



## EXECUTIVE SUMMARY

Metro Transit uses service guidelines to plan and manage our transit system and to enable the public to see the basis of our proposals to expand, reduce or revise service. We developed the guidelines in response to a recommendation of the 2010 Regional Transit Task Force and included them in the *Strategic Plan for Public Transportation*, which was adopted by the King County Council in 2011 and amended in August 2013. This *2014 Service Guidelines Report* was prepared to comply with Section 5 of King County Ordinance 17143. Responding to King County Motion 13736, this report also includes information about Metro's alternative services. It presents our analysis of the Metro system using the service guidelines. Unless noted otherwise, the data analyzed was from the February 15–June 6, 2014 service period.

The service guidelines strike a balance between productivity, social equity and geographic value. They help us use public tax and fare dollars as effectively as possible to provide high-quality service that gets people where they want to go (productivity). They help us make sure Metro serves areas that have many low-income and minority residents and others who may depend on transit (social equity), and that we respond to public transportation needs throughout the county (geographic value).

This report presents Metro's 2014 All-Day and Peak Network analysis, which sets target service levels for the 112 corridors in the network and identifies where service-hour investments are needed. It also presents our performance analysis of 214 Metro bus routes, assessing their productivity and service quality.

At the time this report was developed, Metro had implemented systemwide service reductions that were necessary because of a funding shortfall. Many routes described in this report were deleted or reduced as part of the changes in fall 2014. Additional reductions will be determined as part of the 2015-2016 budget process in late 2014. Metro recognizes the challenges of planning and managing the system when service is changing rapidly—and in particular when service is being reduced. Despite these challenges, this report will serve as an important tool for comparing Metro's system before and after service reductions.

### Investment Needs

The 2014 guidelines analysis found an estimated need of approximately 547,350 annual bus service hours to meet Metro's service quality objectives and target service levels. These needs represent an increase of about 16 percent above the size of the system in spring 2014. This level of investment is necessary to provide reliable services with adequate transit capacity to destinations throughout King County.



*The service guidelines define a transparent process using objective data that helps Metro make decisions about adding, reducing and changing transit service to deliver productive, high quality service where it's needed most.*

**2014 Investment Needs**  
(Based on Spring 2014 Data)

Priority	Investment Area	Estimated Annual Hours Needed
1	Reduce passenger crowding	22,200
2	Improve schedule reliability	38,650
3	Increase service to meet target service levels in All-Day and Peak Network	486,500
<b>Total investment need</b>		<b>547,350</b>
4	Increase service on high-productivity routes: A substantial portion of the growth needed to meet the <i>Transportation 2040</i> expectation (an additional 2.6 million annual service hours) will be on high-productivity services.	

**Investment priorities 1 and 2: Service quality needs.** Twenty-seven routes need investment to reduce passenger crowding and 90 routes need investment to improve schedule reliability. These routes need investments that are likely to be relatively minor, such as an added trip at a particular time of day or a few additional minutes of running time per trip. We determined a total investment need of 60,850 annual service hours to correct the service quality problems—an increase from the 2013 level of 43,200 hours.

**Investment priority 3: Service to meet target service levels in the All-Day and Peak Network.** Fifty-eight corridors need investment to reach target service levels. Meeting target levels typically requires the addition of many trips in a time period or in multiple time periods of the day, or complete revision of the schedules of routes serving an area. We determined a total investment need of approximately 486,500 annual service hours to meet target service levels, compared to 467,500 in 2013.

**Investment priority 4: High-productivity routes.** Investment in high-productivity services is the fourth investment priority. Eighty-one of the 214 routes evaluated were in the top 25 percent on one or both productivity measures for at least one time period in 2014.

Highly productive routes generally serve areas where there is latent demand for transit. Although we know from our experience that investments in very productive routes result in higher ridership, the guidelines do not attempt to quantify the service hours that would be necessary to satisfy that demand. Some of these high-productivity routes are already identified as needing investments because they are overcrowded, unreliable or on corridors where service is not at the target level.

Investment in high-productivity routes is one way we use resources effectively to serve more people, helping us meet future needs. To meet the long-term expectation in the Puget Sound region’s transportation plan, Metro must double the number of riders and nearly double service levels by 2040. Growth to this level will help Metro maximize mobility as well as the economic and environmental benefits of transit.

The existing need of 547,350 annual service hours represents only part of the growth needed to meet the region’s 2040 targets. We expect a substantial portion of the remaining 2.6 million annual service hours will be on highly productive routes. Although new resources will be required to make the large investments our region needs, we will invest in highly productive routes incrementally as opportunities become available—such as through service restructures or partnerships with local jurisdictions.

