Service Guidelines Task Force

Resource Notebook 2015

February 2015

King County METRO

Service Guidelines Task Force

Welcome

Welcome to the 2015 Service Guidelines Task Force! We at Metro appreciate your taking the time to discuss the important issues we have been charged to examine. Your efforts will help strengthen and refine Metro's Service Guidelines.

Annotated Table of Contents

This reference notebook provides background information on Metro, the Service Guidelines, and each of the substantive topics the task force is charged to discuss:

Part A

In addition to the materials provided within this notebook, most sections contain links to additional information relevant to task force discussions. Metro staff will respond to additional requests for information coming from task force discussions as needed.

Link to Resources

Links to additional resources are noted in each section of this notebook. These links have been compiled below for your reference.

All links are available on the Service Guidelines Task Force website: http://www.kingcounty.gov/sgtaskforce

1. RTTF 2010 to Present
    - 2009 Transit Audit: http://bit.ly/sgtf3_1
    - Metro Follow-up to Audit: http://bit.ly/sgtf3_2
    - Auditor's Follow-up: http://bit.ly/sgtf3_3
    - RTTF Final Report: http://bit.ly/sgtf3_4
    - King County Metro Strategic Plan and Service Guidelines: http://bit.ly/sgtf3_5
    - 2013 Strategic Plan Progress Report: http://bit.ly/sgtf3_6
    - Sound Transit / Metro Transit Integration Report: http://bit.ly/sgtf3_7
    - Metro's Long Range Plan: http://bit.ly/sgtf3_8
    - Metro's Accountability Center (Annual Guidelines Reports, Peer comparisons, Performance data): http://bit.ly/sgtf3_9
    - Metro's budget: http://bit.ly/sgtf3_10
    - PSRC's report on Transit Coordination in the Central Puget Sound: http://bit.ly/sgtf3_12
2. Service Guidelines
    - 2014 Service Guidelines Report: http://bit.ly/sgtf4_1
    - 2013 Service Guidelines Report: http://bit.ly/sgtf4_2
    - 2012 Service Guidelines Report: http://bit.ly/sgtf4_3
    - 2011 Service Guidelines Report: http://bit.ly/sgtf4_4
3. Social Equity
    - King County Title VI Policy: http://bit.ly/sgtf5_1
    - Metro Title VI Program Report: http://bit.ly/sgtf5_2
    - 2014 Determinants of Equity Report: http://bit.ly/sgtf5_3
    - 2014 King County Equity and Social Justice Report: http://bit.ly/sgtf5_4
4. Geographic Value
    - Park & Ride Utilization Study: http://bit.ly/sgtf6_1
5. Service Types
    - Best Practices in Transit Service Planning (page 5: Classification Systems): http://bit.ly/sgtf7_1
    - American Public Transportation Association (APTA) Peer Review (page 5: Recommendation re: service types): http://bit.ly/sgtf7_2
6. Alternative Services
    - Five Year Implementation Plan for Alternatives to Traditional Transit Service Delivery: http://bit.ly/sgtf8_1
    - Alternative Services Website: http://bit.ly/sgtf8_2
7. Purchase of Additional Service
    - Proviso regarding transit service agreement (page 97): http://bit.ly/sgtf9_1

- Metro Community Mobility Contracts Program: http://bit.ly/sgtf9_2

8. Metro Background
    - Metro website: http://metro.kingcounty.gov/

Service Guidelines Task Force

1. General Information

Introduction

The legislative mandate for the Service Guidelines Task Force is contained in Ordinance 17941, the King County 2015-2016 biennial budget. This section provides background material regarding this task force, the schedule of work the task force will undertake, and contact information for those involved in the process. Subsequent sections will delve into background information on the substantive content the task force will address.

Links to Information

1. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Note: All links in this notebook will be available at the Service Guidelines Task Force website.

About this Notebook / Staff Contacts

The Service Guidelines Task Force is being asked to review the guidelines and recommend potential changes regarding service types, social equity, geographic value, alternative services, and community mobility contracts. This resource notebook provides background material to support task force discussions. It includes information about the history leading up to the service guidelines, Metro's current practices related to each of the five topics, and issues associated with each. It also provides references and links to additional information on related topics can be found.

We recognize that there will be questions beyond the scope of this notebook. Metro's staff is committed to providing the data and information needed to support the task force efforts and we will be available to provide further information as questions and additional topics arise.

- Facilitator: John Howell, Cedar River Group, 206-223-7660, john@cedarrivergroup.com
- Logistics: DeAnna Martin, 206-477-3835, deanna.martin@kingcounty.gov
- Analytic support:
  - Chris O'Claire, Supervisor, Strategic Planning and Analysis, 206-477-5801, chris.oclaire@kingcounty.gov
  - Jana Demas, Project Manager, 206-477-5867, jana.demas@kingcounty.gov
  - Rachel VerBoort, Technical Lead, 206-477-5815, rachel.verboort@kingcounty.gov

We look forward to working with you.

Sincerely,

Victor Obeso
Deputy General Manager
Planning and Customer Services

Metro Transit Division
Department of Transportation
KSC-TR-0426
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(206) 477-5778

Task Force Work Plan Cover Letter and Motion

January 5, 2015

The Honorable Larry Phillips
Chair, King County Council
Room 1200
C O U R T H O U S E

Dear Councilmember Phillips:

This letter transmits a motion to accept *King County Metro Service Guidelines Task Force Work Plan,* included as Attachment A, setting forth a scope of work, tasks, schedule, milestones, budget, task force membership criteria, and the creation of an interbranch working group to support the process for the Service Guidelines Task Force to be convened in 2015. This motion responds to Proviso 1 in Section 113 of Ordinance 17941, which adopted the 2015/2016 King County Biennial Budget.

As directed by Ordinance 17941, Metro is convening a task force that is charged with reviewing and making recommendations regarding:

1. *How transit service performance is measured as specified in the Metro Service Guidelines to reflect the varied purposes of different types of transit service;*
2. *Approaches to evaluating how the goal of geographic value is included in the Metro Service Guidelines, including minimum service standards;*
3. *Approaches to evaluating how the goal of social equity is included in the Metro Service Guidelines;*
4. *Outline financial policies for purchase of additional services within a municipality or among multiple municipalities; and*
5. *Outline guidelines for alternative services implementation.*

In 2009, in response to Metro's ongoing financial challenges and the increasing regional interest in improving efficiency of the transit system, the first Regional Transit Task Force (RTTF) was convened. The work of the award-winning task force was the foundation for the adopted Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines that are in place today.

In the three years since these planning documents were adopted, four Service Guidelines Reports have been completed and the County has updated the Service Guidelines and adjusted service ten times.

Building on the lessons of the past three years, further refinements to the Service Guidelines could help to ensure that future transit investments reflect the intent of the RTTF's policy guidance.

The new Service Guidelines Task Force will use the solid foundation developed in the 2009 effort to further analyze how transit service is allocated and measured across the region. The success of the RTTF was, in part, due to the tremendous collaboration by King County, partner cities, regional decision makers, and diverse stakeholders. This same approach will help to develop recommendations that further improve the regional transit system.

The attached work plan describes Metro's plan for the Service Guidelines Task Force, which will meet this February through May, with a budget of $150,000. This schedule allows Metro to ensure that the work of the task force will direct the next update of Metro's Service Guidelines and will help shape the Long Range Plan and integration work with Sound Transit. The updated service guidelines will continue to reflect the goals of the King County Strategic Plan, and will help Metro address mobility needs throughout the region.

It is estimated that this work plan required 80 staff hours to produce, costing $4,800. The estimated printing cost for this report is nominal.

Thank you for your consideration of this motion to accept the work plan for the Service Guidelines Task Force. This task force is an important part of Metro's strategic planning and service guidelines updates as well as the long range planning effort. Any changes coming from this Task Force will be consistent with King County's Strategic Plan.

If you have any questions, please contact Christina O'Claire, Supervisor of Strategic Planning and Analysis, at 206-477-5801, or via email at christina.oclaire@kingcounty.gov.

Sincerely,

Dow Constantine
King County Executive

Enclosures

cc: King County Councilmembers
ATTN: Carolyn Busch, Chief of Staff
Anne Noris, Clerk of the Council
Carrie S. Cihak, Chief of Policy Development, King County Executive Office
Dwight Dively, Director, Office of Performance, Strategy and Budget
Harold S. Taniguchi, Director, Department of Transportation (DOT)
Kevin Desmond, General Manager, Metro Transit Division, DOT
Victor Obeso, Manager, Service Development, Metro Transit Division, DOT
Christina O'Claire, Supervisor, Strategic Planning and Analysis, Service Development, Metro Transit Division, DOT

Date Created:	**1/5/2014**
Drafted by:	**Christina O'Claire**
Sponsors:	
Attachments:	A. King County Metro Transit Service Guidelines Task Force Work Plan

..title

A MOTION relating to the establishment of a regional stakeholder transit task force and adopting a task force work plan, as directed by Ordinance 17941, Section 113, Proviso P1.

..body

WHEREAS, in November 2014, Ordinance 17941 adopted the 2015/2016 King County Biennial Budget subject to the provisions set forth in the ordinance, and

WHEREAS, Ordinance 17941, Section 113, includes a proviso P1 that requires the executive to transmit a motion by January 14, 2015 establishing a regional stakeholder transit task force and adopting a detailed task force work plan, and

WHEREAS, the work plan provides for a task force to be convened by March 31, 2015, that is charged with reviewing and making recommendations regarding:

1. How transit service performance is measured as specified in the Metro Service Guidelines to reflect the varied purposes of different types of transit service;

2. Approaches to evaluating how the goal of geographic value is included in the Metro Service Guidelines, including minimum service standards;

3. Approaches to evaluating how the goal of social equity is included in the Metro Service Guidelines;

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

5. Outline guidelines for alternative services implementation, and

WHEREAS, the work plan reflects integration with long range transit system planning and reflects corridor analyses, including Sound Transit corridors and Metro transit system corridors, and

WHEREAS, the work plan includes a scope of work, tasks, schedule, milestones, budget, task force membership criteria, and the creation of an interbranch working group to support the task force process, and

WHEREAS, Metro has compiled the required information and the executive has transmitted the regional stakeholder transit task force work plan as set forth as Attachment A to this motion to the council and to the transportation, economy and environment committee;

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

The King County council hereby accepts the King County Metro Transit Service Guidelines Task Force Work Plan, Attachment A to this motion.

King County Metro Transit

Service Guidelines Task Force Work Plan

A regional stakeholder transit Task Force charged with reviewing and making recommendations regarding service types, geographic value and social equity, as well as financial policies for purchase of additional services and alternatives services implementation.

February 23, 2015

Prepared for:
King County Council

Prepared by:

Department of Transportation
Metro Transit Division
Service Development Section
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Table of Contents

Introduction

Ordinance 17941, which adopted the 2015/2016 King County Biennial Budget included proviso (P1), stating:

> *Of this appropriation $1,000,000 may not be encumbered until the executive transmits a motion establishing a regional stakeholder transit Task Force and adopting a detailed Task Force work plan and the motion is passed by the council. The motion shall reference the subject matter, the proviso's ordinance, ordinance section and proviso number in both the title and body of the motion.*
>
> *A. The work plan shall provide for convening a Task Force by March 31, 2015 that is charged with reviewing and making recommendations regarding:*
>
> *1. How transit service performance is measured as specified in the Metro Service Guidelines to reflect the varied purposes of different types of transit service;*
> *2. Approaches to evaluating how the goal of geographic value is included in the Metro Service Guidelines, including minimum service standards;*
> *3. Approaches to evaluating how the goal of social equity is included in the Metro Service Guidelines;*
> *4. Outline financial policies for purchase of additional services within a municipality or among multiple municipalities;*
> *5. Outline guidelines for alternative services implementation; and*
>
> *B. The work plan shall reflect integration with long range transit system planning and reflect corridor analyses including of Sound Transit corridors as well as Metro Transit System corridors.*
> *C. The work plan shall include a scope of work, tasks, schedule, milestones, budget, Task Force membership criteria and the creation of an interbranch working group to support the Task Force process.*
>
> *The executive must file the work plan and motion approving it by January 14, 2015, in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff, the policy staff director and the lead staff for the regional transit committee and the transportation, economy and environment committee, or its successor.*

This work plan addresses the requirements of Proviso 1 from Section 113 of Ordinance 17941.

Scope of Work

This section outlines the scope of work, including project background and the objectives of the Task Force.

Background

In 2009, in response to Metro's ongoing financial challenges and the increasing regional interest in improving efficiency of the system, the first Regional Transit Task Force (RTTF) was convened. The work of the award-winning Task Force was the foundation for the adopted Strategic Plan for Public Transportation, 2011-2021 and King County Metro Service Guidelines that are in place today.

The RTTF called for transparent, performance-based guidelines emphasizing productivity, social equity, and geographic value. To this end, the Service Guidelines list 64 transit activity centers, 17 regional growth centers, and four manufacturing/industrial centers, that are distributed throughout King County and are connected by transit corridors. Target service levels on these transit corridors are identified through a scoring system, with points assigned as follows:

- 50 percent of points are based on household, job, and college student proximity to the corridor;
- 25 percent of points are based on the share of boardings in census tracts with higher than average low-income and minority populations; and
- 25 percent of the points are awarded for corridors that are the primary connections between centers.

Analysis of total points scored establishes an initial service level in one of six service families a corridor belongs in: very frequent, frequent, local, hourly, peak, or alternative service. The results of this analysis inform investment and reduction priorities for specific routes, which also take into account the actual performance of each route.

In the three years since these planning documents were adopted, Metro has completed four Service Guidelines Reports and adjusted service ten times. The County also updated the Service Guidelines in 2013. Building on the lessons of the past three years, further refinements to the Guidelines could help to ensure that future transit investments reflect the intent of the RTTF's policy guidance. The Service Guidelines Task Force that will be convened starting early in 2015 will use the solid foundation developed in the 2009 effort to further analyze how transit service is allocated and measured across the region. The success of the RTTF was, in part, due to the tremendous collaboration by King County, partner cities, regional decision makers, and diverse stakeholders. This same approach will help to develop recommendations that improve the regional transit system.

The Service Guidelines are a living document that will evolve over time, and after three years of their use, now is an opportune time to evaluate them in advance of the next update to the Strategic Plan and Service Guidelines, scheduled for 2015.

Objectives of the Service Guidelines Task Force

The Task Force will consider the varied purposes and performance characteristics of different types of transit service, which could include definitions of types of service beyond the market based service types (Seattle core versus non-Seattle core) that are currently in the guidelines. Given the policy basis for setting target service levels of 50 percent productivity, 25 percent social equity and 25 percent geographic value, the Task Force will review how the geographic value and social equity standards have been incorporated into the adopted guidelines. The Task Force will build upon existing work completed for the Community Mobility Contracts (CMC)

program to outline financial policies for the purchase of additional services within a municipality or among multiple municipalities. The Task Force will also build upon work completed for the Alternative Services Program to outline guidelines for alternative services implementation. The discussion of alternative services will be incorporated into the discussion on service types, social equity, and geographic value.

Given the robust nature of the above discussion topics, Metro would like to provide clarity about the Task Force process. Metro recommends that the discussion focus on the following aspects (see the Proposed Schedule on page 11 for the order that these topics would be presented to the Task Force):

1. **Transit service types**: The proviso asks Metro to review and make recommendations on "how transit service performance is measured as specified in the Metro Service Guidelines to reflect the varied purposes of different types of transit service."

   Definition: In 2010, the RTTF recommended that Metro create and adopt a new set of performance measures by service type. As Metro developed the Service Guidelines, Metro identified two types of service, based on the market served – those that serve the Seattle core (downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District or Uptown) and those that do not serve the Seattle core. Metro evaluates performance by service type and by whether the service operates all-day or during peak-periods. In addition, Metro is currently following policies updated in 2013 by incorporating alternative services more fully into performance measurement and evaluating these services separately. As noted in the American Public Transportation Association (APTA) peer review of Metro Transit, "Metro could continue to evaluate opportunities to revise the service guidelines to compare service productivity by service type as this enables a more appropriate analysis of service."

   With Task Force guidance, Metro could introduce a different or expanded way of defining service types beyond services that do or do not serve the Seattle core. Different types of fixed route transit services serve different purposes depending on the transportation needs of an area, land use characteristics, density of population and trip-generating attractions. Transit that serves these different purposes could be held to different productivity standards.

   Task Force work: The Task Force will review and consider the transit service types that are currently included in the guidelines and make recommendations on potential additional service types, performance measures, and how to serve different areas of the county, considering and analyzing prior service change decisions. For each suggested service type, including alternative services, the Task Force will review potential performance measures, such as crowding standards, rides per hour (platform and revenue), costs per trip, et al, and may recommend modifications to achieve desired outcomes that could be incorporated into the service guidelines. Within the context of the policy basis for setting target service levels of 50 percent productivity, 25 percent social equity and 25 percent geographic value, the Task Force shall discuss the tensions between productivity, geographic value and social equity, and consider the trade-offs of different performance measures for different types of service. Desired outcomes shall address the appropriate balance between meeting these different goals in service allocation.

2. **Geographic value**: The proviso asks Metro to review and make recommendations on "approaches to evaluating how the goal of geographic value is included in the Metro Service Guidelines, including minimum service standards."

Definition: In 2010, the RTTF recommended that the policy guidance for making service reduction and service growth decisions should be based on three principles, one of which is to provide geographic value throughout the county. According to the RTTF, service allocation decisions (for both reductions and growth) must be perceived as "fair" throughout the county and should is represented by three elements – balancing access with productivity, tax equity, and economic vitality. As Metro developed the service guidelines, Metro identified 64 Transit Activity Centers that are distributed throughout King County and include major destinations and transit attractions, such as large employment sites, significant healthcare institutions and major social service agencies.

These Transit Activity Centers, taken together with the 17 regional growth centers and four manufacturing/industrial centers, represent activity nodes throughout King County that form the basis for an interconnected transit network throughout the urban growth area of King County. Metro identifies primary connections between centers as warranting a higher level of service – these connections are the predominant transit connections between centers, based on a combination of ridership and travel time.

