

Metro Service Guidelines Task Force

Meeting Requests and Follow-up Items

Number	Follow up item	Presentation or white paper
1.1	Expand roster to include email and phone numbers.	Meeting 2
1.2	Explain how Metro has redeployed hours when new light rail operations come online.	Meeting 2: White paper
1.3	Provide the data sets Metro has to help identify the destinations of low-income riders (as opposed to the origin of their trip).	Meeting 3: Presentation
1.4	Provide information on why revenue hours are not used in performance measurement.	Meeting 2: Presentation
1.5	Give examples of at least two routes that were increased and at least two that were decreased using service guidelines methodology.	Meeting 3: White paper
1.6	Provide a list of transit facility improvements that have been made in recent years.	Meeting 2: White paper
1.7	Describe a change to service where there has been community push-back. Have these changes resulted in measurably longer commute times? What has happened to ridership?	Meeting 3: White paper
1.8	Provide information on how Metro’s performance on the two measures (rides per platform hour and passenger miles per platform hour) compares to that of other comparably sized transit agencies.	Meeting 2: Presentation
1.9	Provide a list of co-funding agreements or community service partnerships and how you factor these into the evaluation of service.	Meeting 2: White paper
1.10	Compare transit service provided for low income riders and peak period riders.	Meeting 2: White paper
1.11	Provide more information on DART – where services are located, how DART works, and difference from the Hyde shuttle.	Meeting 2: White paper
1.12	Provide basic timeline/frequency of service changes per year.	Meeting 2: White paper
1.13	Describe how new corridors/routes are added in service guidelines.	Meeting 2: Presentation
1.14	Describe how the lists in the service guidelines turn into service changes.	Meeting 2: White paper
1.15	Explain if the bottom 25% of Seattle core is mainly commuter service from the suburbs.	Meeting 2: Presentation
1.16	Provide more information about peak service and how it is incorporated in the service guidelines.	Meeting 2: Presentation
1.17	Review the Seattle Core and Non-Seattle Core distinction and how we redeploy hours.	Meeting 2: Presentation
1.18	Review Seattle Prop 1 Investments related to service guidelines investment needs.	Meeting 2: White paper, with 1.9
1.19	Rationale behind the 50/25/25 balance between productivity, social equity and geographic value.	Meeting 3: White paper
1.20	Evaluate if every city in King County has at least one activity or regional growth center.	Meeting 2: Presentation
1.21	Explain if there is a minimum level of service identified for cities.	Meeting 2: Presentation
1.22	Describe how park-and-rides are factored into the service metrics.	Meeting 2: Presentation
2.1	Provide description of potential performance measures. Describe the differences between revenue and platform hours and miles.	Meeting 3: White paper

Provided at Meeting 2

Providing at Meeting 3

Routes that have been increased or decreased using the guidelines methodology

Task Force Follow Up Item 1.5: Give examples of at least two routes that had service investments and at least two that had service reductions using service guidelines methodology.

This paper provides examples of routes that were added to, restructured or deleted using guidelines methodology. These examples include:

- Route 7EX (Fall 2014): Route deleted
- Route 19 (Fall 2014): Route deleted
- Route 132 (Fall 2012): Restructured, trip added
- Route 156 (Fall 2012): Restructured, service added
- Route 219 (Fall 2013): New route

ROUTE: 7EX (Deleted Fall 2014)

OBJECTIVES:

Operate the level of transit service that is financially sustainable. There are not sufficient financial resources to sustain the current Metro system of routes and service levels.

Eliminate, reduce, or restructure service according to the Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines:

- *Strategic Plan Strategy 6.1.1: Manage the transit system through service guidelines and performance measures.*
- *Strategic Plan Strategy 6.2.1: Continually explore and implement cost efficiencies, including operational and administrative efficiencies.*
- *Service Guidelines, Performance Management, Productivity: Productivity measures identify routes where performance is weak as candidates for reduction or restructuring. Low performance is defined as having productivity that ranks in the bottom 25 percent of routes within a category and time period.*
- *Service Guidelines, Reducing Service, service reduction priorities identify steps for evaluation when reducing or restructuring service.*

IMPACTED SERVICE AREA:

Rainier Beach, Rainier Valley, Chinatown-International District, Downtown Seattle

SERVICE CHANGE:

Discontinue route.