## Changes in investment needs since 2013

The total investment need of 547,350 annual service hours is an increase from the 510,700-hour need found in the 2013 analysis. The investment needs changed for several reasons:

- Continued ridership growth has resulted in an increased need for investment to reduce passenger crowding.
- More investment is needed to address a decline in schedule reliability that has resulted from more-crowded buses, more roadway construction, and increasing traffic congestion as the economy improves.
- Target service levels changed for some corridors as a result of changes in ridership demand, land use, and distribution of low-income populations in King County. Service now meets the target level on the Aurora Village to downtown Seattle corridor because Metro invested in the RapidRide E Line. Overall, corridor needs increased from the 2013 level.

### Metro at a Glance (2013)

Service area	2,134 square miles
Population	2.04 million
Employment	1.24 million
Fixed-route ridership	118.6 million
Vanpool ridership:	3.5 million
Access ridership:	1.2 million
Annual service hours	3.6 million
Active fleet	1,359 buses
Bus stops	over 8,000
Park-and-rides	130





## INTRODUCTION

This is the fourth annual service guidelines report. It presents the results of our analysis of spring 2014 data for the Metro system using the service guidelines, and identifies services that are candidates for investment, change, or reduction. It serves as a snapshot of Metro service in one service change—a four-month period—and allows us to compare service in that same period each year to identify trends and areas needing improvement.

When Metro makes service decisions to match budget projections—whether resources are shrinking, stable, or growing—the service guidelines help by identifying reduction and investment priorities. The service guidelines were used in 2013 and 2014 to develop a plan for service reductions to bring the Metro system in line with available revenues. In the future, the service guidelines will help Metro manage the system after reductions have been completed. We will continue looking for ways to improve the system regardless of the future funding situation.

### What is in this report?

This report is organized to lead readers through the following questions:

**How is my route doing?** Section 1 presents the results of our route performance analysis as well as our analysis of corridors, which determines if target service levels are being met. This section also discusses performance of alternative services.

**Where are service investments most needed?** Section 2 identifies specific investment priorities based on service quality needs, target service levels, and route productivity.

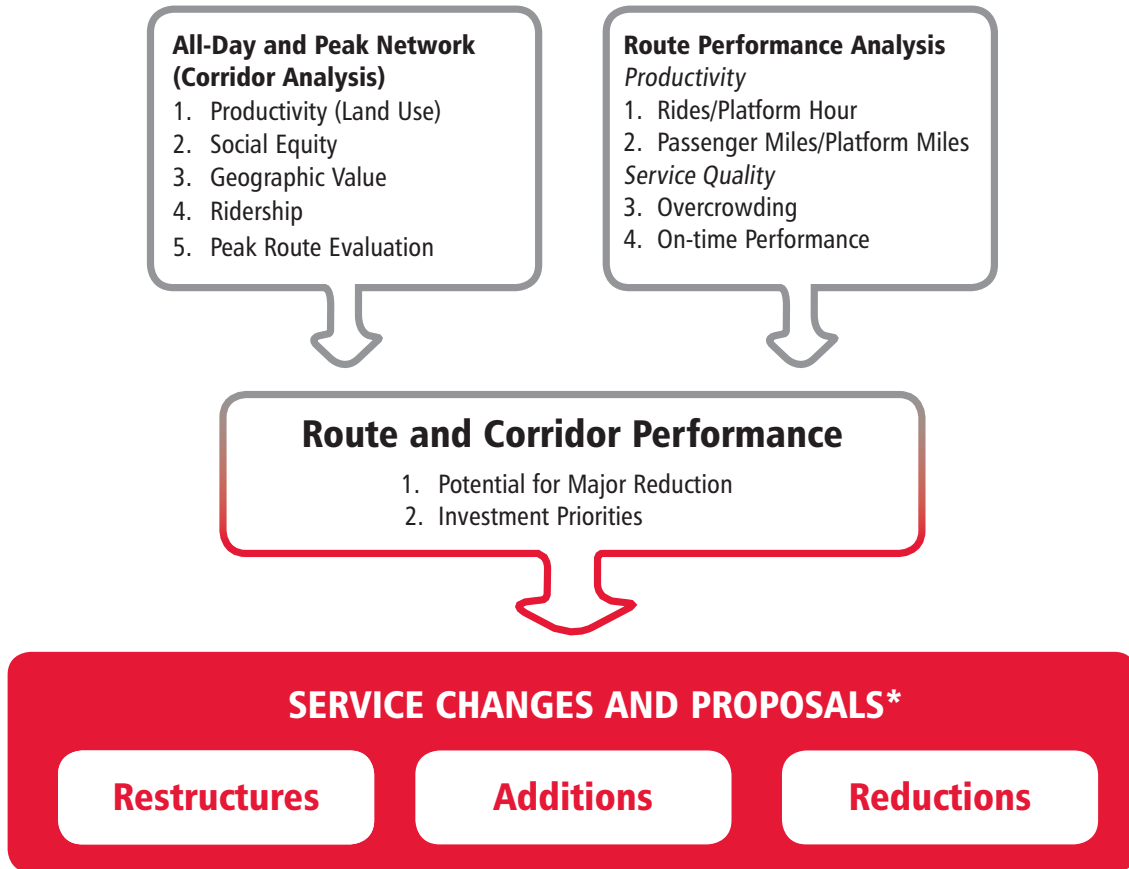
**Where and how is Metro investing in alternative services?** Section 3 presents information about performance of alternative services and steps we are taking to expand these services.