The guidelines also incorporate geographic value by classifying routes by market served – Seattle core and non-Seattle core – as described in the social equity section above. This classification allows us to compare similar routes when assessing productivity. 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.

With Task Force guidance, Metro could look at how geographic value is represented in the transit system, including potential introduction of minimum service levels on the primary connections between centers to ensure that the more dispersed transit activity centers are connected at usable service levels to the main destinations that people travel. Metro could also examine whether the function that park-and-rides play in providing access to the transit network is adequately reflected in the guidelines.

Task Force work: In reviewing the geographic value standards and performance measures, the Task Force will consider and make recommendations on minimum levels of service established by the service guidelines or added through future Long Range Planning efforts, including as they affect local jurisdictions and unincorporated areas. The Task Force will also consider and make recommendations on the role of park-and-rides in providing geographic value. Within the context of the policy basis for setting target service levels of 50 percent productivity, 25 percent social equity and 25 percent geographic value, the Task Force shall discuss the tensions between productivity, geographic value and social equity, and consider the trade-offs of different performance measures for different types of service. Desired outcomes shall address the appropriate balance between meeting these different goals in service allocation.

3. **Social equity**: The proviso asks Metro to review and make recommendations on "approaches to evaluating how the goal of social equity is included in the Metro Service Guidelines."

   Definition: In 2010, the RTTF recommended that the policy guidance for making service reduction and service growth decisions should be based on three principles, one of which is to ensure social equity. As Metro developed the service guidelines, Metro determined that it would identify areas where low-income and minority populations are concentrated as warranting higher levels of service. Metro determines low-income and minority census tracts using census data, and then compares the

percentage of people who board buses in these areas with the county average. Metro evaluates changes to its service network using Federal Transit Administration requirements, including Title VI, which calls for changes not to cause a disparate impact on minority populations or a disproportionate burden on low-income populations. In 2013, Metro updated its service guidelines to include information about Title VI. Metro's evaluation of productivity and ridership in the service guidelines also reinforces the targeting of service where transit dependent communities exist.

With Task Force guidance, Metro could expand the social equity measures in the guidelines to include more specific information about where services are located where such information exists. Metro could also examine incorporating destination information about where social services are located, not just where people are traveling from, into the service guidelines process.

Task Force work: in reviewing the social equity goal, the Task Force will consider and make recommendations on additional ways to incorporate social equity measures in the guidelines, such as incorporating social service agencies into the analysis. The Task Force may examine the available information and data on social and human services, shifting land uses and demographic trends. Within the context of the policy basis for setting target service levels of 50 percent productivity, 25 percent social equity and 25 percent geographic value, the Task Force shall discuss the tensions between productivity, geographic value and social equity, and consider the trade-offs of different performance measures for different types of service. Desired outcomes shall address the appropriate balance between meeting these different goals in service allocation.

4. **Financial policies for purchase of additional services:** The proviso asks Metro to "outline financial policies for purchase of additional services within a municipality or among multiple municipalities."

   Definition: Metro has established the Community Mobility Contract (CMC) program that allows cities or entities to purchase transit service beyond what Metro is able to provide given financial constraints.

   With Task Force guidance, Metro could build on the work that is being completed for the CMC program and identify guidelines that could be included in the Service Guidelines update.

   Task Force work: The Task Force will consider the newly established CMC program and the current financial policies for the purchase of additional services within a municipality or among multiple municipalities as it relates to the Service Guidelines. The Task Force may make recommendations on changes to the guidelines as they relate to the CMC program.

5. **Guidelines for alternative services implementation:** The proviso asks Metro to "outline guidelines for alternative services implementation."

   Definition: The 2015-2016 Transit budget earmarks $12 million over two years for alternative services implementation. Metro is developing an alternative services program and has identified a service family for alternative service in the service guidelines.

   With Task Force guidance, Metro could build on the work that is being done for the Alternative Services Program and identify guidelines that could be included in the Service Guidelines update. Metro's Five-Year Implementation Plan for Alternatives to Traditional Transit Service Delivery (Alternative Services Plan) was adopted in 2012. This plan is intended to guide Metro's decision-making about the provision

of alternatives to fixed route service in King County between 2012 and 2017 and provides additional detail on product types, outreach process, and candidate areas for alternative service delivery. Building on this plan, the 2015-2016 budget includes funding to expand the program to mitigate for fixed route transit service reductions, right-size for cost-efficiency and provide complementary services.

Task Force work: The Task Force will build on the work completed for the Alternative Service Delivery five-year implementation plan and the 2015-2016 budget. The Task Force will review the alternative service type and guidelines for implementation as part of the service types and geographic value discussions. The Task Force may make recommendations on changes to the Service Guidelines as they relate to the alternative services program.

Roles and Responsibilities

This section outlines the roles and responsibilities of the facilitator/mediator, Metro staff and the Service Guidelines Task Force members.

Responsibilities of the Facilitator/Mediator

We propose using a facilitator modeled after the Regional Transit Task force effort. The facilitator/mediator will be responsible for the following list of tasks. This task list may be updated in the future.

Lay the Process Foundation

- Conduct initial communication with Task Force members and County Councilmembers.
- Help with preparation of initial materials for Task Force members.
- Prepare and review materials and agendas for Task Force meetings.

Build the Framework of Consensus

- Facilitate Task Force meetings.
- Conduct ongoing communication with Task Force members.
- Facilitate sub-committee meetings as needed.
- Communicate and meet with Project Coordination Team and Interbranch Working Group.

Finalize the Recommendations

- Prepare final recommendations and summary report for regional, local and unincorporated areas.
- Participate in and prepare for briefings and updates of County Executive, County Council, and other stakeholders.

Responsibilities of Metro Staff

Metro staff will be responsible for the following list of tasks. This task list may be updated in the future.

Lay the Process Foundation

- Set up Task Force meetings and framework.
- Prepare initial materials for Task Force members.
- Prepare materials and agendas for Task Force meetings.

Build the Framework of Consensus

- Handle meeting logistics and materials preparation for all meetings.
- Respond to requests for information.

Finalize the Recommendations

- Prepare final recommendations and summary report for regional, local and unincorporated areas.
- Participate in and prepare for briefings and updates of County Executive, County Council and other stakeholders.

Responsibilities of Task Force Members

Task Force Members will be engaged in the following list of activities. This list may be updated in the future.

Lay the Process Foundation

- Participate in initial interviews with Facilitator and:
  - Express opinions, perspectives, and interests.
  - Identify possible solutions that might be proposed during the meetings.

Build the Framework of Consensus

- Attend Task Force meetings between February and May. Meetings are expected to be three hours each.
- Communicate as needed with Facilitator between meetings.
- Attend sub-committee meetings as needed.
- Keep an open mind about possible solutions that could reflect a consensus among Task Force members.
- Work together to identify a consensus set of recommendations to the Facilitator and Metro.

Finalize the Recommendations

- Review and provide comments on recommendations.

Responsibilities of Project Coordination Team

The Project Coordination Team will consist of members of Metro staff, the Facilitator, County Council central staff, and County Executive staff, and will be engaged in the following list of activities. This list may be updated in the future.

Lay the Process Foundation

- Prepare agendas and review materials for Service Guidelines Task Force meetings.

Build the Framework of Consensus

- Attend Task Force meetings between February and May. Meetings are expected to be three hours each.
- Prepare agendas and review materials for Service Guidelines Task Force meetings.

Finalize the Recommendations

- Review final recommendations and summary report for regional, local and unincorporated areas.
- Participate in and prepare for briefings and updates of County Executive, County Council and other stakeholders.

Responsibilities of Interbranch Working Group

We propose using an Interbranch Working Group, with staff representatives of all nine King County Councilmembers, County Council Central staff, County Executive staff, Metro staff and the facilitator, modeled after the Regional Transit Task force effort. The Interbranch Working Group will be responsible for the following list of tasks. This task list may be updated in the future.

Lay the Process Foundation

- Attend meetings and inform stakeholders about process.

Build the Framework of Consensus

- Attend Interbranch Working Group meetings between February and May. Meetings are expected to be an hour and a half each.
- Communicate as needed with Metro staff between meetings.
- Communicate with and inform stakeholders about the process.

Finalize the Recommendations

- Review final recommendations and summary report for regional, local and unincorporated areas.
- Participate in briefings and updates of County Council and other stakeholders.

Tasks, Deliverables, Milestones and Budget

The table below outlines the tasks involved in supporting the Task Force, as well as deliverables, and milestones.

Tasks, Deliverables, and Milestones

Tasks	Deliverables	Responsibility	Milestones
Lay the Process Foundation			
Prepare & Reach Agreement on Scope of Work and Schedule	Final invitation letter to Task Force members	Facilitator	Mid-January, 2015
Conduct initial communication with Task Force Members	Initial interviews w/ Task Force members and County Councilmembers	Facilitator	Mid-February, 2015
	Memo that summarizes members interests, and provides a statement of key findings and mutual interests	Facilitator	End of February, 2015
Set up Task Force meetings and framework	Schedule meetings for Task Force, Interbranch Working Group and Project Coordination Team	Metro Project Manager	Mid-January, 2015
	Provide all materials, logistic support for meetings	Metro Project Manager	Ongoing
Prepare initial materials for Task Force	Create background notebook	Metro Project Manager	Mid-February, 2015
	Review and shape background notebook	Facilitator	Mid-February, 2015
Prepare Materials for Task Force Meetings	Work with Project Coordination Team to prepare and establish Task Force meeting agendas	Facilitator	1-2 times per month
	Prepare meeting materials, presentations	Metro Project Manager	1-2 times per month
	Review and comment on meeting agendas, materials and presentations	Facilitator	1-2 times per month

Tasks	Deliverables	Responsibility	Milestones
Build the Framework of Consensus			
Facilitate Task Force Meetings	Prepare for, facilitate and follow-up on Task Force meetings	Facilitator	1-2 times per month
	Prepare ground rules	Facilitator	Mid-February, 2015
	Prepare and distribute meeting summaries	Facilitator	1-2 times per month
	Handle meeting logistics and materials preparation	Metro Project Manager	Ongoing
Conduct ongoing communication with Task Force members	Build relationships with Task Force members	Facilitator	Ongoing
	Communicate with members between meetings	Facilitator	Ongoing
	Respond to requests for information	Metro Project Manager	Ongoing
Facilitate sub-committee meetings (if needed)	Facilitate and support sub-committees as needed	Metro/Facilitator	As needed
Communicate with Staff and Leadership Teams	Project Coordination Team logistics	Metro Project Manager	1-2 times per month
	Interbranch Working Group meeting logistics	Metro Project Manager	Monthly
	Attend Project Coordination Team and Interbranch Working Group meetings	Metro/Facilitator	2-4 times per month
	Coordinate with county staff on a regular basis	Facilitator	Ongoing
Finalize the Recommendations			
Approve Final Recommendations	Task Force Final summary recommendations	Task Force	Early June, 2015
Prepare Final Summary Report	Develop outline of draft recommendations	Facilitator	End of June, 2015
	Draft and support preparation of summary report	Metro/ Facilitator	Mid June, 2015
	Final summary report/Task Force recommendations	Metro/ Facilitator	Early July, 2015
Approve Final Recommendations and Summary Report	Final Summary report/Task Force recommendations	Task Force	Early July, 2015
Participate in and prepare for briefings and updates	Prepare presentation materials summarizing Task Force work	Metro/ Facilitator	Early July, 2015

of County Executive, County Council and Other Stakeholders	Presentations to stakeholders as needed	Metro/ Facilitator	As needed
Participate in final meeting to review update to Strategic Plan and Service Guidelines	Strategic Plan and Service Guidelines update	Task Force	September, 2015

Budget

The budget for the Task Force is $150,000.

Schedule and Timeline

This section shows the expected schedule for the Task Force process. There will be six full Task Force meetings, with sub-committee meetings as needed. This schedule is aligned with the Long Range Plan schedule and the Strategic Plan and Service Guidelines update schedule. The outcome of the Task Force process will influence both of these processes; Metro needs adequate time to produce a report and allow time for County Council review and adoption.

Proposed Schedule*

	M	T	W	Th	F	Full Task Force Meeting Topic
January	5	6	7	8	9	
	12	13	14	15	16	
	19	20	21	22	23	
	26	27	28	29	30	
February	2	3	4	5	6	
	9	10	11	12	13	
	16	17	18	19	20	Overview and introductions
	23	24	25	26	27	
March	2	3	4	5	6	Service guidelines, frame social equity discussion
	9	10	11	12	13	
	16	17	18	19	20	
	23	24	25	26	27	
April	30	31	1	2	3	Social equity, frame service types & alternative services discussion
	6	7	8	9	10	
	13	14	15	16	17	
	20	21	22	23	24	
	27	28	29	30	1	Service types & alternative services, frame geographic value discussion
May	4	5	6	7	8	
	11	12	13	14	15	
	18	19	20	21	22	Geographic value, financial policies for purchase of additional services
	25	26	27	28	29	
June	1	2	3	4	5	Continued policy discussion, final discussion, closing remarks
	8	9	10	11	12	
	15	16	17	18	19	
	22	23	24	25	26	

SGTF meetings
Project Coordination Team meetings
Interbranch meetings

* A Task Force meeting will be held in July to review and approve the Final Recommendations and Summary Report; and a final Task Force meeting will be in September 2015 to review how the recommendations are incorporated into the Strategic Plan and Service Guidelines.

Materials Distribution

The initial Task Force notebook will be available one week in advance of the first meeting. Subsequent meeting materials will be available one week prior to the meeting. These materials will be sent out to Task Force members, County Councilmembers, County Council staff, County Executive staff, and Metro staff.

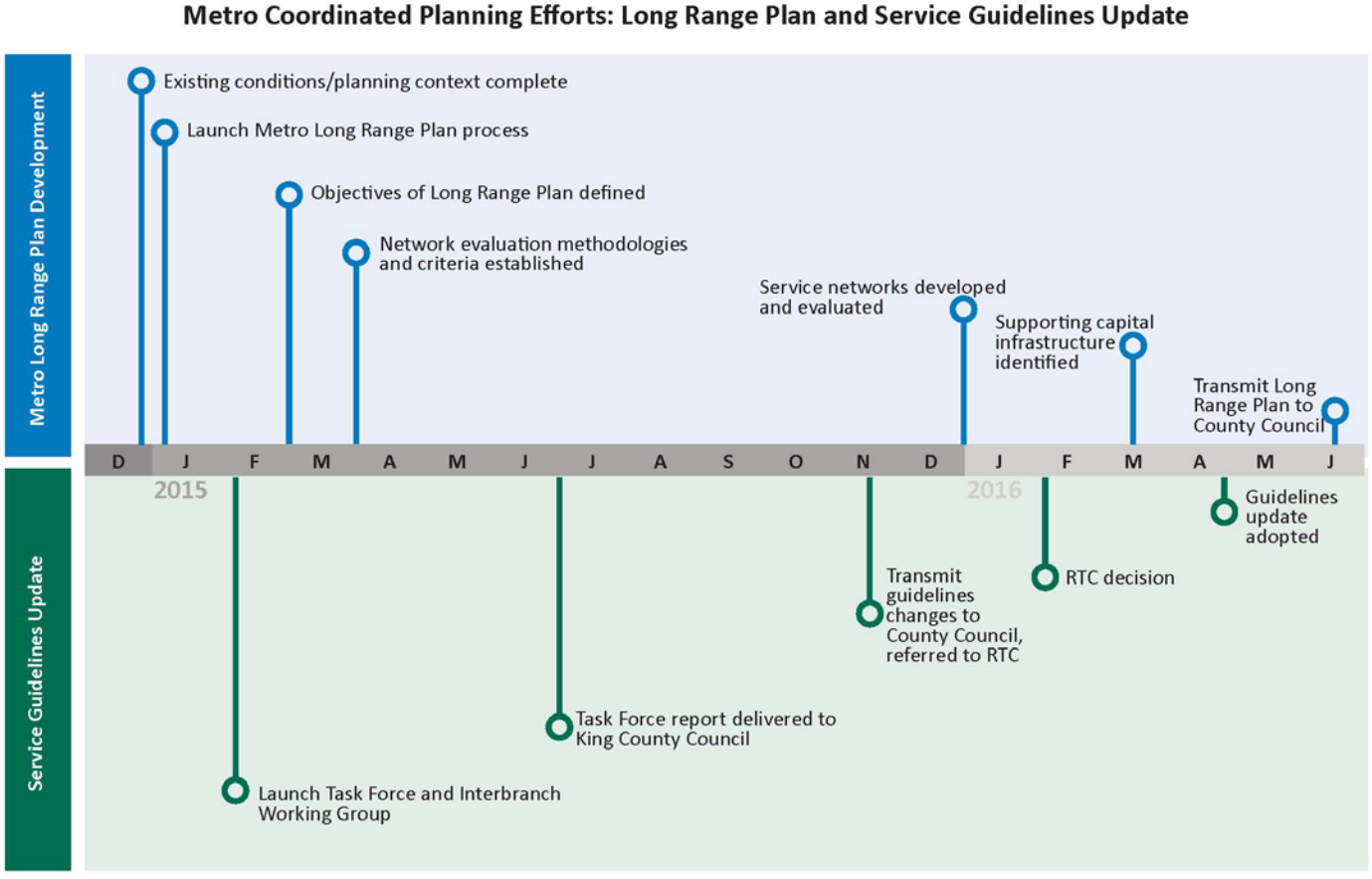
Integration with Long Range Plan and Other Planning Efforts

This section shows how the Task Force will be integrated with Long Range Planning efforts.

Metro's Long Range Plan

The Service Guidelines Task Force will take place in the first part of 2015 so that it can influence the long range planning work, scheduled to be complete by mid-2016, and the Service Guidelines update, scheduled to be complete by April 2016. Metro's Long Range Plan is coordinated with regional planning efforts being undertaken by Sound Transit, the Puget Sound Regional Council, local jurisdictions and stakeholders. Corridor analyses that are completed as part of the Task Force work will include Sound Transit as well as Metro corridors.

A high-level timeline that shows how the Long Range Plan and Service Guidelines update will take place in the same timeframe is shown below. As we move through the Long Range Plan process, updates to the Council and other stakeholders will take place on a regular basis.



