		30	30	0
Issaquah	North Bend	Fall City, Snoqualmie	208	280	0	404	0	0%	0	49%	3	RGC/MIC - TAC	7	10		30	30	0
Issaquah	Overlake	Sammamish, Bear Creek	269	542	0	1,535	4	77%	5	1%	0	RGC/MIC - RGC/MIC	10	19		15	30	30
Kenmore	Kirkland	Juanita	234	860	2	542	2	0%	0	23%	0	TAC - TAC	5	9		60	60	0
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	801	2	824	2	4%	0	31%	0	TAC - TAC	5	9		60	60	0
Kenmore	Totem Lake	Finn Hill, Juanita	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Kennydale	Renton	Edmonds Ave NE	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Kent	Burien	Kent-DM Rd, S, 240th St, 1st Ave S	166	901	2	1,041	2	58%	5	59%	5	RGC/MIC - TAC	7	21		15	30	30
Kent	Maple Valley	SE Kent-Kangley Road	168	718	2	726	2	38%	3	29%	0	RGC/MIC - TAC	7	14		30	30	0
Kent	Renton	84th Ave S, Lind Ave SW	153	524	0	2,902	4	100%	5	100%	5	RGC/MIC - RGC/MIC	10	24		15	30	30
Kent	Renton	Kent East Hill	169	920	2	1,419	4	100%	5	93%	5	RGC/MIC - RGC/MIC	10	26		15	15	30
Kent	Seattle CBD	Tukwila	150	767	2	6,477	8	98%	5	100%	5	RGC/MIC - RGC/MIC	10	30		15	15	30
Kirkland	Bellevue	South Kirkland	234/235	1,845	6	7,933	8	7%	0	0%	0	RGC/MIC - TAC	7	21		15	30	30
Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	1,134	2	3,127	6	66%	5	7%	0	RGC/MIC - TAC	7	20		15	30	30
Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	1,674	4	9,223	8	59%	5	88%	5	RGC/MIC - RGC/MIC	10	32		15	15	30
Lake City	University District	35th Ave NE	65	1,547	4	9,677	8	50%	3	25%	0	Other	2	17		30	30	0
Northgate <sup>1</sup>	University District	Lake City, Sand Point	75	1,454	4	9,831	8	28%	0	75%	5	RGC/MIC - TAC	7	24		15	30	30
Laurelhurst	University District	NE 41st St	78	445	0	22,332	10	20%	0	31%	0	Other	2	12		30	30	0
Madison Park	Seattle CBD	Madison St	11	4,787	10	16,126	10	0%	0	53%	5	RGC/MIC - TAC	7	32		15	15	30
Madrona	Seattle CBD	Union St	2	5,261	10	26,532	10	7%	0	63%	5	Other	2	27		15	15	30
Magnolia	Seattle CBD	34th Ave W, 28th Ave W	24	3,135	10	13,022	10	0%	0	0%	0	RGC/MIC - TAC	7	27		15	15	30
Mercer Island	S Mercer Island	Island Crest Way	204	771	2	680	2	0%	0	0%	0	TAC - TAC	5	9		60	60	0
Mirror Lake	Federal Way	S 312th St	901	1,086	2	580	2	97%	5	97%	5	Other	2	16		30	30	0
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	4,582	10	21,032	10	100%	5	100%	5	Other	2	32		15	15	30
Mount Baker	University District	23rd Ave E	48	1,889	6	13,204	10	75%	5	83%	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	6,414	10	8,971	8	22%	0	54%	5	RGC/MIC - RGC/MIC	10	33		15	15	30
Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	1,463	4	1,945	4	60%	5	24%	0	Other	2	15		30	30	0
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S	182	753	2	953	2	44%	3	44%	3	Other	2	12		30	30	0
Northgate	Seattle CBD	Green Lake, Wallingford	26	3,613	10	13,229	10	21%	0	51%	5	RGC/MIC - RGC/MIC	10	35		15	15	30
Northgate	University District	Roosevelt Way NE	67	3,192	10	16,601	10	39%	3	94%	5	RGC/MIC - RGC/MIC	10	38		<15	15	15
Othello Station	SODO Station	Columbia City Station	50	1,091	2	1,443	4	100%	5	88%	5	Other	2	18		30	30	0
Overlake	Bellevue	Bell-Red Road	226	2,263	6	11,351	10	93%	5	0%	0	Other	2	23		15	30	30
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	1,219	4	4,971	6	52%	3	0%	0	RGC/MIC - TAC	7	20		15	30	30
Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	5,669	10	23,825	10	12%	0	11%	0	Other	2	22		15	30	30
Queen Anne	Seattle CBD	Taylor Ave N	3/4	5,727	10	24,906	10	50%	3	42%	3	Other	2	28		15	15	30
Rainier Beach	Seattle CBD	Rainier Ave S	7	2,651	8	15,475	10	97%	5	97%	5	Other	2	30		15	15	30
Rainier Beach	Capitol Hill	Rainier Ave S														-	-	-
Rainier Beach	Mount Baker Transit Center	Martin Luther King Jr Way S														-	-	-
Redmond	Duvall	Avondale Rd NE	224	546	0	588	2	66%	5	0%	0	RGC/MIC - TAC	7	14		30	30	0
Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	919	2	1,937	4	87%	5	6%	0	RGC/MIC - TAC	7	18		30	30	0
Redmond	Totem Lake	Willows Road	930	957	2	2,667	4	75%	5	0%	0	RGC/MIC - RGC/MIC	10	21		15	30	30