Route 7 and Sound Transit Link light rail will provide alternative service between Rainier Beach and downtown Seattle.



ROUTE: 19 (Deleted Fall 2014)

OBJECTIVES:

Operate the level of transit service that is financially sustainable. There are not sufficient financial resources to sustain the current Metro system of routes and service levels.

Eliminate, reduce, or restructure service according to the Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines:

- *Strategic Plan Strategy 6.1.1: Manage the transit system through service guidelines and performance measures.*
- *Strategic Plan Strategy 6.2.1: Continually explore and implement cost efficiencies, including operational and administrative efficiencies.*
- *Service Guidelines, Performance Management, Productivity: Productivity measures identify routes where performance is weak as candidates for reduction or restructuring. Low performance is defined as having productivity that ranks in the bottom 25 percent of routes within a category and time period.*
- *Service Guidelines, Reducing Service, service reduction priorities identify steps for evaluation when reducing or restructuring service.*

IMPACTED SERVICE AREA:

West Magnolia, Interbay, Downtown Seattle

SERVICE CHANGE:

Discontinue route.

Routes 24 and 33 will provide alternative service between Magnolia and downtown Seattle via Interbay.



ROUTE: 132 (Revised Fall 2012)

OBJECTIVES:

Improve the productivity of Metro Transit's network of bus routes by eliminating or reducing low performing routes, or by restructuring service according to the Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines:

- *Strategic Plan Strategy 2.1.1: Design and offer a variety of public transportation products and services appropriate to different markets and mobility needs.*
- *Strategic Plan Strategy 3.4.1: Serve centers and other areas of concentrated activity, consistent with Transportation 2040.*
- *Strategic Plan Strategy 6.1.1: Manage the transit system through service guidelines and performance measures.*
 - *Service Guidelines, Performance Management – Productivity measures identify routes where performance is weak on one or both measures as candidates for reduction or restructuring.*
 - *Service Design Guidelines – Metro considers changes to make service easier to understand, based on industry best practice.*
 - *Service Restructure Guidelines – Metro considers restructures when there is a mismatch between service and corridor ridership and when a corridor is above or below All-day and Peak Network frequency, based on industry best practice.*
 - *Service Investment Guidelines – Metro considers investments in routes that have passenger load issues or problems with on-time performance.*

IMPACTED SERVICE AREA:

Highline Community College, Des Moines, Burien, Boulevard Park, South Park, Georgetown, SODO, Downtown Seattle

SERVICE CHANGE:

Discontinue Route 132 service between Highline Community College and the Burien Transit Center. Revise Route 132 to operate between the Burien Transit Center and Downtown Seattle via South Park and 4th Avenue South.

Operate Route 131 seven days a week every 30 minutes until approximately 8:00 p.m., and every 60 minutes between approximately 8:00 p.m. and 1:00 a.m.

Route 132 will no longer serve Highline Community College and Des Moines, or 1st Avenue South between South Michigan Street and South Lander Street. Route 156 will provide alternative service in Des Moines between South 200th Street and Highline Community College via 8th Avenue South and Marine View Drive. Route 166 will provide alternative service between Highline Community College and the Burien Transit Center via South 240th Street, Marine View Drive and 1st Avenue South.



ROUTE: 156 (Revised Fall 2012)

OBJECTIVES:

Improve the productivity of Metro Transit's network of bus routes by eliminating or reducing low performing routes, or by restructuring service according to the Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines:

- *Strategic Plan Strategy 2.1.1: Design and offer a variety of public transportation products and services appropriate to different markets and mobility needs.*
- *Strategic Plan Strategy 3.4.1: Serve centers and other areas of concentrated activity, consistent with Transportation 2040.*
- *Strategic Plan Strategy 6.1.1: Manage the transit system through service guidelines and performance measures.*
 - *Service Guidelines, Performance Management – Productivity measures identify routes where performance is weak on one or both measures as candidates for reduction or restructuring.*
 - *Service Design Guidelines – Metro considers changes to network connections, to serve multiple purposes and destinations, and to route spacing, based on industry best practice.*
- *Strategic Plan Strategy 6.2.1: Continually explore and implement cost efficiencies, including operational and administrative efficiencies.*