Task Force Membership Criteria

Membership of the Task Force includes 20-30 executive level participants representing a variety of interests throughout King County. Members are not necessarily transit experts, but are reasonably familiar with how the transportation system affects quality of life, and transit's relationship to land use and mobility.

Membership includes a mix of elected officials representing jurisdictions across King County, corporate/business leaders, labor, major institutions, human and social services, large employers, environmental groups, Transit Advisory Commission members, mobility advocates, and the metropolitan planning organization. Members have been identified through consultation with the King County Council and have been recruited by the County Executive's office and the King County Department of Transportation.

Task Force Roster

Name	Representation
Paul Bachtel	ATU
Nancy Backus	City of Auburn
Amy Biggs	Snoqualmie Valley Transit
Vic Bishop	ETA
Josh Brown	Puget Sound Regional Council
Tim Burgess	City of Seattle
Fred Butler	City of Issaquah
John Chelminiak	City of Bellevue
Suzette Cooke	City of Kent
Lauren Craig	Puget Sound Sage
Chris Eggen	City of Shoreline
Mahnaz Eshetu	ReWA
Jim Ferrell	City of Federal Way
Hilary Franz	Futurewise
George Frasier	Green River College
David Freiboth	King County Labor Council
Patrick Green	Bellevue College
Josh Kavanagh	University of Washington
Matt Koltnow	Transit Advisory Commission
Scott Kubly	Seattle Department of Transportation
Matt Larson	City of Snoqualmie
John Marchione	City of Redmond
Gordon McHenry	Solid Ground
Lynn Moody	Hopelink
Jonathan Porter	Mobility Advocate
Shefali Ranganathan	Transportation Choices Coalition
Tom Rasmussen	City of Seattle
Carla Saulter	Rider
Jon Scholes	Downtown Seattle Association
Edna Shim	Children's Hospital
Jim Stanton	Microsoft

Ex-Officio Members	Representation
Kevin Desmond	King County Metro
Mike Harbour	Sound Transit

Service Guidelines Task Force

3. Regional Transit Task Force (RTTF) to Present

Introduction

This section briefly reviews two recent policy developments: the Regional Transit Task Force's recommendation of a new policy framework for the potential growth or contraction of King County's transit system, and the adoption of Metro's strategic plan and service guidelines. It also provides information about current activities and Metro's finances.

Links to Information

1. 2009 Transit Audit: http://bit.ly/sgtf3_1
2. Metro Follow-up to Audit: http://bit.ly/sgtf3_2
3. Auditor's Follow-up: http://bit.ly/sgtf3_3
4. RTTF Final Report: http://bit.ly/sgtf3_4
5. King County Metro Strategic Plan and Service Guidelines: http://bit.ly/sgtf3_5
6. 2013 Strategic Plan Progress Report: http://bit.ly/sgtf3_6
7. Sound Transit / Metro Transit Integration Report: http://bit.ly/sgtf3_7
8. Metro's Long Range Plan: http://bit.ly/sgtf3_8
9. Metro's Accountability Center (Annual Guidelines Reports, Peer comparisons, Performance data): http://bit.ly/sgtf3_9
10. Metro's budget: http://bit.ly/sgtf3_10
11. PSRC's report on Transit Coordination in the Central Puget Sound: http://bit.ly/sgtf3_12
12. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Executive Summary

Background

Task Force Charge and Process

The King County Council and Executive formed the Regional Transit Task Force in February 2010 to consider a policy framework for the potential future growth and, if necessary, contraction of King County's transit system. The County Council asked the task force to consider six transit system design factors, to which the task force added a seventh: environmental sustainability (see box).

Key Transit System Design Factors

1. Land use
2. Social equity and environmental justice
3. Financial sustainability
4. Geographic equity
5. Economic development
6. Productivitiy and efficiency
7. Environmental sustainability

The 28 task force members were selected to represent a broad diversity of interests and perspectives. Three *ex officio* members represented King County Metro Transit, Sound Transit and the Washington State Legislature. An Executive Committee (County Executive and three County Council members) ensured that the task force carried out its approved work plan. Metro's Manager of Service Development served as the project manager. An Interbranch Working Group supported the Executive Committee and task force's work. Cedar River Group was hired to facilitate the process. The task force created two subgroups of task force members to delve into performance measures and cost control/efficiencies.

The task force met from March through October 2010. The task force used a consensus-based decision-making approach, defining consensus as "all members can support or live with the task force recommendations." The task force agreed that if consensus was not unanimous, the differences of opinion would be included with the final recommendations. task force meetings were open to the public. The task force set aside time in each meeting for public comment and reviewed comments submitted on its website.

The County Council and Executive created the task force as a result of several factors. A severe recession that struck the Puget Sound region and the nation in late 2008 has changed the road ahead for Metro. The precipitous decline in economic activity led to a dramatic fall in sales tax receipts. Since 62 percent of Metro's operating revenue comes from sales taxes, the drop in receipts has had a big impact. At the same time, Metro's ridership has grown significantly, and public expectations remain high. Also in 2008, the Puget Sound Regional Council (PSRC) developed the *Vision 2040* and *Transportation 2040* plans for long-term growth and mobility of the region. These plans project a 42 percent increase in King County's population and a 57 percent increase in jobs from 2000 to 2040,

with most of this growth occurring in the county's 12 largest cities. The plans call for an aggressive strategy to expand transit services to support that growth.

In developing the 2010-2011 biennium budget, Metro and King County were able to avoid large reductions in transit service by making difficult choices and trade-offs, along with some temporary, one-time fixes. However, based on the County's revenue forecast through 2015, dramatic transit service reductions will be needed beginning in 2012.

Metro and Regional Overview

In early meetings, the task force learned about Metro's work and budget, the regional transit system, and regional employment and population forecasts.

Themes from Task Force Discussions

- Regional Perspective: Strike a balance among: the best interest of the region as a whole, the needs of Metro riders, and the interests and needs of local communities.
- Transparency: Decision-making must be clear, consistent, and based on criteria and objectives that are clear to the public.
- Efficiency: Metro and King County must achieve greater efficiencies in transit operations, plans for new service, and in administration of the system.
- Balanced Approach. To avoid reductions in transit services and to meet future demand will require a combination of expense reductions, efficiencies and securing new revenues.
- Performance Based. Use tools, decision processes, and reporting that allow all interested parties to evaluate performance.

Metro Services. King County Metro Transit is the biggest public transportation agency in Washington state and one of the 10 largest bus systems in the nation. In 2009 Metro carried approximately 112 million riders (boardings) on 220 fixed routes connecting multiple centers throughout the county. Dial-a-Ride (DART) service operates on a route with some fixed time points, but deviates to pick up or drop off passengers. Metro serves 130 park-and-ride facilities with more than 25,000 parking stalls. Use has been at 74 percent since 2002. Metro operates one RapidRide bus rapid transit (BRT) line, with five more planned to start service between 2011 and 2013 with frequent, all-day service in busy transit corridors. Metro operates a 1.3-mile transit tunnel in downtown Seattle that is served by buses and Sound Transit's Link light rail. Metro also serves 13 transit centers and operates service out of seven transit bases. Metro has approximately 69 lane-miles of overhead two-way wire for electric trolleybuses, which serve almost one-fifth of Metro ridership. Metro's fleet is operated by nearly 2,700 full- and part-time drivers. Service for riders with disabilities or special needs includes: accessible service on fixed routes; contracted American with Disabilities Act (ADA) paratransit van service (Access); vans operated by local nonprofits (Community Access Transportation – CAT); and taxi scrip. Metro's vanpools serve 6,100 people on an average weekday in more than 1,000 vans. Metro supports the regional Ridematch program for vanpools and carpools. Metro's services to employers include commute trip reduction (CTR), pass sales, and a Custom Bus Program.

Partnership Agreements. Metro has created agreements with local businesses and jurisdictions to help support increased levels of transit service. In return for various partner actions, such as payments to support operating costs, investments to enhance transit speed and reliability, or enhancements to passenger facilities, Metro provides increased levels of service.

Customer Satisfaction. Overall rider satisfaction has remained relatively strong in the past decade, with 93 percent of riders "very" or "somewhat" satisfied (slightly lower in the south county planning area).

Integrated Regional Transit System. Seven other transit agencies serve riders in the central Puget Sound region: Community Transit (Snohomish County), Pierce Transit, Sound Transit (King, Snohomish and Pierce county urban areas), Washington State Ferries, City of Seattle (monorail and South Lake Union Streetcar), Everett Transit, and Kitsap Transit. Metro works closely with these agencies on planning, operations, fare coordination, joint facility construction, and major project implementation. Metro operates some Sound Transit Regional Express bus service, Link light rail, and Seattle's South Lake Union Streetcar.

Metro's Budget. Metro's 2010-2011 biennial operating budget includes $968 million in revenues and $1.2 billion in expenses. Most of the operating revenue (62 percent) is from a local options sales and use tax. The sales tax rate, 0.9 percent, is the maximum currently available to local transit agencies. Another 26 percent of Metro's revenue comes from fares. The largest operating expense category (65 percent) is for the personnel who provide Metro's services and programs. Nine percent of operating expenses are for King County government overhead charges and services from other County departments. Metro's capital program for 2009–2015 totals $1.28 billion, of which 59 percent is for fleet replacement.

Challenge Facing Metro. Metro took action in the 2008-2009 mid-biennial budget process to cut the capital program by more than $65 million, freeze hiring, reduce 19 full-time and 7 limited-term positions, and raise transit and paratransit fares. (Metro had eliminated 27 full time and term-limited staff positions in 2007, and approved the first of four fare increases between 2008 and 2011.) With the 2010-2011 biennial budget, Metro's plan included increasing fares, eliminating 70 staff positions, cutting bus service by 75,000 hours, deferring bus service expansion, reducing operating reserves for four years, using fleet replacement reserves, and implementing schedule efficiencies estimated to save 125,000 hours. Between 2009 and 2015, Metro projects a revenue shortfall of $1.176 billion. Without other actions, this would mean cutting 400,000 hours of existing service by 2013, and another 200,000 hours by 2015.

National, Regional and State Trends. Transit agencies across the nation face similar funding crises and have had to make tough choices. In our region, Intercity Transit (Olympia), Community Transit, Pierce Transit and Sound Transit all are making program adjustments or service cuts. Two (Intercity and Pierce) have sought or will seek voter approval of sales tax increases. The Joint Transportation Committee of the legislature is studying the state's role in public transportation, with a final report due in mid-December 2010.

Recommendations

Recommendation 1: Metro should create and adopt a new set of performance measures by service type, and report at least annually on the agency's performance on these measures. The performance measures should incorporate reporting on the key system design factors, and should include comparisons with Metro's peer transit agencies.

Performance measures will help the public, Metro managers and King County decision makers understand if the transit system is meeting operational and policy objectives. As an evaluation tool, performance measures will help Metro understand how it might improve transit system performance, and establish a strong rationale for difficult policy choices. Regular reporting on the performance measures will aid in transparency. The frequency of reporting should be identified when the measures are adopted, but should be at least annually. (There may be different reporting frequencies for some of the performance measures.)

The task force subgroup on performance measures worked with Metro staff to develop an initial example of metrics for overall system performance and easy-to-understand reporting. The task force recommends that Metro continue developing performance measures using this model. The task force suggests that Metro develop performance measures for all of Metro's operations (e.g., customer service, vehicle maintenance, etc.). The task force supports Metro's suggestion to include recommendations for the performance measurement system in Metro's Comprehensive and Strategic Plans to be submitted to the County Council by February 2011.

Recommendation 2: King County and Metro management must control all of the agency's operating expenses to provide a cost structure that is sustainable over time. Cost-control strategies should include continued implementation of the 2009 performance audit findings, exploration of alternative service delivery models, and potential reduction of overhead and internal service charges.

The task force believes that Metro's financial model, with current revenue sources and Metro's expense structure, is not sustainable over the long-term. The task force recommends effort in three areas:

- Continue to follow up on the 2009 King County Performance Audit recommendations to further reduce costs, create efficiencies and implement savings strategies. Provide regular updates on progress and the expected timetable for implementation.
- Explore opportunities for alternative service products and service delivery models (e.g., carpools, vanpools, DART, taxi scrip, CAT and Access paratransit), including contracting out for some underperforming fixed-route services. Any contracting out should be consistent with broad labor harmony principles.
- King County should clearly explain how and why overhead and internal service charges are allocated to Metro and County departments, and continue to explore ways to reduce overall overhead and internal service charges.

Recommendation 3: The policy guidance for making service reduction and service growth decisions should be based on the following priorities:

1) **Emphasize productivity due to its linkage to economic development, land use, financial sustainability, and environmental sustainability**
2) **Ensure social equity**
3) **Provide geographic value throughout the county.**

Task force members concluded that one overarching statement of policy direction and one approach to implementation of that policy should guide all service allocation decisions. They recommend that the policy statements they have crafted and the recommended use of guidelines and performance measures should provide the foundation for all future service allocation decisions, including service reductions, service growth, service restoration, and the ongoing maintenance of transit services in response to changes in system demand or route performance. The approach represents a fundamental change in the way transit service allocation decisions are made by King County (see box on p. 5).

The task force concluded that one of the transit design factors, productivity and efficiency, has a strong correlation to several of the other factors—land use, economic development and financial sustainability and environmental sustainability. As a result, the task force is recommending a new policy framework to make service allocation decisions. The intent is to optimize efficiency of transit services, deliver people to employment, activity and residential centers, meet the needs of those that are most dependent on transit, and create a system that is a fair distribution of service throughout the county.

Recommended Policy Direction Would Replace Existing Policy Guidance for Service Growth and Reduction

The current policy for transit service growth and reduction is based on three King County subareas (east, west and south) and was established in Metro's 2002–2007 Six-Year Transit Development Plan.

For service growth, every 200,000 hours of new transit service is to be allocated with 40 percent to the east subarea, 40 percent to the south, and 20 percent to the west. This is called the 40/40/20 policy.

Any systemwide service reductions are to take place in proportion to each subarea's share of the total service investment. Based on the current hours of service in each subarea, 62 percent of the reduction would have to come from the west subarea, 21 percent from the south and 17 percent from the east. This is commonly called the 60/20/20 policy.

Recommendation 4: Create clear and transparent guidelines to be used for making service allocation decisions, based upon the recommended policy direction.

Task force members concluded that a new approach to decision-making is needed. Members felt strongly that stakeholders need to understand the basis for service allocation decisions, and how those decisions will be evaluated and adjusted over time. It is essential to this new policy direction to develop and adopt service guidelines, along with the performance measures recommended above.

Service guidelines establish the objective metrics for making service allocation decisions. Guidelines will help the public, Metro and King County decision makers determine the appropriate level and type of service for different corridors and destinations, and for employment and population densities throughout the county. The task force supports Metro's proposal to incorporate newly developed guidelines into Metro's Comprehensive and Strategic Plans to be submitted to the County Council in February 2011.

Recommendation 5: Use the following principles to provide direction for the development of service guidelines.

The task force did not develop recommended guidelines. They did, however, create a set of principle statements that should be used to shape the creation of the guidelines. The following principles should apply to all guidelines:

- Transparency, clarity and measurability
- Use of the system design factors
- Flexibility to address dynamic financial conditions
- Integration with the regional transportation system
- Development of performance thresholds as the basis for decision-making on network changes (e.g., load factor on bus routes, see p. 28).

Metro staff created conceptual scenarios and example guidelines for service reduction using the draft policy guidance. The approach involved three steps: (1) eliminating the least productive routes; (2) assessing the impact of step 1 and adjusting based on social equity, system connectivity, and geographic coverage; and (3) identifying opportunities for efficiencies. In a similar exercise for service growth, the task force identified two types of future growth: (a) response to ridership demand (to address over-crowded bus routes), and (b) support for regional growth (to connect identified population, employment and activity centers).

Recommendation 6: King County, Metro, and a broad coalition of community and business interests should pursue state legislation to create additional revenue sources that would provide a long-term, more sustainable base of revenue support for transit services. To build support for that work, it is essential that King County adopt and implement the task force recommendations, including use of the service guidelines and performance measures, and continue efforts to reduce Metro's operating costs.

The task force concluded that long-term, sustainable revenues for transit service are needed, given the dramatic fluctuations in Metro's primary source of revenue (sales tax), the size of likely service reductions over the next five years, transit's importance to economic recovery, and the need for transit to support the expected growth in population and employment. The task force identified three characteristics for a successful long-term revenue strategy: diversity of revenue sources, sufficient size of revenue source to address long-term needs, and flexibility to include a statewide and/or a local revenue source.

King County and Metro should create a coalition of partners to begin immediately to inform state legislative leaders about the breadth of the potential service reductions facing the Metro system, the task force recommendations, and the actions Metro and King County are taking to address the anticipated revenue shortfall. It may take several legislative sessions to secure support for a long-term, sustainable funding initiative.

Recommendation 7: Metro staff should use the task force recommendations and discussions as the framework for revising Metro's current mission statement, and creating a vision statement (as one does not now exist). Both draft statements should be included in the draft Comprehensive and Strategic Plans scheduled to be submitted to the County Council in February 2011.

Conclusion

The task force has created consensus recommendations that reflect a new policy direction for allocation decisions for transit service reduction and future service growth. The task force also has recommended a method for decision-making that will result in greater clarity, transparency and perceived fairness in decisions allocating Metro transit services.

Moving Metro Forward

A year-one progress report on the Regional Transit Task Force recommendations

King County Executive Dow Constantine and the County Council formed the Regional Transit Task Force in early 2010. The county's public transportation system was facing competing pressures: demand for transit service was strong and expected to grow, but a steep decline in Metro's revenues from sales tax revenues was creating unprecedented financial challenges. In this context County leaders asked the task force to develop a new model for delivering transit service.

In November 2010, after numerous meetings and countless hours of intensive review, the task force issued a report and seven recommendations for making Metro a more productive, accountable, and financially sustainable organization. The recommendations are summarized at right; for the full task force report and recommendations, visit www.kingcounty.gov/transittaskforce.

In the year since the task force released its findings, Metro and King County have taken groundbreaking action on all of the task force's recommendations, launching new efforts as well as continuing reforms initiated earlier to manage the revenue shortfall. These actions are making Metro a stronger organization and will yield benefits to the public for years to come.