Figures rounded for display purposes.

<sup>1</sup> At target when including September 2017 investments.

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

<sup>2</sup> Corridor was extended from Lake City to Northgate

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)

(RGC: Regional Growth Center)

(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/ CORRIDOR MILE	POINTS	JOBS/ 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	757	2	1,742	4	88%	5	88%	5	RGC/MIC - RGC/MIC	10	26	Yes	< 15	15	15
Renton	Enumclaw	Maple Valley, Black Diamond	143/907	215	0	284	0	9%	0	0%	0	RGC/MIC - TAC	7	7		60	60	0
Renton	Beacon Hill	West Hill, Rainier View		107	815	2	549	2	100%	5	100%	RGC/MIC - TAC	7	21		15	30	30
Renton	Renton Highlands	NE 4th St, Union Ave NE		105	1,348	4	2,707	4	97%	5	92%	RGC/MIC - TAC	7	25		15	15	30
Renton	Seattle CBD	Martin Luther King Jr Way S, I-5	101/102	639	2	4,958	6	95%	5	100%	5	RGC/MIC - RGC/MIC	10	28		15	15	30
Renton	Seattle CBD	Skyway, Martin Luther King Jr Way S.S. Beacon Hill		106	1,564	4	2,414	4	100%	5	100%	RGC/MIC - TAC	7	25		15	15	30
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE		908	1,099	2	2,881	4	81%	5	72%	Other	2	18		30	30	0
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE		348	1,562	4	2,045	4	61%	5	46%	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 <sup>1</sup>	View Ridge, NE 65th St, Cowen Park		62	2,506	8	2,374	4	0%	0	23%	TAC - TAC	5	17		30	30	0
Sand Point	University District	NE 55th St		74	3,152	10	12,425	10	36%	3	81%	Other	2	30		15	15	30
Shoreline	University District	Jackson Park, 15th Ave NE		373	1,396	4	6,739	8	74%	5	59%	RGC/MIC - TAC	7	29		15	15	30
Shoreline CC	Greenwood	Greenwood Ave N		5	2,014	6	1,898	4	11%	0	50%	TAC - TAC	5	20		15	30	30
Shoreline CC	Lake City	N 155th St, Jackson Park		330	1,551	4	1,582	4	33%	0	75%	TAC - TAC	5	18		30	30	0
Shoreline CC	Northgate	N 130th St, Meridian Ave N		345	1,345	4	3,379	6	65%	5	88%	RGC/MIC - TAC	7	27		15	15	30
Totem Lake	Seattle CBD	Kirkland, SR-520		255	1,414	4	6,821	8	8%	0	13%	RGC/MIC - RGC/MIC	10	22		15	30	30
Tukwila	Des Moines	McMicken Heights, Sea-Tac		156	584	0	1,025	2	93%	5	85%	RGC/MIC - RGC/MIC	10	22		15	30	30
Tukwila	Fairwood	S 180th St, Carr Road		906	618	2	1,554	4	100%	5	78%	RGC/MIC - TAC	7	23		15	30	30
Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S		124	1,777	4	10,276	10	90%	5	93%	RGC/MIC - RGC/MIC	10	34		15	15	30
Twin Lakes	Federal Way	S 320th St		187	936	2	657	2	100%	5	90%	Other	2	16		30	30	0
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S		903	1,203	4	1,219	2	100%	5	98%	Other	2	18		30	30	0
University District	Bellevue	SR-520		271	888	2	12,653	10	93%	5	1%	RGC/MIC - RGC/MIC	10	27		15	15	30
University District	Seattle CBD	Broadway		49	4,441	10	22,372	10	39%	3	70%	Other	2	30		15	15	30
University District	Seattle CBD	Eastlake, Fairview		70	5,310	10	42,380	10	37%	3	66%	RGC/MIC - TAC	7	35		15	15	30
UW Bothell	Redmond	Woodinville, Cottage Lake		931	529	0	1,107	2	15%	0	0%	RGC/MIC - TAC	7	9		60	60	0
UW Bothell	University District	Kenmore, Lake Forest Park, Lake City		372	1,365	4	7,970	8	63%	5	63%	RGC/MIC - TAC	7	29		15	15	30
UW Bothell/CCC	Kirkland	132nd Ave NE, Lake Washington Tech		238	1,097	2	1,732	4	16%	0	4%	RGC/MIC - TAC	7	13		30	30	0
Vashon	Tahlequah	Valley Center		118	49	0	72	0	0%	0	0%	Other	2	2		60	60	0
West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	2,568	8	9,290	8	15%	0	28%	0	RGC/MIC - TAC	7	23	Yes	< 15	15	15
White Center	Seattle CBD	16th Ave SW, South Seattle College		125	806	2	6,636	8	93%	5	93%	RGC/MIC - TAC	7	27		15	15	30
Woodinville	Kirkland	Kingsgate		236	1,166	2	911	2	29%	0	0%	RGC/MIC - TAC	7	11		30	30	0