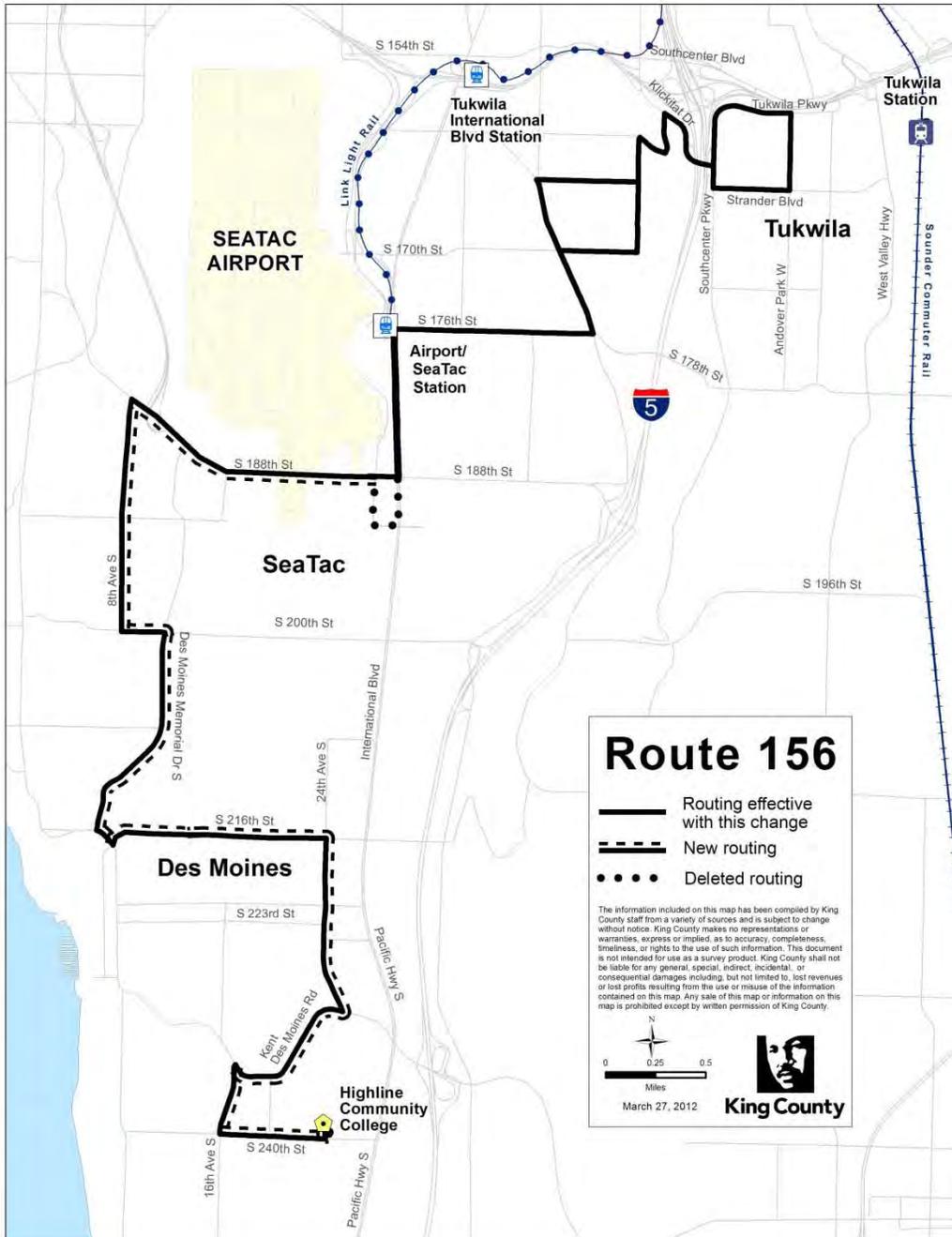
IMPACTED SERVICE AREA:

Highline Community College, Des Moines, SeaTac, Tukwila/Southcenter

SERVICE CHANGE:

Extend Route 156 from SeaTac to Highline Community College in Des Moines.

Extend the weekday evening span of service later by adding one hourly round trip so that the last trip from Highline Community College to Tukwila leaves the college at approximately 9:30 p.m.