The following is a summary of these accomplishments.

New strategic plan, service guidelines and performance measures

Immediately after the task force completed its work, Metro began drafting a new 10-year strategic plan that conforms with the task force findings as well as the King County Strategic Plan. Metro developed the service guidelines recommended by the task force as part of the plan.

The Regional Transit Committee revised and unanimously approved the *Strategic Plan for Public Transportation 2011-2021* and Service Guidelines, and the King County Council unanimously adopted them on July 11, 2011.

The plan starts with Metro's vision for public transportation. In brief: a safe, efficient, and reliable system that people find easy to use; expanded and improved products and services that attract a growing segment of the population; an engaged public; quality employees; and financial stability. The Puget Sound region has a stronger economy, improved public health, and cleaner environment because of the public transportation system.

Reflecting the task force's guidance, the plan establishes goals, objectives and strategies for allocating service on the basis of productivity, social equity and providing value around the county; controlling costs; increasing public engagement and access to information; working toward environmental sustainability; and securing stable funding.

Included in the plan are more than 60 performance measures for tracking and reporting progress toward the goals. Most of

The task force recommendations

1. Create a new set of performance measures and report at least annually.
2. Control all operating expenses.
3. Base service reduction and growth decisions on these priorities:
   - Productivity
   - Social equity
   - Providing value throughout the county
4. Create guidelines for allocating service.
5. Base these service guidelines on:
   - Transparency, clarity and measurability
   - Use of the system design factors (land use, social equity and environmental justice, financial sustainability, geographic equity, economic development, productivity and efficiency, and environmental sustainability)
   - Flexibility to address dynamic financial conditions
   - Integration with the regional transportation system
   - Development of thresholds for decision-making on network changes.
6. Work with a community and business coalition to pursue state legislation that creates a more sustainable revenue base for transit.
7. Revise Metro's mission statement and create a vision statement.

these measures address issues considered by the task force, and incorporate the key system design factors. For example, one measure, the percentage of the low-income population that is within a ¼-mile walk access to transit, will be used to assess how well Metro's products and services are promoting social equity.

> The plan includes Metro's updated mission statement:
> *Provide the best possible public transportation services and improve regional mobility and quality of life in King County.*

Metro incorporated a number of performance measures into the new Service Guidelines that are used to determine target service levels, evaluate performance, and design service. As an example, Metro uses two productivity measures, rides per hour from the time a bus leaves the base until it returns, and total passenger-miles per mile the bus travels, to identify routes as candidates for addition, reduction, or restructuring of service.

Metro also incorporated performance measures into its business plan, which guides near-term actions.

Metro will provide annual reports on the Service Guidelines and biennial reports on the Strategic Plan performance measures to the Regional Transit Committee. Metro also produces annual reports on route productivity and peer comparisons as well as a comprehensive Annual Management Report. The format for the 2010 route productivity report, completed in September 2011, was revised to reflect the new Service Guidelines. The 2010 Annual Management Report produced this year also was revised to place more emphasis on performance trends and to include some peer comparisons. (Peer comparison data is drawn from the FTA's National Transit Database, and typically is not available until at least a year after it is collected.)

Metro also created new webpages that display charts and data on performance. These are updated monthly or annually, as data becomes available.

Congestion reduction charge and sustainable funding

As a result of the task force's work and the County's commitment to comply with its recommendations, the Washington legislature authorized King County to adopt a temporary, $20 Congestion Reduction Charge (CRC) to help fund transit. The County adopted the CRC in August, helping Metro sustain service for the next two years. The emergence of a broad coalition of community and business leaders who advocated for transit, as well as strong grassroots support, were key to adoption of the CRC.

As the result of numerous favorable trends, such as lower-than-expected expenses and stronger fare revenue as ridership rebounds, Metro's 2012-2013 budget shows a positive trend. However, after the Congestion Reduction Charge expires in mid-2014, Metro will still face a sizeable structural deficit that threatens current service and prevents the expansion of service to meet the county's growing needs. Other risks exist as well, such as potential cuts in federal funding.

Responding to the task force recommendation to seek sustainable funding, Metro and the County are monitoring and participating in the Connecting Washington Task Force that was formed by Gov. Chris Gregoire to recommend a 10-year investment and funding plan for the state's transportation system. Deputy Executive Fred Jarrett represents King County.

Elimination of the Ride Free Area

The CRC legislation also calls for elimination of the Ride Free Area in downtown Seattle—prompted in part by the task force's questions about its costs. Metro is in the process of planning this major change, and will provide its plan to the County Council in May 2012. Metro estimates that elimination of the Ride Free Area could generate as much as $3 million annually in new fare revenue. It will also make riding Metro simpler as passengers will always pay as they enter. Metro is working with county and city health and human service agencies to identify ways to reduce the impact on people in downtown Seattle who have very limited means.

Transit incentive program

Metro is also developing a transit incentive program, another requirement of the CRC legislation. This program will offer people eight free bus tickets per household annually when they renew a vehicle license. They may either use the tickets or donate them to Metro's human services ticket program.

Making the transit system more productive

Adoption of the CRC gave Metro an opportunity to use its new strategic plan and service guidelines to revise the transit system over the next two years to get more people where they want to go, more comfortably and reliably.

The adopted CRC legislation provides direction for this effort. It requires Metro to reduce at least 100,000 annual service hours from bus routes with relatively low productivity and reinvest those hours to meet more pressing transit needs, consistent with Metro's newly adopted service guidelines. Although the reduction or elimination of routes will create inconveniences for some riders, the guidelines will lead to reinvestments that benefit more riders and improve key performance metrics such as on-time performance and number of passengers carried per hour the bus operates.

Priority for reinvestment will be given to improving service quality on corridors that have heavy demand. The hours will be reinvested

to relieve overcrowding, improve on-time performance, or address transit needs on currently underserved corridors. The legislation also specifies that routes which see ridership increases as a result of highway tolling will be candidates for added service.

Consistent with the task force's advice that Metro explore alternative service delivery models, the legislation also directs Metro to shift at least 5,000 and up to 20,000 hours of service to alternatives that meet local needs at lower operating cost (also referred to as "right-sized services"). These alternatives are to be focused in east and south King County communities along the urban growth boundary, next to rural areas. The alternatives might include flexible Dial-a-Ride Transit (DART), community vans, and contracted service.

Metro plans to make service improvements following this guidance at each of its three scheduled service change periods in 2012:

- In February, Metro will convert three whole or partial routes to DART service.
- For June, the County Executive has proposed an ordinance for County Council action by January 2012 that would delete or reduce approximately 40,000 hours from routes that do not meet the productivity standards in the new service guidelines. These hours would be reinvested in heavily used routes to relieve overcrowding or improve on-time performance and to address transit needs in underserved areas of the county.
- For September, Metro has begun an extensive, two-part outreach process to involve the public in developing proposals for restructuring service in several areas in conjunction with the start of the RapidRide C and D lines. Metro's planners are proposing to reduce low-performing routes and reinvest the hours in higher performing routes, in many cases to better integrate with the higher frequency RapidRide corridors as well as to improve the transit network. The Executive will be forwarding final proposals to the County Council in early spring 2012.

Reporting

Metro will be reporting on all of these legislated programs over the next three years, creating opportunities for public scrutiny. Reports and the dates they are due to the Regional Transit Committee in 2012 are:

- Baseline annual service guidelines report – March 31
- Potential proposed changes to the strategic plan and guidelines – April 30
- Ride Free Area elimination plan – May
- Five-year implementation plan for alternative services, including a report on alternative service best practices, costs and benefits, constraints to implementation, and timeline – June 15
- Report on preliminary results of the methodology for adding service – October 31

Controlling costs and increasing revenue

Metro has taken numerous actions to control costs and increase revenue, building on the nine-point plan adopted with the 2010-2011 budget and cost-cutting labor agreements negotiated in 2010. Metro has acted on recommendations of a performance audit of conducted in 2009, adjusted fares and achieved an all-time high farebox recovery rate, and incorporated efficiency reductions into its 2012-2013 budget.

Performance audit

By the end of this year, Metro will have substantially completed its two-year program of follow-up work related to the recommendations of the 2009 Performance Audit of Transit. Changes resulting from the audit have resulted in $100 million in one-time reductions of reserves and have yielded approximately $20 million in ongoing annual savings.

Accomplishments include:

- Systematically adjusted bus schedules to be tighter and more efficient, resulting in annual savings of approximately $12 million. Metro's scheduling-efficiency measure now meets the auditor's recommended target. Unfortunately, tightening of schedules has caused on-time performance to decline by 4 to 5 percent. In 2012, Metro will reinvest service hours from relatively unproductive routes to improve on-time performance on routes that are running late beyond the thresholds in the new service guidelines.
- Eliminated 125 "back-up" operator positions and began using part-time or overtime drivers to fill more absences, saving approximately $1.45 million annually.
- Improved the productivity of the Access paratransit service, resulting in ongoing savings estimated at $1.5 million per year.
- Expanded the Community Access Transportation (CAT) program by 25 percent in 2009, yielding $3.6 million in savings.
- Extended the vehicle maintenance inspection interval for buses, saving $450,000 per year, and established systemwide productivity standards and performance measures.
- Enhanced and expanded the use of planning to increase efficiency and revenue generation. Metro completed an updated financial planning model, an economic model for vehicle replacement decisions, a trolley-replacement study, a strategic plan for Access, and a plan to adjust paratransit service and fares to match ADA minimums. Metro also incorporated facility master planning into the planning process and developed tools to monitor vehicle maintenance work.
- Adjusted fares and fare policies to increase revenue, including increasing the base fare by $.25 in January 2011 and adjusting senior/disabled fares in 2010 and the youth fare in 2011. Metro included fare policy goals in the new strategic plan, updated the Council-approved financial policies, reduced the Revenue

Fleet Replacement Fund balance, and did an extensive analysis of the cost of the downtown Seattle Ride Free Area.

Farebox recovery rate

The January 2011 fare increase was the fourth adjustment in four years—a total $1 increase (80 percent). Metro's farebox recovery rate for 2011 will be 28 percent and the ratio of operating revenue to operating expense (OR/OE) will be 30 percent for 2011—both all-time highs.

2012-2013 budget efficiencies

Metro incorporated efficiency reductions into its 2012-2013 budget that will save more than $5 million. New efficiency measures include reorganizing workgroups and reclassifying positions (eliminating 21 staff positions, including several management positions); making efficiency improvements in vehicle maintenance and in the processing of work orders at bases; planned closure in 2013 of the Westlake Pass Sales office; and a new suite of customer information products that will result in operating efficiencies.

Lower-than-expected employee health care costs will save Metro about $24 million in the 2012-2013 biennium.

Public transparency and accountability

A theme in the task force report is that Metro must be a transparent, accountable organization. In 2010 and 2011, Metro created or enhanced the following webpages on Metro Online that provide information about performance, finances, and plans:

- Monthly reporting measures: http://metro.kingcounty.gov/am/reports/monthly-measures/
- Annual reporting measures: http://metro.kingcounty.gov/am/reports/annual-measures/
- Budget: http://metro.kingcounty.gov/am/budget/
- Strategic plan and service guidelines: http://metro.kingcounty.gov/planning/
- General manager's newsletter: http://metro.kingcounty.gov/am/generalmanager.html
- Reports: http://metro.kingcounty.gov/am/reports/reports.html
- Financial stability and sustainability: http://metro.kingcounty.gov/am/future/
- Proposed service changes: http://metro.kingcounty.gov/up/sc/planning.html
- Have a say (opportunities for public comment on suggested service changes and other matters): www.kingcounty.gov/metro/haveasay

A new "Accountability Center," with a prominent link on the Metro Online home page, will make these pages easier to find. It will be launched in December 2011.

Metro also has been using its Transit Alerts e-mail notification system to provide information about Metro issues and plans. This system currently has more than 40,000 subscribers who choose to receive information about the bus routes they use as well as other topics. Nearly 10,000 people have signed up for a topic called "Metro Matters," which covers Metro plans, policies and service developments. The Transit Alerts system has been particularly useful during public outreach around potential service changes that Metro is developing to make the transit system more productive. Metro has sent information about suggested changes—and the guidelines they are based on—directly to people whose bus routes would be affected.

Another new communication channel is General Manager Kevin Desmond's e-newsletter, started in October 2010. Newsletters are sent once or twice a month, as topics arise, to community leaders. The newsletter is posted on Metro Online, where readers are invited to subscribe. Topics addressed in 2010 and 2011 included the Regional Transit Task Force, Metro's budget, cost-cutting and other efforts to attain financial sustainability, the new strategic plan, and preparations for adverse weather operations.

King County METRO
We'll Get You There

Department of Transportation - Metro Transit Division
King Street Center, KSC-TR-0415
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206-553-3000 TTY Relay: 711
www.kingcounty.gov/metro

Alternative Formats Available
206-263-5277 TTY Relay: 711

LETTER FROM THE GENERAL MANAGER

Dear Friends,

I am pleased to present the *King County Metro Strategic Plan for Public Transportation 2011-2021*. This is the latest in a series of visionary plans Metro has used to imagine the future we want for public transportation, and then achieve it.

Metro's last major strategic planning effort resulted in the *2002-2007 Metro Six-Year Development Plan*, which had updates in 2004, 2007, and 2009. At the time this earlier plan was written, communities and employment centers were growing around the county, and traffic congestion had become one of the region's foremost problems. The 2002 plan set the stage for Metro to enhance mobility by serving more people throughout the King County and by connecting to more destinations.

The 2002 plan led to a number of successful initiatives. Metro extended service to new locations and restructured several local transit networks to boost productivity and better match service with the destinations people wanted to reach. We helped launch a regional fare payment system, ORCA, making it easier for people to travel by bus, train, light rail and ferries throughout the region. We worked to procure hybrid articulated buses so we could carry more passengers while reducing emissions. We attracted new riders by making buses and bus stops more accessible, developing park-and-ride facilities, and expanding employee commute programs. And we took Metro service to a higher level by launching RapidRide, a new generation of service designed to keep people moving throughout the day on heavily used corridors. Metro accomplished all this and more despite two financial downturns that constrained our ability to grow.

People responded positively to the changes we made. Metro set ridership records in three consecutive years, culminating with 118 million rides in 2008 and outpacing growth in jobs, population, and vehicle miles traveled in King County. As a result of our successes, public transportation has become a more robust and better-integrated part of the Puget Sound region's transportation system.

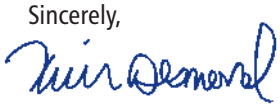
Now that we have reached this stage, what challenges does our new strategic plan address? Many of the old ones, like congestion, climate change, and regional growth, are still with us. The region's *Transportation 2040* action plan calls for an ambitious expansion of public transportation to accommodate the large population and job increases expected in King County. And we face the urgent need to craft a new funding structure for public transportation. Metro's current revenue sources cannot supply the funds we need to meet our region's expectations. I am proud of Metro's record of delivering promised services even when funding has fallen far short of expectations over the past decade, but we have exhausted many one-time solutions and cost-cutting measures that we have used to get by. A new funding structure is imperative if we are to fully realize our vision for public transportation.

As we crafted a plan to take on these and other challenges, two recent planning processes gave us invaluable guidance. The *King County Strategic Plan 2011-2014* was developed under the leadership of County Executive Dow Constantine in collaboration with King County Council members and other elected officials and input from thousands of residents and County employees. The County plan's eight goals are the framework for Metro's plan.

Second, the Regional Transit Task Force was formed in 2010 to consider a new policy framework for Metro as we face both growing demand for transit services and a worsening financial outlook. The task force members represented many areas of the county and points of view, but they came together on consensus proposals for Metro. While these recommendations are still under consideration, the themes that emerged in this group's discussions—emphasizing productivity, ensuring that bus services are available for those most dependent on transit, and providing value to the diverse cities and communities throughout the county—influenced our plan in many ways.

Thanks to all the groundbreaking work and forward-looking thinking that has contributed to this strategic plan, I am confident that Metro can continue our tradition of prioritizing the customer and creating the future envisioned for public transportation in King County. We will be reporting on our performance in publications and on our website; I invite you to follow our progress.

Sincerely,



Kevin Desmond, General Manager
King County Metro Transit

EXECUTIVE SUMMARY

Public transportation in the Puget Sound region: today and tomorrow

Public transportation is vitally important to the Puget Sound region. It provides connections to jobs, schools, and other destinations, and enables those with limited mobility options to travel. Public transportation enhances regional economic vitality by freeing up roadway capacity and improving the mobility of people, goods, and services. It saves the region time and money. It helps accommodate regional growth by making better use of the region's existing infrastructure and it benefits the environment. Public transportation improves the quality of life for residents and visitors to the Puget Sound region.

King County Metro Transit, King County's public transportation provider, is committed to serving the region with the highest quality products and services possible as it works towards a vision of a sustainable public transportation that helps our region thrive.

This is Metro's vision:

Metro provides safe, efficient and reliable public transportation that people find easy to use. The agency offers a cost-effective mix of products and services, tailored to specific market needs. Its fixed-route bus system meets most public transportation needs, particularly in areas of concentrated economic activity or urban development and along the corridors that link them. Metro also offers alternative public transportation options for people who cannot use the fixed-route system. No matter what community they live in or whether they have special needs because of age, disability or income, people can use public transportation throughout King County.

Expanded and improved products and services make public transportation attractive to a growing segment of the population, and public transportation ridership and use increases as a result. With more and more people switching from single-occupant cars to buses, carpools and other alternative transportation options, roadways are more efficient—carrying more people and goods and moving them faster. Less land is paved for parking, and the region can reduce its reliance on highway expansion.

Public transportation is contributing to a better quality of life in the Puget Sound region. The local economy is thriving because transit has kept the region moving. Public health is improving because people are walking, biking, and using transit more. Emissions from transportation have leveled off and are starting to decline, and Metro is using new technologies to reduce its energy consumption.

The public is engaged with Metro—informed about its plans and performance and a big part of the decision-making process. Customers find the public transportation experience to be positive at every stage, from trip planning to arrival at a destination. People understand how to use Metro's products and services, and are happy with the variety of transportation options available.