Figures rounded for display purposes.

<sup>1</sup> Corridor 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			Lead-up/Preliminary Service Level*			Lead-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 HEED (After subtracting Sep 17 investments)	INVESTMENT PRIORITY
Admiral District	Southcenter	California Ave SW, Military Rd, T185	128	21%	44%	26%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	9,100	32
Alki	SODO Station	Alaska Junction	50	108%	40%	23%	1	-	-	-	-	30	1	-	-	15	30	30	Frequent	6,600	29
Auburn	Burien	Kent, SeaTac	180	33%	53%	33%	-	-	-	60	-	30	-	-	-	15	30	30	Frequent	9,400	7
Auburn	Pacific	Algona	917	22%	9%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	3,100	55
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	18%	34%	22%	-	-	-	60	-	30	-	-	-	15	30	30	Frequent	6,500	8
Aurora Village	Northgate	Meridian Ave N	346	20%	16%	14%	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent	9,300	23
Aurora Village	Seattle CBD	Aurora Ave N	E Line	117%	79%	54%	2	1	-	60	-	30	2	1	-	<15	<15	15	Very Frequent	-	-
Avondale	Kirkland	NE 85th St, Redmond Way, Avondale Rd NE	248	17%	29%	18%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	4,200	26
Ballard	Northgate	Holman Road	40	120%	41%	82%	2	-	1	60	-	30	2	-	1	<15	15	15	Very Frequent	-	-
Ballard	Seattle CBD	15th Ave W	D Line	109%	74%	51%	1	1	-	60	-	30	1	1	-	<15	<15	15	Very Frequent	-	-
Ballard	Seattle CBD	Fremont, South Lake Union	40	120%	41%	82%	2	-	1	60	-	30	2	-	1	<15	15	15	Very Frequent	-	-
Ballard	University District	Green Lake, Greenwood	45	126%	33%	73%	2	-	1	-	-	30	2	-	1	<15	15	15	Very Frequent	-	-
Ballard	University District	Wallingford (N 45th St)	44	116%	41%	80%	2	-	1	60	-	30	2	-	1	<15	15	15	Very Frequent	-	-
Beacon Hill	Seattle CBD	Beacon Ave	36	121%	91%	85%	2	1	1	-	-	30	2	1	1	<15	<15	15	Very Frequent	-	-
Bellevue	Eastgate	Lake Hills Connector	271	44%	45%	22%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	-	-
Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	47%	30%	25%	-	-	-	60	-	30	-	-	-	<15	15	15	Very Frequent	-	-
Bellevue	Renton	Newcastle, Factoria	240	18%	39%	10%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	10,600	27
Burien	Seattle CBD	1st Ave S, South Park	131	29%	19%	33%	-	-	-	60	-	30	-	-	-	15^	15	30	Very Frequent	11,800	2
Burien	Seattle CBD	Delridge, Ambaum	120	118%	37%	79%	2	-	1	60	-	30	2	-	1	<15	15	15	Very Frequent	-	-
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	24%	14%	23%	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent	15,900	16
Capitol Hill	Seattle CBD	15th Ave E	10	91%	32%	60%	1	-	1	-	-	30	1	-	1	<15	15	15	Very Frequent	-	-
Capitol Hill	Seattle CBD	Madison St	12	93%	31%	31%	1	-	-	-	-	30	1	-	-	<15	15	30	Very Frequent	-	-
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	65%	34%	36%	1	-	-	-	-	30	1	-	-	<15	15^	30	Very Frequent	7,700	17
Central District	Seattle CBD	E Jefferson St	3/4	124%	92%	71%	2	1	1	-	-	30	2	1	1	<15	<15	15	Very Frequent	-	-
Colman Park	Seattle CBD	Leschi, Yesler Way	27	22%	7%	11%	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent	9,100	44
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Ave W	33	65%	27%	17%	1	-	-	-	-	30	1	-	-	<15	30	30	Frequent	3,900	47
Eastgate	Bellevue	Newport Way, S. Bellevue, Beauv Arts	241	12%	15%	7%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	4,700	19
Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	4%	7%	N/A	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	14,900	49
Eastgate	Overlake	Phantom Lake	226	17%	16%	10%	-	-	-	-	-	-	-	-	-	30	30	0	Local	-	-
Enumclaw	Auburn	Auburn Way S, SR 164	186/915	28%	17%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	3,500	39
Fairwood	Renton	S Puget Dr, Royal Hills	148	21%	27%	17%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	5,100	33
Federal Way	Kent	Military Road S	183	18%	14%	N/A	-	-	-	60	-	30	-	-	-	15	30	30	Frequent	12,700	9
Federal Way	SeaTac	SR-99	A Line	48%	48%	33%	-	-	-	60	-	30	-	-	-	<15	15	15	Very Frequent	-	-
Fremont	Broadview	8th Ave NW	28	116%	12%	11%	2	-	-	-	-	30	2	-	-	<15	30	30	Frequent	-	-
Fremont	Seattle CBD	Dexter Ave N	62	144%	30%	52%	2	-	-	-	-	30	2	-	-	<15	15	30	Very Frequent	-	-
Fremont	University District	N 40th St	31/32	110%	79%	36%	1	1	-	-	-	30	1	1	-	<15	15	30	Very Frequent	-	-
Green River CC	Kent	132nd Ave SE	164	32%	46%	19%	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	6,000	30
Greenwood	Seattle CBD	Greenwood Ave N	5	99%	38%	79%	1	-	1	-	-	30	1	-	1	<15	15	15	Very Frequent	4,500	14
High Point	Seattle CBD	35th Ave SW	21	50%	33%	35%	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent	-	-

Figures rounded for display purposes.

^ Northbound peak period is at target when including September 2017 investments.

^^ At target when including September 2017 investments.