NEW ROUTE: 219 (Implemented Fall 2013)

OBJECTIVES:

Reduce crowding and create capacity to meet transit commuter demand at Issaquah Highlands Park-and-Ride and South Sammamish Park-and-Ride by redistributing resources within the I-90 corridor, consistent with the Strategic Plan for Public Transportation 2011-2021.

- *Strategic Plan Strategy 3.2.1: Expand services to accommodate the region's growing population and serve new transit markets.*
- *Strategic Plan Strategy 3.4.1: Serve centers and other areas of concentrated activity, consistent with Transportation 2040.*
- *Strategic Plan Strategy 6.1.1: Manage the transit system through service guidelines and performance measures.*

IMPACTED SERVICE AREA:

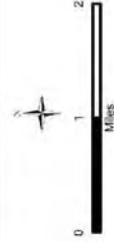
Sammamish, Issaquah Highlands, Eastgate, downtown Seattle

SERVICE CHANGE:

Establish new peak Route 219 to serve commuters traveling between Sammamish, Issaquah Highlands Park-and-Ride, Eastgate Freeway Station (AM, westbound direction only), and downtown Seattle. Operate five trips during the AM peak period and nine trips during the PM peak period.



NEW ROUTE 219



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March 7, 2013 R219_ord.pdf



King County

Changes to service that cause community push back

Task Force Follow Up Item 1.7: Describe a change to service where there has been community push-back. Have these changes resulted in measurably longer commute times? What has happened to ridership?

These examples below were presented at Task Force meetings and this paper provides additional information.

- **Routes 21/22 (Fall 2012):** In the Fall of 2012, Metro proposed changes to Routes 21 and 22 that would eliminate midday service to Arbor Heights and all-day service to Gatewood. Given community concerns, Metro implemented Route 22 which provides an all-day connection between Arbor Heights and Alaska Junction, serving Westwood Village, Gatewood, and Chief Sealth High School. Prior to the Fall of 2012, Route 22 proved all-day service between White Center and Downtown Seattle via Alaska Junction and Gatewood.
 - **Impact to Commuters:** Peak period commuters have the same service on Route 21 Express, which serves Arbor Heights. Midday commuters have to transfer if they are traveling between Arbor Heights and Downtown Seattle, resulting in longer travel times.
 - **Ridership** (average weekday)

Route	Spring 2012	Spring 2013	Spring 2014
21	2,200	3,700	4,000
21 Express	1,000	1,000	1,000
22 (revised routing)	--	200	200

- **Route 27 (Fall 2014):** In the Fall of 2014 as part of countywide service reductions, Metro reduced service on Route 27 to operate only during peak periods, due to poor performance and to avoid duplication with other service. Metro will be reinstating service on Route 27 during the off-peak and night periods in June 2015 through its service agreement with the City of Seattle.
 - **Impact to Commuters:** Commuters who are traveling during peak periods are not impacted. Commuters traveling at other times of day may have longer distances to walk to alternative service on Jefferson or Jackson Streets.
 - **Ridership** (average weekday)

Route	Fall 2012	Fall 2013	Fall 2014
27	1,300	1,400	700

- **Routes 50 and 60 (Spring 2014):** In the Spring of 2014, Metro removed service from the front entrance of the VA Medical Center due to construction. Metro's service design guidelines suggest this route should not deviate into the VA Medical Center, due to delay for other passengers. However, given community concerns, Metro is planning to reinstate service to the entrance of the VA Medical Center on Route 50 as soon as a new driveway is available.
 - **Impact to Commuters:** Commuters who are traveling through to Alaska Junction, SODO or Southeast Seattle will be delayed by approximately 2-3 minutes per trip.
 - **Ridership** (average weekday)

Route	Spring 2012	Spring 2013	Spring 2014
50	--	2,000	2,200
60	4,800	5,100	4,900

Balancing Productivity, Social Equity and Geographic Value

Task Force Follow Up Item 1.19: Rationale behind the 50/25/25 balance between productivity, social equity and geographic value.

The enabling legislation for the 2010 Regional Transit Task Force (RTTF) requested that the RTTF develop a policy framework establishing priorities for key system design factors. The task force recommendation #3 stated, “the policy guidance for making service reduction and service growth decisions should be based on the following priorities:

- Emphasize productivity due to its linkage to economic development, land use, financial sustainability, and environmental sustainability
- Ensure social equity
- Provide geographic value throughout the county.”