Metro has quality employees who enjoy their jobs. Their satisfaction shows in their good work ethic and responsiveness to customers.

Metro is financially stable—able to sustain its products and services in both the short and long term by emphasizing productivity and efficiency and by controlling costs. Metro receives sufficient funding to fulfill the public's expectations for service and the region's vision for a robust public transportation system.

A pathway to the vision

To guide Metro towards its vision, this plan includes goals, objectives and strategies, which build on the work of two major regional planning processes:

King County's strategic plan: In 2010, King County adopted its first countywide strategic plan, *King County Strategic Plan 2010–2014: Working Together for One King County*. The plan is a key tool in Executive Dow Constantine's work to reform county government by focusing on customer service, partnerships, and ways to bring down the cost of government. Metro's strategic plan will guide work on portions of the countywide strategic plan that involve public transportation.

Regional Transit Task Force: Metro used input from the Regional Transit Task Force in the creation of this plan. The task force was a groundbreaking countywide effort to recommend a new policy framework for transit in King County that took place in 2010. Metro drew on the task force's recommendations as a way to ensure that diverse points of view are well-represented in the strategic plan.

Navigating the road ahead

Metro faces complex—and often competing—challenges. The Puget Sound region is growing and evolving. Changes in land use and the region's population are having an impact on where public transportation should be located, how service is provided, and who uses that service. Major projects that change the footprint of the transportation system have an impact on public transportation and require regional collaboration during planning and construction and upon completion. Public transportation is called upon to help mitigate climate change and meet diverse customer needs. All the while, Metro's funding structure limits its ability to respond to these challenges.

What's new in the 2013 update?

This update incorporates the following changes adopted by the County Council in 2012 and 2013:

- Three new strategies:
  - 2.1.4, provide alternatives to fixed-route transit service
  - 6.1.2, create a long-range transit plan in collaboration with local planning
  - 6.2.4, provide alternative service in the context of financial challenges
- Updates to strategy 2.1.2 reflecting revised requirements for complying with Title VI of the Civil Rights Act
- Several revisions and additions to performance measures
- Revisions of service guidelines to better link transit service and local development and to clarify several technical matters

Metro's strategic plan is intended to address these challenges and chart a path to the future. Metro has formulated eight goals with 17 associated objectives. Each objective has an associated outcome that is related to an aspect of Metro's vision. Metro also has established 36 strategies that are intended to move Metro closer to its objectives, and ultimately to its vision. The table on pages iii-vii summarizes these elements of the plan.

Ensuring success

Metro will monitor its performance and measure its success in achieving the plan's strategies, objectives, goals, and vision. Metro will measure its objectives through outcomes and its strategies through associated measures. It will compare the performance of its system with that of peer transit agencies. Using this monitoring system, Metro will update and adjust this plan periodically as conditions warrant to ensure that it is moving along the right path.

TABLE 1: **Summary table of Metro strategic plan elements**

OBJECTIVE	STRATEGIES	MEASURES
Goal 1: Safety. Support safe communities.		
Keep people safe and secure. Outcome: Metro's services and facilities are safe and secure.	Promote safety and security in public transportation operations and facilities. Plan for and execute regional emergency-response and homeland security efforts.	• Preventable accidents per million miles • Operator and passenger incidents and assaults • Customer satisfaction regarding safety and security • Effectiveness of emergency responses
Goal 2: Human Potential. Provide equitable opportunities for people from all areas of King County to access the public transportation system.		
Provide public transportation products and services that add value throughout King County and that facilitate access to jobs, education and other destinations. Outcome: More people throughout King County have access to public transportation products and services.	Design and offer a variety of public transportation products and services appropriate to different markets and mobility needs. Provide travel opportunities and supporting amenities for historically disadvantaged populations, such as low-income people, students, youth, seniors, people of color, people with disabilities, and others with limited transportation options. Provide products and services that are designed to provide geographic value in all parts of King County. Seek to provide to the general public an extensive range of transportation alternatives to regular fixed-route transit, such as ridesharing and other alternative or "right-sized" services.	• Population with ¼-mile walk access to a transit stop or 2-mile drive to a park-and-ride, reported separately • Number of jobs with ¼-mile walk access to a transit stop or 2-mile drive to a park-and-ride, reported separately • Number of students at universities and community colleges that are within a ¼-mile walk of transit • Percentage of households in low-income census tracts within a quarter-mile walk of a transit stop or a 2-mile drive to a park-and-ride, reported separately • Percentage of households in minority census tracts within a quarter-mile walk of a transit stop or a 2-mile drive to a park-and-ride, reported separately • Accessible bus stops • Transit mode share by market • Student and reduced-fare permits and usage • Access applicants who undertake fixed-route travel training • Access boardings/number of trips provided by the Community Access Transportation (CAT) program • Access registrants • Requested Access trips compared to those provided • Vanpool boardings

OBJECTIVE	STRATEGIES	MEASURES
Goal 3: Economic Growth and Built Environment. Encourage vibrant, economically thriving and sustainable communities.		
Support a strong, diverse, sustainable economy. Outcome: Public transportation products and services are available throughout King County and are well-utilized in centers and areas of concentrated economic activity.	Through investments and partnerships with regional organizations, local jurisdictions and the private sector, provide alternatives to driving alone that connect people to jobs, education and other destinations essential to King County's economic vitality. Partner with employers to make public transportation products and services more affordable and convenient for employees.	• Transit rides per capita • Park-and-ride capacity and utilization (individually and systemwide) • Employees at CTR sites sharing non-drive-alone transportation modes during peak commute hours • Employer-sponsored passes and usage • All public transportation ridership in King County (rail, bus, Paratransit, Rideshare) • Ridership in population/business centers • HOV lane passenger miles
Address the growing need for transportation services and facilities throughout the county. Outcome: More people have access to and regularly use public transportation products and services in King County.	Expand services to accommodate the region's growing population and serve new transit markets. Coordinate and develop services and facilities with other providers to create an integrated and efficient regional transportation system. Work with transit partners, WSDOT and others to manage park-and-ride capacity needs.	
Support compact, healthy communities. Outcome: More people regularly use public transportation products and services along corridors with compact development.	Encourage land uses, policies, and development that lead to communities that transit can serve efficiently and effectively. Support bicycle and pedestrian access to jobs, services, and the transit system.	
Support economic development by using existing transportation infrastructure efficiently and effectively. Outcome: Regional investments in major highway capacity projects and parking requirements are complemented by high transit service levels in congested corridors and centers.	Serve centers and other areas of concentrated activity, consistent with *Transportation 2040*.	

OBJECTIVE	STRATEGIES	MEASURES
Goal 4: Environmental Sustainability. Safeguard and enhance King County's natural resources and environment.		
Help reduce greenhouse-gas emissions in the region. Outcome: People drive single-occupant vehicles less.	Increase the proportion of travel in King County that is provided by public transportation products and services.	• Per capita vehicle miles traveled (VMT)* • Transit mode share • Average miles per gallon of the Metro bus fleet • Energy use at Metro facilities/kWh and natural gas used in facilities normalized by area and temperature • Total facility energy use • Vehicle energy (diesel, gasoline, kWh) normalized by miles • Vehicle fuel (diesel, gasoline, kWh) normalized by boardings
Minimize Metro's environmental footprint. Outcome: Metro's environmental footprint is reduced (normalized against service growth).	Operate vehicles and adopt technology that has the least impact on the environment and maximizes long-term sustainability. Incorporate sustainable design, construction, operating and maintenance practices.	
Goal 5: Service Excellence. Establish a culture of customer service and deliver services that are responsive to community needs.		
Improve satisfaction with Metro's products and services and the way they are delivered. Outcome: People are more satisfied with Metro's products and services.	Provide service that is easy to understand and use. Emphasize customer service in transit operations and workforce training. Improve transit speed and reliability.	• Customer satisfaction • Customer complaints per boarding • On-time performance by time of day • Crowding • Utilization of Metro web tools and alerts
Improve public awareness of Metro products and services. Outcome: People understand how to use Metro's products and services and use them more often.	Use available tools, new technologies, and new methods to improve communication with customers. Promote Metro's products and services to existing and potential customers.	

**Technical amendment: Placement of this measure corrects an error in the version approved by the King County Council.*

OBJECTIVE	STRATEGIES	MEASURES
Goal 6: Financial Stewardship. Exercise sound financial management and build Metro's long term sustainability.		
Emphasize planning and delivery of productive service. Outcome: Service productivity improves.	Manage the transit system through service guidelines and performance measures. Establish and maintain a long-range transit service and capital plan developed in collaboration with local comprehensive and regional long-term transportation planning.	• Boardings per revenue hour • Cost per boarding • Cost per hour • Service hours operated • Asset condition assessment • Fare revenues • Farebox recovery • Service hours and service hour change per route • Ridership and ridership change per route • Boardings per vehicle hour • Passenger miles per vehicle mile • Passenger miles per revenue mile • ORCA use • Cost per vehicle mile • Cost per vanpool boarding • Cost per Access boarding
Control costs. Outcome: Metro's costs grow at or below the rate of inflation.	Continually explore and implement cost efficiencies including operational and administrative efficiencies. Provide and maintain capital assets to support efficient and effective service delivery. Develop and implement alternative public transportation services and delivery strategies. Provide alternative or "right-sized" services in the context of overall system financial health and the need to reduce, maintain or expand the system.	
Seek to establish a sustainable funding structure to support short- and long-term public transportation needs. Outcome: Adequate funding to support King County's short- and long-term public transportation needs.	Secure long-term stable funding. Establish fare structures and fare levels that are simple to understand, aligned with other service providers, and meet revenue targets established by Metro's fund management policies. Establish fund management policies that ensure stability through a variety of economic conditions.	

OBJECTIVE	STRATEGIES	MEASURES
Goal 7: Public Engagement and Transparency. Promote robust public engagement that informs, involves, and empowers people and communities.		
Empower people to play an active role in shaping Metro's products and services. Outcome: The public plays a role and is engaged in the development of public transportation.	Engage the public in the planning process and improve customer outreach.	• Public participation rates* • Customer satisfaction regarding Metro's communications and reporting • Social media indicators • Conformance with King County policy on communications accessibility and translation to other languages
Increase customer and public access to understandable, accurate and transparent information. Outcome: Metro provides information that people use to access and comment on the planning process and reports.	Communicate service change concepts, the decision-making process, and public transportation information in language that is accessible and easy to understand. Explore innovative ways to report to and inform the public.	
Goal 8: Quality Workforce. Develop and empower Metro's most valuable asset, its employees.		
Attract and recruit quality employees. Outcome: Metro is satisfied with the quality of its workforce.	Market Metro as an employer of choice and cultivate a diverse and highly skilled applicant pool. Promote equity, social justice and transparency in hiring and recruiting activities.	• Demographics of Metro employees* • Employee job satisfaction • Promotion rate • Probationary pass rate
Empower and retain efficient, effective, and productive employees. Outcome: Metro employees are satisfied with their jobs and feel their work contributes to an improved quality of life in King County.	Build leadership and promote professional skills. Recognize employees for outstanding performance, excellent customer service, innovation and strategic thinking. Provide training opportunities that enable employees to reach their full potential.	

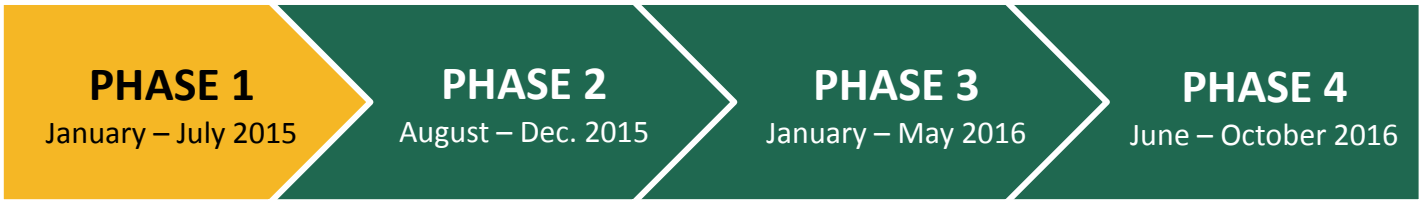
**Technical amendment: Placement of this measure corrects an error in the version approved by the King County Council.*

Long Range Plan Summary

Metro's long range plan will present a shared vision for a future public transportation system that gets people where they want to go and helps our region thrive. The plan will describe an integrated network of transportation options, the facilities and technology needed to support those services, and the financial requirements for building the system. It will be developed in close coordination with Sound Transit and other transportation agencies.

WHEN THE PLANNING PROCESS WILL TAKE PLACE

Over the next two years, Metro will work with transit riders, cities, community groups, and motorists to shape a long-range plan for meeting our region's growing and changing public transportation needs.



The long range planning process will take place over four phases. Currently, the planning process is in Phase 1 Discovery in which cities, community groups, businesses, transit riders and travelers of all types provide input to Metro about their goals and needs for public transportation through 2040.

- Agencies and local jurisdictions are educated about the planning process and invited to join the advisory committee.
- Key stakeholders are briefed about the planning process and invited to join the Community Advisory Group (CAG).
- Community representatives can find information about the project through online and print media and are invited to apply to join the CAG.
- General public finds information about the project online and in print, including information about how to provide input throughout the planning process.

WHAT IS IN THE PLAN

The plan will reflect four key themes:

CONNECTIONS	ACCOUNTABILITY	PARTNERSHIPS	ECONOMIC GROWTH

HOW TO GET INVOLVED

Metro invites you to join us in imagining a better future. Options for getting involved:

- Take the online survey
- Apply to be on the Community Advisory Group
- Sign up for notifications about events and project updates
  The website for Metro's long range public transportation plan is
  http://www.kcmetrovision.org/#connections

Metro's Current Activities

King County Metro plans for and provides a range of public transportation services across King County. Metro is guided by its Strategic Plan for Public Transportation 2011-2021 and associated service guidelines, which were adopted in July 2011 and updated in 2013.

This new planning framework was influenced by two major planning processes: the King County Strategic Plan and the Regional Transit Task Force (RTTF). The King County Strategic Plan 2011-2014, developed with input from all branches of County government as well as thousands of residents and County employees, provides the framework for Metro's Strategic Plan for Public Transportation. The RTTF, formed in 2010 and comprising members who represented different parts of the county and diverse interests, recommended a new approach to allocating transit service that was incorporated into Metro's strategic plan and service guidelines.

The new planning framework emphasizes productivity, social equity (ensuring that bus services are available for those most dependent on transit), and geographic value (providing value to the diverse cities and communities throughout the county). Metro's strategic plan is consistent with the King County Comprehensive Plan, the Puget Sound Regional Council's Vision 2040 and Transportation 2040, and the Washington State Growth Management Act.

In the years since these planning documents were adopted, Metro has completed four service guidelines reports and the County has updated the service guidelines and adjusted service 10 times. Further refinements to the service guidelines, building on the lessons learned in the past three years, could help ensure that future transit investments reflect the intent of the RTTF's policy guidance. Toward this end, in 2015 a new Service Guidelines Task Force will further analyze how transit service is allocated and measured across the region. They will review and recommend changes in the following areas:

- How transit service performance is measured, and potential changes to reflect the varied purposes of different types of transit service
- How the goal of geographic value is included in the guidelines, and potential new approaches including minimum service standards
- How the goal of social equity is included in the guidelines, and potential new approaches
- Financial policies for the purchase of additional services within a municipality or among multiple municipalities
- Guidelines for alternative services implementation.

In June 2014, Metro launched its sixth line in the RapidRide bus rapid transit system. RapidRide operates along 62 corridor miles. Its characteristics include a unique fleet of 113 vehicles as well as corridor and system capital investments such as transit signal priority and improved passenger facilities. Ridership on RapidRide has consistently increased since implementation. Two lines have achieved over 70 percent ridership growth in less than five years of operation, exceeding the program's goal of 50-percent growth

in five years. In 2014, ridership on the RapidRide lines constituted nearly 15 percent of Metro's total weekday ridership, with more than 55,000 boardings each weekday. Total RapidRide ridership for 2014 was over 16.5 million.

In March 2016, Sound Transit is scheduled to open the University Link (U-Link) Extension. Testing will begin prior to implementation, during the fall 2015 service change. The U-Link Extension will add two stations—one in Capitol Hill at Broadway and East John Street, and one at the University of Washington at Husky Stadium. As part of the process of integrating this new asset into the region's transportation system, Metro and Sound Transit will consider changes to service in one or both of the areas surrounding the stations. Metro and Sound Transit are conducting an integrated planning process for changes and are engaging many internal and external stakeholders, including the University of Washington community, the City of Seattle, Seattle Children's, and the general public.

In fall 2013, Metro launched its first Alternative Services project with the Snoqualmie Valley Shuttle, providing service between North Bend and Duvall. The shuttle is funded through a public/private partnership between Metro and the Snoqualmie Tribe, and is operated by a local nonprofit organization, Snoqualmie Valley Transportation. Metro's 2015-2016 budget appropriates $12 million over two years for an expansion of alternative services. Metro is developing a new suite of alternative service products that are best suited to areas with lower density or dispersed origins and destinations—characteristics that make it challenging to provide productive fixed-route service.

Metro's 2013 strategic plan update added Strategy 6.1.2, which explicitly calls for the development and maintenance of a long-range plan. The long-range planning process, which launched in January 2015, will define Metro's role in enhancing the public's mobility, build on existing policies, and garner regional support for public transportation across the county. Over the next two years, several ongoing and upcoming planning efforts will be integrated into Metro's long range plan (Sound Transit's System Development Plan, PSRC's Transportation 2040 update, and comprehensive master plan updates). The long-range plan will describe future public transportation service, capital infrastructure, and financial requirements needed to maximize people's ability to get around while minimizing the total costs.

Metro is undertaking an Access to Transit Study to identify opportunities to improve access to transit, with a focus on transit access infrastructure. In this study, Metro explores the role played by infrastructure such as park-and-rides and pedestrian and bicycling facilities in providing and enhancing access to transit, as well as industry best practices and innovative approaches to improving access to transit. Metro has also been actively participating in the regional Transit Access Working Group facilitated by PSRC.