Ridership*	Peak	OffPeak	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			
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
Issaquah	Eastgate	SE Newport Way	271	26%	23%	22%	-	-	-	-	-	-	-	-	-
Issaquah	North Bend	Fall City, Snoqualmie	208	0%	8%	N/A	-	-	-	-	-	-	-	-	-
Issaquah	Overlake	Sammamish, Bear Creek	269	11%	N/A	N/A	-	-	-	60	-	30	-	-	-
Kenmore	Juanita	Juanita	234	55%	21%	13%	-	-	-	-	-	-	-	-	-
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	116%	75%	N/A	2	1	-	-	-	30	2	1	-
Kenmore	Totem Lake	Finn Hill, Juanita	-	-	-	-	-	-	-	-	-	-	-	-	-
Kennydale	Renton	Edmonds Ave NE	-	-	-	-	-	-	-	-	-	-	-	-	-
Kent	Burien	Kent-DM Rd, S, 240th St, 1st Ave S	166	21%	39%	26%	-	-	-	-	-	30	-	-	-
Kent	Maple Valley	SE Kent-Kangley Road	168	66%	32%	39%	1	-	-	-	-	30	1	-	-
Kent	Renton	84th Ave S, Lind Ave SW	153	20%	N/A	N/A	-	-	-	60	-	30	-	-	-
Kent	Renton	Kent East Hill	169	30%	25%	39%	-	-	-	60	-	30	-	-	-
Kent	Seattle CBD	Tukwila	150	65%	37%	45%	1	-	-	60	-	30	1	-	-
Kirkland	Bellevue	South Kirkland	234/235	48%	42%	43%	-	-	-	-	-	30	-	-	-
Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	60%	70%	23%	1	1	-	-	-	30	1	1	-
Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	143%	49%	94%	2	-	1	60	-	30	2	-	1
Lake City	University District	35th Ave NE	65	211%	84%	48%	2	1	-	-	-	30	2	1	-
Northgate <sup>1</sup>	University District	Lake City, Sand Point	75	77%	84%	92%	1	1	1	-	-	30	1	1	1
Laurelhurst	University District	NE 41st St	78	17%	11%	N/A	-	-	-	-	-	-	-	-	-
Madison Park	Seattle CBD	Madison St	11	62%	34%	46%	1	-	-	-	-	30	1	-	-
Madrona	Seattle CBD	Union St	2	87%	48%	61%	1	-	1	-	-	30	1	-	1
Magnolia	Seattle CBD	34th Ave W, 28th Ave W	24	41%	15%	24%	-	-	-	-	-	30	-	-	-
Mercer Island	S Mercer Island	Island Crest Way	204	38%	12%	N/A	-	-	-	-	-	-	-	-	-
Mirror Lake	Federal Way	S 312th St	901	18%	25%	10%	-	-	-	-	-	-	-	-	-
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	81%	33%	59%	1	-	1	-	-	30	1	-	1
Mount Baker	University District	23rd Ave E	48	35%	30%	19%	-	-	-	-	-	30	-	-	-
Mount Baker Transit Ctr.	Seattle Center	Martin Luther King Jr Way, E John St, Denny Way	8	60%	36%	33%	1	-	-	60	-	30	1	-	-
Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	51%	24%	40%	-	-	-	-	-	-	-	-	-
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S	182	23%	15%	16%	-	-	-	-	-	-	-	-	-
Northgate	Seattle CBD	Green Lake, Wallingford	26	88%	16%	25%	1	-	-	60	-	30	1	-	-
Northgate	University District	Roosevelt Way NE	67	70%	49%	52%	1	-	-	60	-	30	1	-	-
Othello Station	SODO Station	Columbia City Station	50	108%	40%	23%	1	-	-	-	-	30	1	-	-
Overlake	Bellevue	Bell-Red Road	226	17%	31%	10%	-	-	-	-	-	30	-	-	-
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	12%	10%	11%	-	-	-	-	-	30	-	-	-
Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	96%	97%	77%	1	1	1	-	-	30	1	1	1
Queen Anne	Seattle CBD	Taylor Ave N	3/4	68%	45%	69%	1	-	1	-	-	30	1	-	1
Rainier Beach	Seattle CBD	Rainier Ave S	7	84%	55%	62%	1	-	1	-	-	30	1	-	1
Rainier Beach	Capitol Hill	Rainier Ave S													
Rainier Beach	Mount Baker Transit Cent	Martin Luther King Jr Way S													
Redmond	Duvall	Avondale Rd NE	224	10%	5%	N/A	-	-	-	-	-	-	-	-	-
Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	31%	38%	14%	-	-	-	-	-	-	-	-	-
Redmond	Totem Lake	Willows Road	930	15%	N/A	N/A	-	-	-	60	-	30	-	-	-