**How is Metro using the guidelines?** Section 4 describes how we used the guidelines to plan service changes in 2014.

Figure 1 summarizes the service guidelines process we followed in preparing this report. To read the complete service guidelines, visit <http://metro.kingcounty.gov/planning> and select the “Service Guidelines” tab.

FIG. 1

### Metro Service Guidelines Process



\*Service Design Principles guide changes to the system and are considered when planning for service changes.



## Providing service where it's needed most: how the guidelines advance social equity and geographic value

Metro strives to provide equitable access to public transportation for everyone in our community and to deliver value throughout King County. The service guidelines help us by defining criteria and processes for analyzing and planning transit service that focus on social equity and geographic value.

### Social equity

One of the most important processes is that of setting target service levels for corridors in the All-Day and Peak Network. The guidelines define a process for determining a social equity score that makes up 25 percent of each corridor's total service-level score. First we determine low-income and minority census tracts in the corridor using the most recent and best available census data. Then we assign a social equity score based on the percentage of people who board buses in those areas compared to the county average.

The social equity score is combined with scores for productivity (50 percent of the total) and geographic value (25 percent) to determine a preliminary target service level. The next step is to increase the service level if necessary to serve the actual number of current riders. This step helps us make sure that in areas where many people have few transportation options and rely on Metro to get around, we set a target service level that will accommodate them.



The investment priorities defined in the guidelines also benefit low-income and minority corridors where many people use transit. The table on the next page shows the findings of the 2014 guidelines analysis for investment needed to reduce overcrowding, improve reliability, and meet target service levels systemwide and in low-income and minority routes and corridors. The percentage of the investment need that is on minority routes and corridors increased for reliability and meeting target service levels, and decreased for passenger crowding. The percentage of the investment need that is on low-income routes and corridors increased for all three categories of investments.

Priority Investment Category	Estimated total hours needed	Hours on minority routes/corridors	% of total need	Hours on low-income routes/corridors	% of total need
Passenger crowding	22,200	9,900	45%	6,800	31%
Schedule reliability	38,650	17,600	46%	20,650	53%
Meeting target service levels	486,500	350,200	72%	308,300	63%

We also consider historically disadvantaged populations and people who depend on transit when we develop proposals to add, reduce or revise service. We strive to reach or maintain established target service levels. Even when reducing low-performing service, we avoid making reductions on corridors below target service levels, helping to ensure that low-income and minority communities are not disproportionately affected.

Another way we avoid disproportionate impacts is to conduct robust public outreach that engages people who have low incomes or are members of minority groups—including those who speak little or no English. We develop partnerships with community organizations, have public open houses and information tables at convenient times and locations, translate public communication materials, and offer to have language interpreters at meetings.

We follow the requirements and guidance of Title VI of the Civil Rights Act, which prohibits discrimination on the basis of race, color or national origin; King County Ordinance 16948, related to the “fair and just” principle of the King County Strategic Plan, which strives to eliminate inequities and social injustices based on race, income, and neighborhood; and the Executive Order on Translation, which requires County agencies to ensure that public communications are culturally and linguistically appropriate for the target audience, including people who do not speak English well.

For example, Ordinance 16948 lists 13 “determinants of equity.” When planning service changes we strive to maintain public transportation connections and access to health care, education, food, housing, employment and other activities of daily living and civic engagement that affect social equity.

### Geographic value

To help us deliver value throughout the county’s geographic area, the guidelines identify the primary transit connections between centers on the basis of ridership and travel time. Centers are activity nodes that are the basis of the countywide transit network. They include regional growth centers, manufacturing/industrial centers, and transit activity centers. Transit activity centers include major destinations and transit attractions such as large employment sites and health and social service facilities.

In the process for setting target service levels, we assign higher levels to corridors that serve as primary connections between centers.

Primary Connections	Number of Corridors
Between regional growth centers	31
Between transit activity centers	49

The guidelines also incorporate geographic value by classifying routes by market served. This classification allows us to compare similar routes when assessing productivity. We classify Metro routes into two groups:

- Seattle core routes, which connect to the greater downtown Seattle area and the University District.
- Non-Seattle core routes, which operate in other areas of Seattle and King County.

Routes that serve the Seattle core are expected to perform at a higher level because their market potential is greater than routes serving other parts of King County.

### Transit Activity Centers