In 2013, the Low-Income Fare Options Advisory Committee submitted a report to the King County Council recommending that a low-income fare program be created. The King County Council adopted a fare ordinance incorporating a low-income fare, and Metro will introduce this fare in March 2015. Fares will increase by 25 cents per trip in all current Metro fare categories for all regularly scheduled transit services, fares will increase by $0.50 per trip for Access paratransit service, and Metro will offer the new

reduced fare of $1.50 per trip for qualifying riders who have low incomes. This new fare will be available only through use of an ORCA fare card.

In fall 2014, Metro and Sound Transit produced the Transit Integration Report, which identifies opportunities to further integrate planning and operations of the two agencies and create efficiency dividends to better serve the needs of riders. The report focused on short- and long-term planning, rider engagement and information, capital facilities, and operational efficiencies. Metro and Sound Transit will continue integration efforts and will produce an annual integration report with partner agencies.

Metro is also participating in a five-agency group with the City of Seattle, Community Transit, Sound Transit, and the Washington State Department of Transportation to address the significant infrastructure, development, and transit operations changes coming to downtown Seattle over the next 10 years.

Over the next two years, Metro will participate in many regional planning efforts. For example, Metro is actively engaged in identifying and implementing transit components of projects of regional significance such as the Alaskan Way Viaduct Replacement Project, Seattle's Seawall Replacement and Waterfront Development project, the SR-520 Bridge Replacement and HOV Project, and the I-405 Eastside Express toll lane project and other corridors that include pricing strategies to fund and manage facilities. Metro will look for integration opportunities with the City of Seattle's First Hill Streetcar project and other potential streetcar expansion projects. Metro also works closely with Sound Transit to facilitate bus connections to Sound Transit Link and commuter rail service. This coordination includes planning activities related to ST2 Link extensions.

Metro Transit's finances: an overview

Metro relies on sales tax for about half of its operating funds, and the economic slump has caused a drop in revenue to support bus service. Since 2009 we have avoided systemwide service reductions by taking a range of actions to cut costs, boost revenue, and improve operational efficiency. However, after temporary funding runs out in mid-2014, Metro will not have the resources to maintain the current level of service—even with recent economic growth in King County.

This paper provides context about Metro's financial situation. It explains where Metro's funding comes from, how the money is spent, what we've done to preserve service so far, and the process of planning service reductions in case no new funding becomes available.

Where does Metro's funding come from?

Metro's primary revenue source is local sales tax. Washington State law allows for a local sales tax of up to 0.9 percent for transit agencies. This tax must be approved by the voters.

Note: This paper uses 2012 data, the most recent audited data available, unless otherwise noted.

Before 2000, Metro relied on the state's motor vehicle excise tax (MVET) for nearly one-third of its revenue. In 2000, following voter approval of Initiative 695, the state legislature eliminated the MVET for transit agencies. Today, Metro receives less than 1 percent of its funding from the state.

After the MVET was eliminated, King County voters approved a 0.2 percent sales tax increase, from 0.6 percent to 0.8 percent, replacing a portion of the lost MVET revenue. The remainder of the lost revenue was offset by administrative cuts and a fare increase. In 2006, voters approved an additional 0.1 percent sales tax increase for the Transit Now program, which was intended to expand the system and create RapidRide. As a result of this increase, Metro is one of a handful of transit agencies in the state that are at the maximum allowable 0.9 percent sales tax level.

Metro's increased reliance on sales tax made our ability to provide bus service more dependent on economic conditions. Sales tax is volatile; receipts can vary substantially with the ups and downs of the region's economy.

As shown in Fig. 1, other significant revenue sources for Metro are fares and federal grants. Grants can also fluctuate significantly depending on reimbursement activities and regional guidelines for project selections.

Metro operates Sound Transit's Link light rail and Regional Express Bus service, and receives contract payments from Sound Transit to cover the operating costs.

Smaller revenue sources include property tax and the temporary Congestion Reduction Charge, which expires in June 2014.

Total Metro revenue in 2012 was approximately $837 million, of which sales tax was the source of nearly 50 percent.

Fig. 1
2012 Revenue by Source
Total: Approx. $837 million

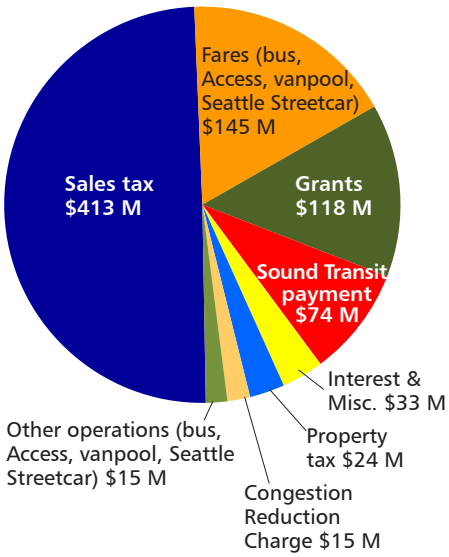


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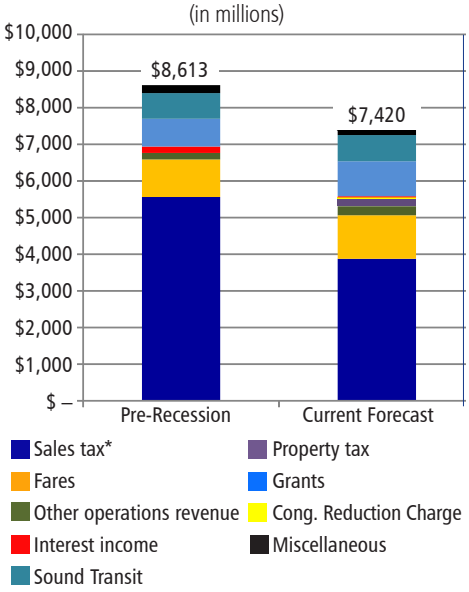
Fig. 2
Metro Revenue 2009-2017
(in millions)



*Based on August 2013 OEFA forecast

Fig. 3
2012 Revenue Distribution by Subfund
(M=million)

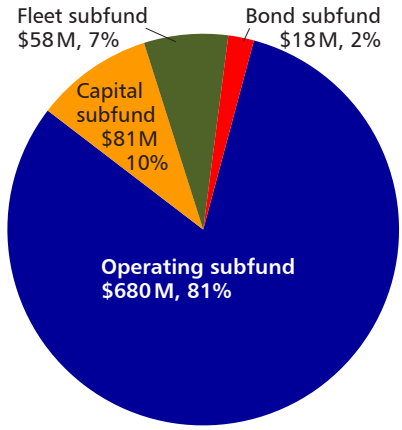
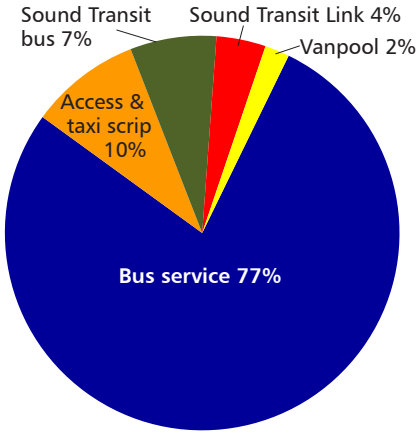


Fig. 4
2012 Operating Expense by Program



Metro's revenues from various sources have changed as a result of the recession (see Fig. 2). Sales tax receipts fell from $442 million in 2007 to $375 million in 2010, and have not yet returned to pre-recession levels. Just before the economic downturn, Metro had embarked on the Transit Now service expansion program. Sales tax was projected to make up 64 percent of this program's funding between 2009 and 2017. As a result of the recession, sales tax contributions declined to 52 percent.

The proportion of revenue from fares grew during this period as fares were increased four times; Metro's financial plan assumes future fare increases. Revenue from grants fluctuated based on the timing of competitive awards from the Federal Transit Administration.

How are Metro's funds spent?

Metro's management follows adopted fund management policies which ensure that sufficient resources are set aside to operate services, replace the bus fleet, maintain facilities in a state of good repair, and pay for debt service. The budget is separated into subfunds that have designated purposes: fleet replacement, bond payments, capital infrastructure, and day-to-day operations.

As shown in Fig. 3, the largest share (81 percent) of Metro's funds are disbursed for operations, including bus, paratransit, vanpool and contracted service. The balance is used for the capital program (10 percent), fleet replacement (7 percent), and debt service (2 percent). In total, Metro spends about $777 million per year based on the current estimates for 2009-2017.

Metro's operating budget: the largest share of expenditures

In 2012, Metro's total annual operating cost was approximately $635 million. The majority of the funds went toward operating and maintaining bus service and related facilities. Metro provided about 3.5 million annual hours of bus service. In addition, Metro operates Sound Transit Regional Express Bus and Link service, for which we are reimbursed.

The operating budget provides for labor, fuel, and maintenance of about 1,400 buses, 1,300 vanpool vans, 340 Access vehicles, and 570 support vehicles. It supports the maintenance of 130 park-and-ride lots and about 8,500 bus stops, including 1,900 with shelters. This budget also covers maintenance and operation of the Downtown Seattle Transit Tunnel, seven transit bases and other facilities.

Fig. 4 shows the percentages of Metro's 2012 operating costs by major program. The largest expenditure, 77 percent, is for Metro's fixed-route bus service, which cost nearly $500 million in 2012.

Factors that influence Metro's bus operating costs include inflation and a transition to larger vehicles. By moving to larger vehicles, Metro has increased seat capacity by 12 percent since 2007; this extra capacity is helping Metro serve growing ridership. Another factor is Metro's contracted service with Sound Transit Link light rail, which began in 2009 and grew to more than $30 million in 2013. Sound Transit (Link light rail and Regional Express Bus service) now accounts for 11 percent of Metro's operating budget, up from 7 percent in 2007.

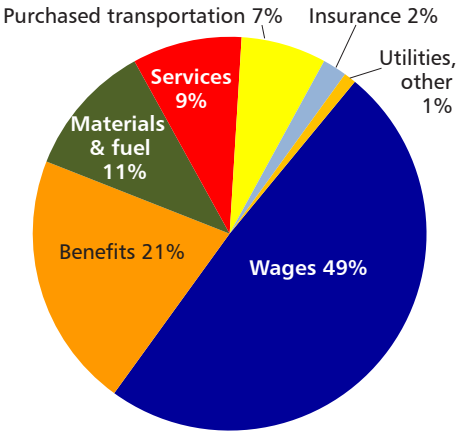
Metro also operates Access paratransit service for people with disabilities who are unable to use regular buses. Paratransit service is required by the Americans with Disabilities Act. Its operating cost per ride is much higher than regular bus service.

Other services in the operating program are dial-a-ride transit (DART), Seattle Streetcar, and the vanpool and rideshare programs. Metro operates one of the largest publicly owned vanpool programs in the nation.

Fig. 5 shows the percentage of Metro's operating budget that goes toward wages and benefits, materials and fuel, services, and purchased transportation. Over two-thirds of Metro's operating expenditures are for wages and benefits for approximately 4,500 employees, including 2,700 part- and full-time bus drivers. Changes in benefit programs and labor agreements have saved Metro $36 million since 2009 and are forecast to save $17 million annually (in wages) in the future.

Services include items such as the Metro Transit Police provided under contract by the King County Sheriff, security guards, and central government services and overhead functions. Purchased transportation includes services such as Access paratransit and DART.

Fig. 5
Operating Expense by Account, 2012



How Metro's operations measure up

Metro's and King County's strategic plans emphasize performance and accountability. Metro uses a number of industry performance measures to evaluate bus service productivity and cost efficiency, including:

- Cost per hour
- Total ridership (measured by number of annual boardings)
- Boardings per hour
- Cost per mile
- Cost per rider
- Farebox recovery (percent of bus operating costs recovered through fares)

Average cost per hour is one measure Metro uses to monitor how much is spent on operating bus service. Most of the total cost (about 70 percent) comes from the direct costs of putting buses on the road: wages and benefits for bus drivers, vehicle maintenance, fuel or power, and insurance. These costs vary directly with the operation of bus service.

In addition to direct costs, there are costs for support functions that are critical to the successful delivery of service. These include information technology, safety, and security; management and administrative services including human resources, payroll, accounting, budget, and planning; and maintenance of bases and passenger facilities. Because Metro is part of a large, general-purpose government, support is also provided by the county council and executive offices.

Fig. 6 illustrates all of these component costs and shows how the average cost per hour of providing Metro bus service has changed since 2007.

Fig. 6
Metro Bus Operating Cost Per Hour

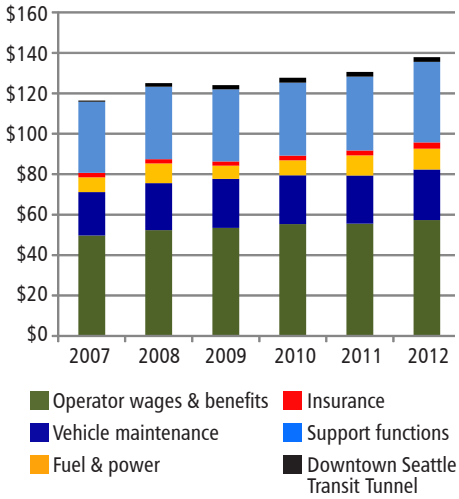


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Fig. 7
Metro Farebox Recovery Rate

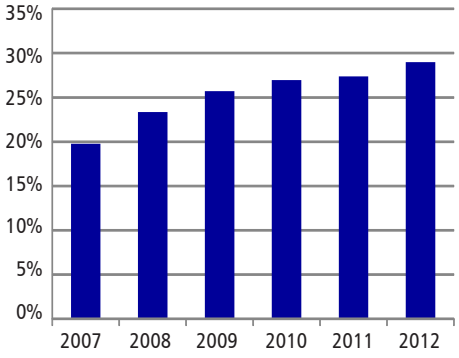


Fig. 8
Annual Boardings
(millions)

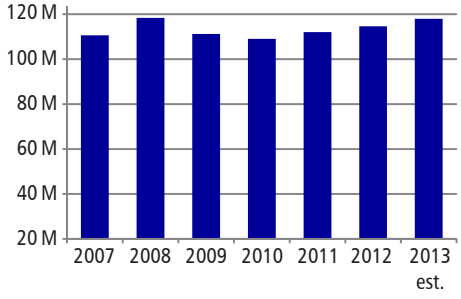
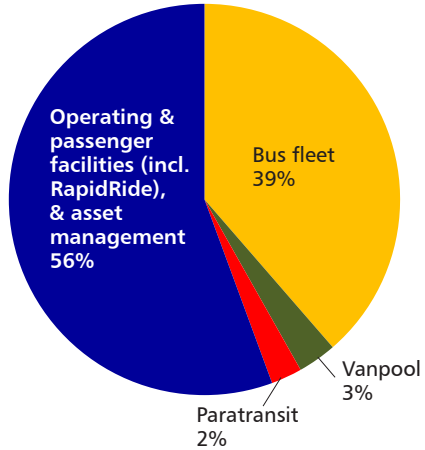


Fig. 9
Capital Project Expense by Category 2007-2013



Compared to its peers—the other 29 largest bus transit agencies in the United States—Metro ranked eighth highest in operating cost per hour in 2012, at around $136 per hour. The average cost per hour for the peer group was about $123. However, Metro ranked 19th for the average annual percentage growth in operating cost between 2007 and 2012. Compared to the peer group, Metro's operating cost per hour reflects relatively heavy reliance on large articulated coaches, which are more expensive than smaller coaches but provide operating efficiencies. A unique cost for Metro is the maintenance and operation of the Downtown Seattle Transit Tunnel, which supports efficient operation and quality service in the busy Seattle core.

On other performance measures, Metro's rank among its peers varied. Metro was 14th highest in operating cost per passenger mile at $.99. The peer group average is $.98 per passenger mile.

On cost recovery from fares, Metro ranked 13th among peers at about 29 percent, above the average cost recovery of 27.8 percent. Fig. 7 illustrates how Metro's farebox recovery as a percentage of operating costs has gone up in recent years. This is due in large part to four successive fare increases from 2008 through 2011 that led to the highest farebox recovery rate Metro has had.

In 2012, Metro ranked 10th in total ridership with around 115 million total boardings, and 15th in boardings per hour. Fig. 8 illustrates Metro's annual ridership from 2007 to 2012 and the 2013 estimated ridership, which is very close to the record ridership that occurred in 2008, before the recession.

On the measure of cost per rider, Metro ranked eighth at $4.25 per boarding; the peer average is $3.72. This performance measure varies among peer agencies depending on factors such as population density and land use, which contribute to trip length for passengers.

Metro's capital program

In addition to operating expenses, Metro spends money on its capital program for vehicles, facilities and technology systems.

As part of Metro's effort to manage during the recession, the capital program has been reduced since 2008. In 2009, we canceled projects to improve speed and reliability, bus layover space in downtown Seattle, a new maintenance facility for the Waterfront Streetcars, and trolley wire upgrades. We have also replaced fewer buses and shelters, delayed computer replacements, and reduced the scope of changes to the RapidRide corridor improvement projects, lighting upgrades at park-and-rides, and accessibility improvements at bus zones.

Fig. 9 illustrates where Metro spent its capital dollars between 2007 and 2013. In recent years, the capital program has been focused on replacing aging infrastructure and elements of the fleet, such as the electric trolley buses. A significant amount of capital program funding comes from federal grants. Large amounts of grant funding were spent on the RapidRide program in 2011 and 2012. In general, bus replacements have been scaled back to match the reduction in service that is currently projected, while bus life cycles have also been extended

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beyond federal minimums. The "other" category represents programs such as operating and passenger facilities, general asset maintenance, and RapidRide facilities. Much smaller amounts are typically spent on paratransit and vanpool capital needs.

Actions taken to reduce costs, boost revenue, and preserve bus service, 2009-2013

Ongoing productivity/efficiency actions – Saved $204 million ($93 million ongoing annual savings)

- Took efficiency actions recommended by 2009 Performance Audit of Transit, including changing bus schedules to reduce bus downtime.
- Negotiated agreements with employees that reduced the growth of pay through furloughs and pay freezes.
- Cut more than 100 staff positions that did not directly affect service.
- Eliminated 75,000 hours of less-used bus service and adopted new service guidelines as part of Metro's strategic plan.
- Deferred 350,000 hours of service expansion.