The recommendations of the Task Force were translated into policy through an extensive effort that included work with an Interbranch group (with representatives from King County Council staff, Executive Staff and Metro staff) and the Regional Transit Committee. Metro’s Strategic Plan for Public Transportation, 2011-2021 and Service Guidelines, were the result of this effort and were adopted by the King County Council in July, 2011.

Platform versus revenue hours and miles

Task Force Follow Up Item 2.1: Provide description of potential performance measures. Describe the differences between revenue and platform hours and miles.

This paper explores the difference between using platform hours and miles and using revenue hours and miles when evaluating transit service and explains why Metro uses platform hours and miles to assess route performance.

Difference between platform and revenue hours and miles

The transit industry identifies two measures of hours and miles traveled: platform and revenue service. Revenue service is when a bus is in service and accepting passengers, while platform service includes revenue service plus any time when the bus is outside the base traveling to or from a route, as described below:

- **Revenue service** is the time when a vehicle is available to the general public and there is an expectation of carrying passengers, including layover/ recovery time.¹
- **Platform service** is the time when a vehicle is in operation away from the base; this includes revenue service, layover/ recovery time, and deadhead time.¹

Metro uses two performance measures based on platform service: rides per platform hour and passenger miles per platform mile. Use of these two measures balances the diverse needs of King County riders and the various functions that the Metro system provides. These measures are described in more detail in the box on the right.

Metro's use of platform hours and miles for route performance

Performance measures that use platform hours and miles account for the full cost running transit service. Revenue hours and miles do not take into account all the hours and miles operated by each route, and do not reflect the full cost of service. As directed by Metro's Strategic Plan, Metro emphasizes planning and delivery of productive service, works to control costs, and seeks to establish a sustainable funding structure to support short- and long-term public transportation needs. To reflect these values, rides per platform hour and passenger miles per platform mile were selected as the two performance measures to compare individual bus routes for the annual Service Guidelines Report.

Measures used to assess route performance in the Service Guidelines Report

- Boardings (rides) per vehicle (platform) hour: total ridership divided by the total hours a bus travels from the time it leaves its base until it returns. This is an indicator of all ridership, including time when a bus is traveling and does not pick up passengers. **This measure accounts for the full cost of service** and values services that connect many people to many places with many ons and offs all along the route.
- Passenger miles per vehicle (platform) mile: total miles traveled by all passengers divided by the total miles the bus operates from its base until it returns. This is an indicator of the average distance traveled by all passengers, including the miles when the bus is traveling and the seats are empty. **This measure accounts for the full cost of service and efficiency of route design** and values services that have riders who travel long distances along the whole route.

At a systemwide level, Metro operates approximately 3.5 million platform hours annually. About 70% of those hours are revenue hours. Metro's system operates along approximately 43.9 million platform

¹ National Transit Database Glossary, <http://www.ntdprogram.gov/ntdprogram/Glossary.htm>

miles; 81% of those miles are operated in revenue service. The following table summarizes information about Metro’s platform and revenue hours and miles.

Summary of 2014 Systemwide Hours and Miles			
	Platform	Revenue	Revenue as % of Platform
Hours	3,500,000	2,500,000	71%
Miles	43,900,000	35,500,000	81%

Impacts of using revenue hours or miles

If revenue hours and miles were used for route performance, routes serving the Seattle core in the peak period would see the largest change in route performance, in both rides and passenger miles. Measuring by revenue hours and miles instead of platform hours and miles would generally put Peak-Only routes at a performance advantage over All-Day service during the peak period. If Metro utilized a revenue hours and miles measure, Peak-Only routes would have higher performance relative to All-Day services.

Effects on Route Performance

- If rides per revenue hour were used, performance on Peak-Only services would improve over all-day services; Seattle Core Peak-Only routes would experience the most upward movement in performance.
- Non-Seattle Core routes would experience minor changes to route performance if a revenue service based measure was used, due to the fewer number of Non-Seattle Core Peak-Only routes, miles, and hours
- If passenger miles per revenue mile were used, performance on Peak-Only services would improve over all-day services
 - When comparing to platform service based measures, approximately 85 percent of Peak-Only routes, serving the Seattle Core, would improve.
 - When comparing to platform service based measures, 100 percent of All-Day routes, serving the Seattle Core and operating in the peak period, would decline.