Final Target Service Levels and Family					
PEAK	OFFPEAK	NIGHT	RESULTING SERVICE FAMILY	INVESTMENT NEED (Other subtracting Sep 17 investments)	INVESTMENT PRIORITY
30	30	0	Local	-	-
30	30	0	Local	10,200	40
15	30^	30	Frequent	13,700	11
60	60	0	Hourly	-	-
15	30	30	Frequent	9,800	43
60	60	0	Hourly	9,500	57
60	60	0	Hourly	7,200	58
15	30	30	Frequent	5,800	34
15	30	30	Frequent	7,600	36
15	30	30	Frequent	14,000	10
15^	15^	30	Very Frequent	-	-
<15	15	30	Very Frequent	7,900	3
15	30	30	Frequent	-	-
<15	15	30	Very Frequent	7,400	28
<15	15	15	Very Frequent	-	-
<15	15	30	Very Frequent	-	-
<15	15	15	Very Frequent	-	-
30	30	0	Local	-	-
<15	15	30	Very Frequent	3,400	13
<15	15	15	Very Frequent	-	-
15	15	30	Very Frequent	10,800	15
60	60	0	Hourly	-	-
30	30	0	Local	-	-
<15	15	15	Very Frequent	11,700	45
15	15	30	Very Frequent	-	-
<15	15	30	Very Frequent	-	-
30	30	0	Local	-	-
30	30	0	Local	2,300	54
<15	15	30	Very Frequent	12,800	1
<15	15	15	Very Frequent	-	-
15	30	30	Frequent	6,600	50
15	30	30	Frequent	7,000	48
15	30	30	Frequent	11,000	22
<15	15	15	Very Frequent	-	-
<15	15	15	Very Frequent	-	-
<15	15	15	Very Frequent	-	-
-	-	-	-	-	-
-	-	-	-	-	-
30	30	0	Local	7,600	37
30	30	0	Local	-	-
15	30	30	Frequent	10,900	6

Figures rounded for display purposes.

^ At target when including September 2017 investments.