Revenue-related actions – Increased revenue by $145 million ($55 million ongoing annual revenue)

- Raised fares four times in four years, a total 80 percent increase, contributing to 29 percent farebox recovery rate in 2012.
- County Council used tools provided by the legislature, permanently allocating a portion of the property tax levy to Metro (while reducing other property taxes so taxpayers don't pay more), and adopting two-year Congestion Reduction Charge.
- Eliminated Ride Free area in downtown Seattle.

One-time actions (cash savings) to sustain service pending longer-term solutions – Saved $344 million

- Reduced the capital program
- Reduced the bus replacement reserve fund by $100 million, as recommended by the 2009 Performance Audit.
- Used half of the operating reserve fund to support service.
- Realized benefits from the County's employee health program.

Altogether, these actions have realized $798 million, including $93 million in ongoing annual cost reductions and $55 million in increased revenue.

Fig. 12

Summary of Actions and Results

Actions	Cumulative Total through 2013	Ongoing Annual Savings
I. Ongoing productivity/efficiency actions		
• Transit program efficiencies		
Scheduling efficiencies	$34 million	$13 million
Non-service and staff reductions	$55 million	$14 million
Other program efficiencies	$15 million	$ 5 million
• Bus service reductions	$23 million	$ 8 million
• Labor cost savings	$36 million	$17 million
• Service deferrals	$41 million	$36 million
II. Revenue-related actions		
• Fare increases	$145 million	$35 million
• Property tax	$66 million	$18 million
• Congestion Reduction Charge (temporary)	$39 million	
• Ride Free Area elimination		$ 2 million
III. One-time actions (cash savings)		
• Capital program cuts	$180 million	
• Fleet replacement reserves	$ 93 million	
• Operating reserves	$ 41 million	
• 2009 savings, i.e. hiring freeze	$ 20 million	
• Healthy Incentives program	$ 10 million	
TOTAL	**$798 million**	**$148 million**

Metro's 2015-2016 adopted budget (website: http://metro.kingcounty.gov/am/budget/)

Metro funding — past and present

Before 2000, Metro relied on the state's motor vehicle excise tax (MVET) for nearly one-third of our revenue. Revenue from this source grew roughly in line with Metro's service growth. In 2000, following voter approval of Initiative 695, the state legislature eliminated the MVET for transit agencies.

After the MVET was eliminated, King County voters approved two sales tax increases, in 2000 and 2006, to help make up for the lost revenue. These tax increases brought Metro to the maximum allowable 0.9 percent sales tax level. Today, 50 to 60 percent of Metro's operating revenue comes from local sales tax.

Metro's increased reliance on sales tax made our ability to provide bus service more dependent on economic conditions. Sales tax is volatile; receipts can vary substantially with the ups and downs of the region's economy.

We experienced this volatility twice in recent years. Metro had planned to increase service after both the 2000 and 2006 sales tax increases. Several months after the first increase was approved, the "dot-com" recession began, and the sales tax revenue Metro actually received never reached the projected amount. Metro was able to complete some, but not all, of the planned service increases.

Soon after the 2006 tax increase was approved, Metro made a number of the planned service improvements. But in 2008, the Great Recession caused an even more serious erosion of sales tax revenue, leading to a shortfall of approximately $1.2 billion for Metro from 2009 through 2015. With the adoption of Metro's 2010-2011 budget, the King County Council agreed that the one-tenth of a cent sales tax increase would be used to preserve existing service.

Metro took many other actions to weather the financial crisis that lingered for six years—cutting costs, increasing fares, tapping reserve funds, negotiating cost-cutting labor agreements, adopting new operating efficiencies, and more. These actions saved or gained nearly $800 million for bus service between 2009 and 2013, and have brought ongoing annual savings or revenue gains of close to $150 million annually.

However, some temporary funding expired in 2014. Faced with an ongoing revenue gap, Metro proposed service reductions for 2014 and 2015. As we planned the 2015-2016 biennial budget, we took new actions to increase efficiency and preserve as much service as possible. The adopted 2015-2016 budget reflects these efficiency efforts (see below).

As a result of these actions, lower projected fuel costs, and other factors, the King County Council adopted a 2015-2016 budget that maintains Metro service at the current level. However, the budget does not enable Metro to grow to meet all current and future demand for service.

While Metro and other transportation providers have struggled to manage the long financial crisis and ongoing lack of adequate funding for transit, roads, bridges, and ferries, community leaders across the state have advocated for a statewide transportation funding solution. The state legislature has considered a number of proposals but has not approved one. King County leaders are continuing to seek a broad, long-term funding solution.

Meanwhile, Metro continues striving to become even more efficient and make the best use of every transit dollar.

Adopted 2015-2016 budget maintains current Metro service level

The King County Council's adoption of the 2015-2016 county budget on Nov. 17 marks a turning point for Metro. Coming after extraordinary efforts to save bus service during a six-year financial crisis, the new budget maintains the current level of service for the next two years.

Ever since the 2008 recession caused a steep drop in sales tax revenue, Metro has preserved most bus service by cutting costs, raising fares, and making a host of fiscal reforms. But after some temporary funding expired in 2014, we had to delete or reduce service on 41 bus routes in September 2014, and proposed additional cuts for 2015 and 2016.

However, Metro's ongoing efficiency gains, recent projections of lower fuel costs, and other financial improvements enabled the Council to adopt a budget that eliminates the need for service cuts.

Earlier in November, Seattle voters approved funding for additional transit service. The City of Seattle will purchase Metro service through Executive Dow Constantine's Community Mobility Contracts Program. Seattle will expand service on Metro routes that serve the city by about 10 percent. This funding expires after 2020.

The need remains for long-term funding that fully meets King County's current and future demand for bus service. According to Metro's service guidelines, 15 percent more bus service is needed today—and ridership is growing. Although Metro's budget will maintain the current service level for two years, it doesn't enable growth. Seattle's funding will meet much of the city's demand, but unmet needs remain in Seattle and throughout King County.

Metro will continue striving for efficiency improvements to make the most of every available transit dollar, and county leaders have pledged to continue working for a statewide transportation funding solution.

Efficiency improvements in Metro's 2015-2016 budget

- Cut liability claims and workers' comp costs.
- Purchased 40 fewer replacement buses without impacting service.
- Made business process improvements resulting in a reduction in employee positions.
- Through King County's Healthy Incentives Program, reduced the growth in employee health care costs.
- Conducted a bus base automation project.
- Used Lean techniques to improve vehicle repair and parts inventory management practices.
- Created and increased the use of lower-cost alternatives to Access service. Lower fuel costs will also reduce Access costs. Worked with other county agencies to control service costs, resulting in significant savings in financial accounting, facilities and central services.
- Adopted a number of smaller measures, such as reducing energy costs and eliminating vacant positions that are no longer considered priorities.

Service Guidelines Task Force

4. Service Guidelines

Introduction

This section contains the service guidelines, which are part of Metro's strategic plan. This document is the core subject of the task force, which will recommend revisions to the guidelines. This section also provides materials that explain how Metro uses the guidelines in planning additions, reductions, and restructures to service.

Links to Information

1. 2014 Service Guidelines Report: http://bit.ly/sgtf4_1
2. 2013 Service Guidelines Report: http://bit.ly/sgtf4_2
3. 2012 Service Guidelines Report: http://bit.ly/sgtf4_3
4. 2011 Service Guidelines Report: http://bit.ly/sgtf4_4
5. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Introduction

Metro has developed service guidelines that it will use to design and modify transit services in an ever-changing environment. The guidelines will help Metro make sure that its decision-making is objective, transparent, and aligned with the regional goals for the public transportation system. These guidelines enable Metro to fulfill Strategy 6.1.1 in its *Strategic Plan for Public Transportation 2011-2021*, which calls for Metro to "Manage the transit system through service guidelines and performance measures."

Metro will use the guidelines to make decisions about expanding, reducing and managing service, to evaluate service productivity, and to determine if service revisions are needed because of changes in rider demand or route performance. Guidelines are also intended to help Metro respond to changing financial conditions and to integrate its services with the regional transportation system.

The guidelines are designed to address productivity, social equity and geographic value. These factors are applied within the guidelines in a multi-step process to identify the level and type of service, along with additional guidelines to measure service quality, define service design objectives and to compare the performance of individual routes within the Metro service network to guide modifications to service following identified priorities. The guidelines work as a system to emphasize productivity, ensure social equity and provide geographic value in a balanced manner through the identification of measurable indicators associated with each factor and the definition of performance thresholds that vary by market served, service frequency and locations served. They are also intended to help Metro respond to changing financial conditions and to integrate its services with the regional transportation system.

A central piece of the service guidelines is the All-Day and Peak Network, which establishes target service levels for transit corridors throughout King County. Productivity, social equity and geographic value are prioritized in this three-step process:

- **Step one** establishes initial service levels for corridors based on how well they meet measurable indicators reflecting productivity, social equity, and geographic value. Indicators of high productivity (using measureable land use indicators closely correlated with transit productivity) make up 50 percent of the total score, while geographic value and social equity indicators each comprise 25 percent of the total score in this step.
    - **Productivity** indicators demonstrate market potential of corridors using land use factors of housing and employment density.
    - **Social Equity** indicators provide an evaluation of how well corridors serve concentrations of minority and low-income populations by comparing boardings in these areas along each corridor against the systemwide average of all corridor boardings within minority and low-income census tracts.
    - **Geographic Value** indicators establish how well corridors preserve connections and service throughout King County.

The cumulative score from this step indicates the initial appropriate frequency for service in the corridor.

- **Step two** makes adjustments to the assigned step-one service family based on current ridership, productivity, and night network completeness. Adjustments are only made to assign corridors to a higher service level; service frequencies are not adjusted downward in this step.

- **Step three** defines the peak overlay for the All-Day and Peak Network. This step evaluates whether or not peak service provides a significant ridership or travel time advantage over the local service.

The All-Day and Peak Network will be analyzed annually concurrent with Metro's reports on the application of the service guidelines. Using this network as a baseline and as resources allow, Metro will work to adjust service levels to better meet the public transportation needs of King County.

Other guidelines are grouped into the following categories:

- Performance management
  These guidelines establish standards for productivity, passenger loads, and schedule reliability. Metro will use these guidelines to evaluate individual routes and recommend changes to achieve efficient and effective delivery of transit service as part of ongoing system management and in planning for growth or reduction.
- Service restructures
  These guidelines define the circumstances that will prompt Metro to restructure multiple routes along a corridor or within an area.
- Service Design
  These are qualitative and quantitative guidelines for designing specific transit routes and the overall transit network.
- Use and implementation
  This section describes how Metro will use all guidelines, how they will be prioritized to make recommendations about adding, reducing or adjusting service, and how the performance of individual bus routes and the Metro system as a whole will be reported.

The service guidelines provide Metro with tools to ensure that decisions about Metro's service network are transparent, consistent, and clear. These guidelines will be reported on and reviewed annually to ensure that they are consistent with Metro's strategic plan and other policy goals.

All-day and peak network

Metro strives to provide high-quality transit service to a wide variety of travel markets and a diverse group of riders. Metro designs its services to meet a number of objectives:

- Support regional growth plans
- Respond to existing ridership demand
- Provide productive and efficient service
- Ensure social equity
- Provide geographic value through a network of connections and services throughout King County.

Metro is building a network of services to accomplish these objectives. The foundation of the All-Day and Peak Network is a set of two-way routes that operate all day and connect designated regional growth centers, manufacturing/industrial centers, and other areas of concentrated activity. All-day service is designed to meet a variety of travel needs and trip purposes throughout the day. Whether riders are traveling to work, appointments, shopping, or recreational activities, the availability of service throughout the day gives them the ability to travel when they need to. The All-Day and Peak Network also includes peak service that provides faster travel times, accommodates very high demand for travel to and from major employment centers, and serves park-and-ride lots in areas of lower population density.

A key step in developing the All-Day and Peak Network is to determine the service levels that meet the needs of King County's diverse communities. Metro determines these service levels through a three-step process:

First, service levels are set by scoring all corridors using six measures addressing land use, social equity, and geographic value. Corridors with higher scores are assigned higher levels of service. Second, service levels are adjusted based on existing ridership. Corridor service levels are increased when the service level suggested in step-one would not be adequate to accommodate existing riders, would be inconsistent with service levels set for RapidRide services, or would leave primary connections without night service. Third, peak service that enhances the all-day network is determined using travel time and ridership information.

These steps provide broad guidance for establishing a balance of all-day service levels and peak services and may change as conditions do. The target service levels may also be revised as areas of King County grow and change. Metro does not have sufficient resources to fully achieve the All-Day and Peak Network today. The service-level guidelines, used in combination with the guidelines established for managing the system, will help Metro make progress toward the All-Day and Peak Network.

Service levels are defined by corridor rather than by route to reflect the fact that there may be multiple ways to design routes to serve a given corridor, including serving a single corridor with more than one route. The desired service levels can be achieved through service by a single route or by multiple routes.

Metro evaluated 113 corridors where it provides all-day service today and 94 peak services provided today. The services in these corridors include those linking regional growth centers, manufacturing/industrial centers, and transit activity centers; services to park-and-rides and major transit facilities; and services that are geographically distributed throughout King County. The same evaluation process could be used to set service levels for corridors that Metro does not currently serve.

All-day and peak network assessment process

STEP-ONE: SET SERVICE LEVELS	
Factor	**Purpose**
Land Use	Support areas of higher employment and household density
Social Equity and Geographic Value	Serve historically disadvantaged communities
	Provide appropriate service levels throughout King County

STEP-TWO: ADJUST SERVICE LEVELS	
Factor	**Purpose**
Loads	Provide sufficient capacity for existing transit demand
Use	Improve effectiveness and financial stability of transit service
Service Span	Provide adequate levels of service throughout the day

STEP-THREE: IDENTIFY PEAK OVERLAY	
Factor	**Purpose**
Travel Time	Ensure that peak service provides a travel time advantage compared to other service alternatives
Ridership	Ensure that peak service is highly used

OUTCOME: ALL-DAY AND PEAK NETWORK

Step-One: Set service levels

Service levels are determined by the number of households and jobs in areas with access to a corridor, by the proportion of historically disadvantaged populations near the corridor, and by the geographic distribution of regional growth, manufacturing/industrial, and transit activity centers in King County. These factors give Metro a way to take into account the elements that make transit successful as well as the populations and areas that must be served to support social equity and deliver geographic value. Each corridor is scored on six factors, and the total score is used to set service levels in a corridor. Each corridor is intended to have the identified frequency during some or all of the time period listed.

Land use factors

The success of a transit service is directly related to how many people have access to the service and choose to use it. Areas where many people live and work close to bus stops have higher potential transit use than areas where few people live and work close by. Areas that have interconnected streets have a higher potential for transit use than areas that have fewer streets or have barriers to movement, such as hills or lakes. The land-use factors Metro uses to determine service levels are the number of households and jobs located within a quarter-mile walking access of stops. The quarter-mile calculation considers street connectivity; only those areas that have an actual path to a bus stop are considered to have access to transit. This is an important distinction in areas that have a limited street grid or barriers to direct access, such as lakes or freeways. The use of land-use factors is consistent with Metro's *Strategic Plan for Public Transportation 2011-2021* because it addresses the need for transit to serve a growing population (Strategy 3.2.1) and encourages land uses that transit can serve efficiently and effectively (Strategy 3.3.1)

Social equity and geographic value factors

As it strives to develop an effective transit network that ensures social equity and provides geographic value, Metro considers how the network will serve historically disadvantaged populations, transit activity centers, regional growth centers, and manufacturing/industrial centers. As a way to achieve social equity, Metro identifies areas where low-income and minority populations are concentrated as warranting higher levels of service. Metro also identifies primary connections between centers as warranting a higher level of service, to achieve both social equity and geographic value. Primary connections are defined as the predominant transit connection between centers, based on a combination of ridership and travel time.

Centers represent activity nodes throughout King County that form the basis for a countywide transit network. The term "centers," as defined in the strategic plan, refers collectively to regional growth centers, manufacturing/industrial centers, and transit activity centers. Regional growth centers and manufacturing/industrial centers are designated in the region's *Vision 2040* plan. Metro identified transit activity centers beyond the Puget Sound Regional Council (PSRC)-designated centers to support geographic value in the distribution of its transit network throughout King County. Transit activity centers include major destinations and transit attractions such as large employment sites, significant healthcare institutions and major social service agencies. Transit activity centers represent activity nodes throughout King County that form the basis for an interconnected transit network throughout the urban growth area of King County.

Each transit activity center identified in Appendix I meets one or more of the following criteria:

- Is located in an area of mixed-use development that includes concentrated housing, employment, and commercial activity
- Includes a major regional hospital, medical center or institution of higher education located outside of a designated regional growth centers
- Is located outside other designated regional growth centers at a transit hub served by three or more all-day routes.

The size of these transit activity centers varies, but all transit activity centers represent concentrations of activity in comparison to the surrounding area.

The use of factors related to social equity and geographic value is consistent with the *Strategic Plan for Public Transportation 2011-2021*. The use of social equity factors guides transit service to provide travel opportunities for historically disadvantaged populations (Strategy 2.1.2). Factors concerning transit activity centers and geographic value guide service to areas of concentrated activity (Strategy 3.4.1) and ensure that services provide value in all areas of King County. Regional growth centers, manufacturing/industrial centers, and transit activity centers are listed in Appendix 1.

Revisions to Appendix 1 Centers in King County

The list of centers associated with the All-Day and Peak Network is adopted by the King County Council as part of Metro's service guidelines. However, the region's growth and travel needs are anticipated to change in the future. The following defines centers and guides additions to this list.

Regional Growth and Manufacturing/Industrial Centers

Additions to and deletions from the regional growth and manufacturing/industrial Centers lists should be based on changes approved by the PSRC and defined in *Vision 2040*, or subsequent regional plans.