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

<sup>1</sup> Corridor was extended from Lake City to Northgate

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			Load's Preliminary Service Level <sup>1</sup>			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 Sep. 17 investments)	INVESTMENT PRIORITY
Renton	Burien	S 154th St	F Line	22%	28%	15%	-	-	-	60	-	30	-	-	-	< 15	15	15	Very Frequent	4,800	5
Renton	Enumclaw	Maple Valley, Black Diamond	143/907	74%	4%	N/A	1	-	-	-	-	-	1	-	-	30	60	0	Local	2,500	41
Renton	Beacon Hill	West Hill, Rainier View	107	61%	35%	32%	1	-	-	-	-	-	30	1	-	< 15	30	30	Frequent	6,500	35
Renton	Renton Highlands	NE 4th St, Union Ave NE	105	19%	13%	19%	-	-	-	-	-	-	30	-	-	15	15	30	Very Frequent	6,400	24
Renton	Seattle CBD	Martin Luther King Jr Way S, I-5	101/102	139%	27%	50%	2	-	-	60	-	30	2	-	-	< 15	15	30	Very Frequent	7,900	4
Renton	Seattle CBD	Skyway, Martin Luther King Jr Way S S. Beacon Hill	106	53%	36%	32%	-	-	-	-	-	-	30	-	-	15	15	30	Very Frequent	-	-
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE	908	10%	8%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	3,000	51
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE	348	29%	34%	25%	-	-	-	-	-	-	30	-	-	15	30	30	Frequent	6,500	25
Roosevelt	UW	University Way		Connection now served by Northgate - U District via Roosevelt Way NE corridor																	
Sand Point	Fremont <sup>2</sup>	View Ridge, NE 65th St, Cowen Park	62	289%	60%	26%	2	1	-	-	-	-	30	2	1	< 15	15	30	Very Frequent	-	-
Sand Point	University District	NE 55th St	74	56%	N/A	N/A	1	-	-	-	-	-	30	1	-	< 15	15	30	Very Frequent	40,000	46
Shoreline	University District	Jackson Park, 15th Ave NE	373	67%	N/A	N/A	1	-	-	-	-	-	30	1	-	< 15	15	30	Very Frequent	29,400	18
Shoreline CC	Greenwood	Greenwood Ave N	5	49%	38%	40%	-	-	-	-	-	-	30	-	-	15	30	30	Frequent	-	-
Shoreline CC	Lake City	N 155th St, Jackson Park	330	7%	15%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	3,200	42
Shoreline CC	Northgate	N 130th St, Meridian Ave N	345	25%	22%	15%	-	-	-	-	-	-	30	-	-	15	15	30	Very Frequent	9,300	20
Totem Lake	Seattle CBD	Kirkland, SR-520	255	142%	58%	42%	2	1	-	60	-	30	2	1	-	< 15	15	30	Very Frequent	-	-
Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	13%	21%	11%	-	-	-	60	-	30	-	-	-	15	30	30	Frequent	5,000	12
Tukwila	Fairwood	S 180th St, Carr Road	906	14%	23%	N/A	-	-	-	-	-	30	-	-	-	15	30	30	Frequent	15,200	31
Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S	124	30%	15%	12%	-	-	-	60	-	30	-	-	-	15	15	30	Very Frequent	-	-
Twin Lakes	Federal Way	S 320th St	187	25%	12%	19%	-	-	-	-	-	-	-	-	-	30	30	0	Local	1,300	53
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	39%	15%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	1,700	52
University District	Bellevue	SR-520	271	87%	45%	44%	1	-	-	60	-	30	1	-	-	< 15	15	30	Very Frequent	-	-
University District	Seattle CBD	Broadway	49	48%	34%	59%	-	-	1	-	-	30	-	-	1	15	15	15	Very Frequent	-	-
University District	Seattle CBD	Eastlake, Fairview	70	101%	36%	54%	1	-	-	60	-	30	1	-	-	< 15	15	30	Very Frequent	-	-
UW Bothell	Redmond	Woodinville, Cottage Lake	931	17%	N/A	N/A	-	-	-	-	-	-	-	-	-	60	60	0	Hourly	3,600	38
UW Bothell	University District	Kenmore, Lake Forest Park, Lake City	372	129%	43%	51%	2	-	-	-	-	30	2	-	-	< 15	15	30	Very Frequent	-	-
UW Bothell/CCC	Kirkland	132nd Ave NE, Lake Washington Tech	238	19%	27%	N/A	-	-	-	-	-	-	-	-	-	30	30	0	Local	-	-
Vashon	Tahlequah	Valley Center	118	76%	11%	15%	1	-	-	-	-	-	1	-	-	30	60	0	Local	1,200	56
West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	110%	59%	48%	1	1	-	-	-	30	1	1	-	< 15	< 15	15	Very Frequent	-	-
White Center	Seattle CBD	16th Ave SW, South Seattle College	125	53%	20%	18%	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent	9,000	21
Woodinville	Kirkland	Kingsgate	236	20%	13%	16%	-	-	-	-	-	-	-	-	-	30	30	0	Local	-	-
																			<b>485,700†</b>		

Figures rounded for display purposes.  
<sup>1</sup> Corridor 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

† The two corridors served by route 50 have identical investment needs. This total is therefore not the sum of all values in this column.



## Appendix J: Investment Needs

### Priority 1 - Crowding

Route	Daily One-way Trips Needed	Hours
18	1	400
21	1	400
24	2	500
33	1	200
50	2	800
128	1	500
232	1	400
240	1	400
255	1	400
312	2	900
C Line	1	300
D Line	2	600
E Line	3	1,000
		<b>6,800</b>

### Priority 2 - Reliability

Route	Hours
5	250
8	700
11	1,200
12	500
19	250
26EX	1,300
28EX	1,150
37	250
40	500
43	50
62	2,300
63	400
64EX	600
70	250
123	250
131	600
166	50
168	100
178	800
179	900
190	800
200	250
212	400
216	300
218	250
219	300
226	250
234	50
249	100
257	250
268	250
311	250
355	250
B Line	900
	<b>17,000</b>

Priority 3 - Service Growth

Connections					
Between	And	Via	Major Route	Hours	Priority
Northgate	Seattle CBD	Green Lake, Wallingford	26EX	12,800	1
Burien	Seattle CBD	1st Ave S, South Park	131	11,800	2
Kent	Seattle CBD	Tukwila	150	7,900	3
Renton	Seattle CBD	Martin Luther King Jr Way S, I-5	101/102	7,900	4
Renton	Burien	S 154th St	F Line	4,800	5
Redmond	Totem Lake	Willows Road	930	10,900	6
Auburn	Burien	Kent, SeaTac	180	9,400	7
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	6,500	8
Federal Way	Kent	Military Road S	183	12,700	9
Kent	Renton	84th Ave S, Lind Ave SW	153	14,000	10
Issaquah	Overlake	Sammamish, Bear Creek	269	13,700	11
Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	5,000	12
Madison Park	Seattle CBD	Madison St	11	3,400	13
Greenwood	Seattle CBD	Greenwood Ave N	5	4,500	14
Magnolia	Seattle CBD	34th Ave W, 28th Ave W	24	10,800	15
Burien	Seattle CBD	Des Moines Mem Dr S, South Park	132	15,900	16
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	7,700	17
Shoreline	Univeristy District	Jackson Park, 15th Ave NE	373EX	29,400	18
Eastgate	Bellevue	Newport Way, S. Bellevue, Beaux Arts	241	4,700	19
Shoreline CC	Northgate	N 130th St, Meridian Ave N	345	9,300	20
White Center	Seattle CBD	16th Ave SW, South Seattle College	125	9,000	21
Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	11,000	22
Aurora Village	Northgate	Meridian Ave N	346	9,300	23
Renton	Renton Highlands	NE 4th St, Union Ave NE	105	6,400	24
Richmond Beach	Northgate	Richmond Beach Rd, 15th Ave NE	348	6,500	25
Avondale	Kirkland	NE 85th St, Redmond Way, Avondale Rd NE	248	4,200	26
Bellevue	Renton	Newcastle, Factoria	240	10,600	27
Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	7,400	28
Alki	SODO Station	Alaska Junction	50	6,600	29
Green River CC	Kent	132nd Ave SE	164	6,000	30
Tukwila	Fairwood	S 180th St, Carr Road	906	15,200	31
Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	9,100	32
Fairwood	Renton	S Puget Dr, Royal Hills	148	5,100	33
Kent	Burien	Kent-DM Rd, S. 240th St, 1st Ave S	166	5,800	34

Investment Needs, Priority 3 - Service Growth continued

Connections					
Between	And	Via	Major Route	Hours	Priority
Renton	Beacon Hill	West Hill, Rainier View	107	6,500	35
Kent	Maple Valley	SE Kent-Kangley Road	168	7,600	36
Redmond	Duvall	Avondale Rd NE	224	7,600	37
UW Bothell	Redmond	Woodinville, Cottage Lake	931	3,600	38
Enumclaw	Auburn	Auburn Way S, SR 164	186/915	3,500	39
Issaquah	North Bend	Fall City, Snoqualmie	208	10,200	40
Renton	Enumclaw	Maple Valley, Black Diamond	143/907	2,500	41
Shoreline CC	Lake City	N 155th St, Jackson Park	330	3,200	42
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	9,800	43
Colman Park	Seattle CBD	Leschi, Yesler Way	27	9,100	44
Mount Baker	Seattle CBD	31st Ave S, S Jackson St	14	11,700	45
Sand Point	University District	NE 55th St	74	40,000	46
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Ave W	33	3,900	47
Overlake	Bellevue	Bell-Red Road	226	7,000	48
Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	14,900	49
Othello Station	SODO Station	Columbia City Station	50	6,600	50
Renton Highlands	Renton	NE 7th St, Edmonds Ave NE	908	3,000	51
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	1,700	52
Twin Lakes	Federal Way	S 320th St	187	1,300	53
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S	182	2,300	54
Auburn	Pacific	Algona	917	3,100	55
Vashon	Tahlequah	Valley Center	118	1,200	56
Kenmore	Totem Lake	Finn Hill, Juanita	-	9,500	57
Kennydale	Renton	Edmonds Ave NE	-	7,200	58
				<b>485,700</b>	

The two corridors served by Route 50 have identical investment needs. The sum of all hours shown here is therefore greater than the total shown at the bottom.







Department of Transportation  
Metro Transit Division

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