Transit Activity Centers

Additional transit activity centers may be designated in future updates of the service guidelines. Additions to the list of transit activity centers will be nominated by the local jurisdictions and must meet one or more of the above criteria, plus the following additional criteria:

- Pathways through the transit activity center must be located on arterial roadways that are appropriately constructed for transit use.
- Identification of a transit activity center must result in a new primary connection between two or more regional or transit activity centers in the transit network, either on an existing corridor on the All-Day and Peak Network or as an expansion to the network to address an area of projected all-day transit demand. An expansion to the network indicates the existence of a new corridor for analysis.
- Analysis of a new corridor using step-one of the All-Day and Peak Network assessment process must result in an assignment of 30-minute service frequency or better.

Thresholds and points used to set service levels

Factor	Measure	Threshold	Points
Productivity (Land Use)	Households within ¼ mile of stops per corridor mile	>3,000 HH/Corridor Mi	10
		>2,400 HH/Corridor Mi	8
		>1,800 HH/Corridor Mi	6
		>1,200 HH/Corridor Mi	4
		>600 HH/Corridor Mi	2
	Jobs & student enrollment at universities & colleges within ¼ mile of stops per corridor mile	>10,250 Jobs & students/Corridor Mi	10
		>5,500 Jobs & students/Corridor Mi	8
		>3,000 Jobs & students/Corridor Mi	6
		>1,400 Jobs & students/Corridor Mi	4
		>500 Jobs & students/Corridor Mi	2
Social Equity	Percent of boardings in low-income census tracts[1]	Above system average	5
		Below system average	0
	Percent of boardings in minority census tracts[2]	Above system average	5
		Below system average	0
Geographic Value	Primary connection between regional growth, manufacturing/industrial centers	Yes	5
		No	0
	Primary connection between transit activity centers	Yes	5
		No	0

Frequency based on total score

Scoring Range	Peak Service Frequency (minutes)	Off-Peak Service Frequency (minutes)	Night Service Frequency (minutes)
25-40	15	15	30
19-24	15	30	30
10-18	30	30	--
0-9	60 or less (≥ 60)	60 or less	--

1 Low-income tracts are those where a greater percentage of the population than the countywide average has low incomes, based on current American Community Survey data.

2 Minority tracts are defined as tracts where a greater percentage of the population than the Countywide average is minority (all groups except White, non-Hispanic), based on current census data.

Step-Two: Adjust service levels

After setting service levels on the basis of the six factors in step-one, Metro adjusts the levels to ensure that the All-Day and Peak Network accommodates current ridership levels. Corridor service levels are increased if providing service at the levels established under step-one would not accommodate existing riders, would be inconsistent with policy-based service levels set for RapidRide services or would result in an incomplete network of night service[3].

Thresholds used to adjust service levels

Factor	Measure	Threshold	Adjustment to warranted frequency		
			Service level adjustment	Step 1 frequency (minutes)	Adjusted frequency (minutes)
Cost recovery	Estimated cost recovery by time of day—*if existing riders were served by step-one service levels*	>100% in any time period	Adjust two levels	15 or 30	<15
				≥ 60	15
		Peak >50%	Adjust one level	15	<15
		Off-peak >50%		30	15
		Night >33%		≥ 60	30
		Night >16%	Add night service	--	30
		Night >8%		--	≥ 60
Load	Estimated load factor[4] by time of day—*if existing riders were served by step-one service levels*	>1.5	Adjust two levels	15 or 30	<15
				≥ 60	15
		>0.75	Adjust one level	15	<15
				30	15
				≥ 60	30
Service span	Connection at night	Primary connection between regional growth centers	Add night service	--	≥ 60
		Frequent peak service	Add night service	--	30

Metro also adjusts service levels on existing and planned RapidRide corridors to ensure that identified service frequencies are consistent with policy-based service frequencies for the RapidRide program: more frequent than 15 minutes during peak periods, 15 minutes during off-peak periods, and 15 minutes at night. Where policy-based service frequencies are more frequent than service frequencies established in step-two, frequencies are improved to the minimum specified by policy.

3 An incomplete network of night service is defined as a network in which night service is not provided on a primary connection between regional growth centers or on a corridor with frequent peak service. Provision of night service on such corridors is important to ensure system integrity and social equity during all times of day.

4 Load factor is calculated by dividing the maximum load along a route by the total number of seats on a bus, to get a ratio of riders to seats.

The combined outcome of steps one and two is a set of corridors with all-day service levels that reflect factors concerning land use, social equity, geographic value, and ridership. These corridors are divided into families based on the frequency of service, as described in the Service Families section below. Corridors with the highest frequency would have the longest span of service.

Step-Three: Identify peak overlay

Peak service adds value to the network of all-day service by providing faster travel times and accommodating very high demand for travel to and from major employment centers. Peak service thresholds ensure that peak service is well-used and provides benefits above the network of all-day service. Service levels on peak routes are established separately from the all-day network because they have a specialized function within the transit network.

Thresholds for peak services

Factor	Measure	Threshold
Travel Time	Travel time relative to alternative service	Travel time should be at least 20% faster than the alternative service
Ridership	Rides per Trip	Rides per trip should be 90% or greater compared to alternative service

Metro considers travel time and ridership to determine where peak service is appropriate. Peak service in a corridor that also has all-day service should have higher ridership and faster travel times than the other service to justify its higher cost. If peak service does not meet the load and travel-time thresholds but serves an area that has no other service, Metro would consider preserving service or providing service in a new or different way, such as connecting an area to a different destination or providing alternatives to fixed-route transit service, consistent with Strategy 6.2.3.

Peak service generally has a minimum of eight trips per day on weekdays only. Peak service is provided for a limited span compared to all-day service. The exact span and number of trips are determined by demand on an individual route basis.

Evaluating new service

Metro has defined the current All-Day and Peak Network on the basis of appropriate levels of service for all-day and peak services within King County today. However, the service assessment processes described in the guidelines should also be used when Metro is considering and evaluating potential or proposed new services, including new service corridors. They should also be applied over time to determine appropriate levels of service, including the need for new services and service corridors as areas of King County change.

Service families

All-Day and Peak Network services are broken down by level of service into five families. Service families are primarily defined by the frequency and span of service they provide. The table below shows the typical characteristics of each family. Some services may fall outside the typical frequencies, depending on specific conditions.

Summary of typical service levels by family

Service Family	Frequency[5] (minutes)			Days of service	Hours of service[6]
	Peak[7]	Off-peak	Night		
Very frequent	15 or more frequent	15 or more frequent	30 or more frequent	7 days	16-20 hours
Frequent	15 or more frequent	30	30	7 days	16-20 hours
Local	30	30 - 60	--*	5-7 days	12-16 hours
Hourly	60 or less frequent	60 or less frequent	--	5 days	8-12 hours
Peak	8 trips/day minimum	--	--	5 days	Peak
Alternative Services	Determined by demand and community collaboration process				

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

- **Very frequent** services provide the highest levels of all-day service. Very frequent corridors serve very large employment and transit activity centers and high-density residential areas.
- **Frequent** services provide high levels of all-day service. Frequent corridors generally serve major employment and transit activity centers and high-density residential areas.
- **Local** services provide a moderate level of all-day service. Local corridors generally serve regional growth centers and low- to medium-density residential areas.
- **Hourly** services provide all-day service no more frequently than every hour. Corridors generally connect low-density residential areas to regional growth centers.
- **Peak** services provide specialized service in the periods of highest demand for travel. Peak services generally provide service to a major employment center in the morning and away from a major employment center in the afternoon.
- **Alternative** service is any non-fixed route service directly provided or supported by Metro. Alternative services provide access to local destinations and fixed route transit service on corridors that cannot be cost-effectively served by fixed route transit at target service levels. The service type and frequency for Alternative services are determined through collaborative community engagement regarding community travel needs balanced against costs, which shall not exceed the estimated cost to deliver fixed route service at target service levels. Performance for Alternative services shall be determined individually for each service through a cost-effectiveness measure based on cost per rider.

5 Frequency is the number of minutes between consecutive trips in the same direction. A trip with four evenly spaced trips per hour would have an average headway of 15 minutes and a frequency of four trips per hour.
6 Hours of service, or span, is defined as the time between first trip and last trip leaving the terminal in the predominant direction of travel.
7 Time period definitions: Peak 5-9 a.m. and 3-7 p.m. weekdays; Off-peak 9 a.m. to 3 p.m. weekdays; 5 a.m. to 7 p.m. weekends; Night 7 p.m. to 5 a.m. all days.

Target Service Comparison

The service guidelines compare the target service levels identified through the corridor analysis with existing levels of service. A corridor is determined to be either "below", "at" or "above" its target service level. This process is called the target service comparison.

The target service comparison is a factor in both the investment and reduction priorities, as described in the "Use and Implementation" section of the guidelines.

While the service families are based on frequency, Metro also classifies individual routes by their major destinations when comparing productivity. These classifications are based on the primary market served. Regional growth centers in the core of Seattle and the University District are significantly different from markets served in other areas of King County. Services are evaluated based on these two primary market types to ensure that comparisons reflect the service potential of each type of market.

- **Seattle core** routes are those that serve downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District, or Uptown. These routes serve regional growth centers with very high employment and residential density.
- **Non-Seattle core** routes are those that operate only in other areas of Seattle and King County. These routes provide all-day connections between regional growth or transit activity centers outside of Seattle or provide service in lower-density areas.

Performance management

Metro uses performance management to improve the efficiency and effectiveness of the transit system. Performance management guidelines are applied to individual routes to identify high and low performance, areas where investment is needed, and areas where resources are not being used efficiently and effectively.

Productivity

Productivity measures identify routes where performance is strong or weak as candidates for addition, reduction, or restructuring. High and low performance thresholds differ for routes that serve the Seattle core areas[8] and those that do not. Routes serving the Seattle core are expected to perform at a higher level because the potential market is much greater than for routes serving other areas of King County.

The measures for evaluating routes are rides per platform hour[9] and passenger miles per platform mile[10]. Two measures are used to reflect the fact that services provide different values to the system. Routes with high ridership relative to the amount of investment perform well on the rides-per-platform-hour-measure. Routes with full and even loading along the route perform well on the passenger-miles-per-platform-mile measure; an example is a route that fills up at a park-and-ride and is full until reaching its destination.

Low performance is defined as having productivity that ranks in the bottom 25 percent of routes within a category and time period. High performance is defined as having productivity levels in the top 25 percent of routes within a category and time period. Routes in the bottom 25 percent on both productivity measures are identified as the first candidates for potential reduction.

8 Seattle core areas include the regional growth centers in downtown Seattle, First Hill/Capitol Hill, South Lake Union, Uptown, and the University District.

9 Rides per platform hour is a measure of the number of people who board a transit vehicle relative to the total number of hours that a vehicle operates (from leaving the base until it returns).

10 Passenger miles per platform mile is a measure of the total miles riders travel on a route relative to the total miles that a vehicle operates (from leaving the base until it returns).

Thresholds for the top 25 percent and the bottom 25 percent are identified for the following time periods and destinations for each of two performance measures – rides/platform hour and passenger miles/platform mile.

Time period	Route destination
Peak	Seattle core
	Not Seattle core
Off-peak	Seattle core
	Not Seattle core
Night	Seattle core
	Not Seattle core

Passenger loads

Passenger loads are measured to identify crowded services as candidates for increased investment. Overcrowding is a problem because buses may pass up riders waiting at stops, riders may choose not to ride if other transportation options are available, and overcrowded buses often run late because it takes longer for riders to board and get off at stops.

Passenger loads are averaged using observations from a complete period between service changes. Trips must have average loads higher than thresholds for an entire service change period to be identified as candidates for investment. Load factor is calculated by dividing the maximum load along a route by the total number of seats on a bus, to get a ratio of riders to seats.

- When a route operates every 10-minutes or more frequently, or on all RapidRide services, an individual trip should not exceed a load factor of 1.5.
- When a route operates less than every 10-minutes, or is not a RapidRide service, an individual trip should not exceed a load factor of 1.25.
- No trip on a route should have a standing load for 20 minutes or longer.

Other considerations: Vehicle availability

Action alternatives:

- Assign a larger vehicle
- Add or adjust the spacing of trips within a 20-minute period

Schedule reliability

Metro measures schedule reliability to identify routes that are candidates for remedial action due to poor service quality.

Schedule adherence is measured for all Metro services. Service should adhere to published schedules, within reasonable variance based on time of day and travel conditions. When measuring schedule adherence, Metro focuses on routes that are regularly running late. On-time is defined as a departure that is five minutes late or better at a scheduled time point.

Time period	Lateness threshold (Excludes early trips)
Weekday average	> 20%
Weekday PM peak average	> 35%
Weekend average	> 20%

Investment can include route design, schedule, or traffic operations improvements. Routes that operate with a headway less frequent than every 10-minutes that do not meet performance thresholds will be prioritized for schedule adjustment or investment. Routes that operate with a headway of every 10-minutes or more frequent that do not meet performance thresholds will be prioritized for traffic operations (speed and reliability) investments. It may not be possible to improve through-routed routes that do not meet performance thresholds because of the high cost and complication of separating routes.

Other considerations: External factors affecting reliability

Action alternatives:

- Adjust schedules
- Adjust routing
- Invest in speed and reliability improvements.

Service restructures

Service restructures are changes to multiple routes along a corridor or within an area, including serving new corridors, in a manner consistent with service design criteria found in this service guidelines document. Restructures may be prompted for a variety of reasons and in general are made to improve the efficiency and effectiveness of transit service or to reduce net operating costs when Metro's operating revenue is significantly reduced from historic levels.

- Under all circumstances, whether adding, reducing or maintaining service hours invested, service restructures shall have a goal to focus service frequency on the highest ridership and productivity segments of restructured services, to create convenient opportunities for transfer connections between services and to match service capacity to ridership demand to improve productivity and cost-effectiveness of service.
- In managing the transit system, service restructures shall have a goal of increasing ridership.
- Under service reduction conditions, service restructures shall have an added goal of resulting in an overall net reduction of service hours invested.
- Under service addition conditions, service restructures shall have added goals of increasing service levels and ridership.

When one or more key reasons trigger consideration of restructures, Metro specifically analyzes:

- Impacts on current and future travel patterns served by similarly aligned transit services;
- Passenger capacity of the candidate primary route(s) relative to projected consolidated ridership; and
- The cost of added service in the primary corridor to meet projected ridership demand relative to cost savings from reductions of other services.

Restructures will be designed to reflect the following:

- Service levels should accommodate projected loads at no more than 80 percent of established loading guidelines.
- When transfers are required as a result of restructures, the resulting service will be designed for convenient transfers and travel time penalties for transfers should be minimized.
- A maximum walk distance goal of 1/4 mile in corridors where service is not primarily oriented to freeway or limited-access roadways. Consideration for exceeding this goal may be given where the walking environment is pedestrian-supportive.

Based on these considerations, Metro recommends specific restructures that have compatibility of trips, capacity on the consolidated services to meet anticipated demand and that achieve measurable savings relative to the magnitude of necessary or desired change.

Following the implementation of restructures, Metro will regularly evaluate the resulting transit services and respond to on-time performance and passenger loads that exceed the performance management guidelines as part of the regular ongoing management of Metro's transit system.

Key reasons that will trigger consideration of restructures include:

Sound Transit or Metro service investments

- Extension or service enhancements to Link light rail, Sounder commuter rail, and Regional Express bus services.
- Expansion of Metro's RapidRide network, investment of partner or grant resources, or other significant introductions of new Metro service.

Corridors above or below All-Day and Peak Network frequency

- Locations where the transit network does not reflect current travel patterns and transit demand due to changes in travel patterns, demographics, or other factors.

Services compete for the same riders

- Locations where multiple transit services overlap or provide similar connections.

Mismatch between service and ridership

- Situations where a route serves multiple areas with varying demand characteristics or situations where ridership has increased or decreased significantly even though the underlying service has not changed.
- Opportunities to consolidate or otherwise reorganize service so that higher ridership demand can be served with improved service frequency and fewer route patterns.

Major transportation network changes

- Major projects such as SR 520 construction and tolling and the Alaskan Way Viaduct replacement; the opening of new transit centers, park-and-rides, or transit priority pathways; or the closure of facilities like the South Park Bridge.

Major development or land use changes

- Construction of a large-scale development, new institutions such as colleges or medical centers, or significant changes in the overall development of an area.

Service design

Metro uses service design guidelines to develop transit routes and the overall transit network. Guidelines reflect industry best practices for designing service. The use of service design guidelines can enhance transit operations and improve the rider experience. Some guidelines are qualitative considerations that service development should take into account. Other guidelines have quantitative standards for comparing and measuring specific factors.

1. Network connections

Routes should be designed in the context of the entire transportation system, which includes local and regional bus routes, light-rail lines, commuter rail lines and other modes. Metro strives to make transfers easy as it develops a network of services. Network design should consider locations where transfer opportunities could be provided, and where provision of convenient transfers could improve the efficiency of the transit network. Where many transfers are expected to occur between services of different frequencies, timed transfers should be maintained to reduce customer wait times.

2. Multiple purposes and destinations

Routes are more efficient when designed to serve multiple purposes and destinations rather than specialized travel demands. Routes that serve many rider groups rather than a single group appeal to more potential riders and are more likely to be successful. Specialized service should be considered when there is sizeable and demonstrated demand that cannot be adequately met by more generalized service.

3. Easy to understand, appropriate service

A simple transit network is easier for riders to understand and use than a complex network. Routes should have predictable and direct routings and should provide frequency and span appropriate to the market served. Routes should serve connection points where riders can connect to frequent services, opening up the widest possible range of travel options.

4. Route spacing and duplication

Routes should be designed to avoid competing for the same riders. Studies indicate that people are willing to walk one-quarter mile on average to access transit, so in general routes should be no closer than one-half mile. Services may overlap where urban and physical geography makes it necessary, where services in a common segment serve different destinations, or where routes converge to serve regional growth centers. Where services do overlap, they should be scheduled together, if possible, to provide effective service along the common routing.

Routes are defined as duplicative in the following circumstances:

- Two or more parallel routes operate less than one-half mile apart for at least one mile, excluding operations within a regional growth center or approaching a transit center where pathways are limited.
- A rider can choose between multiple modes or routes connecting the same origin and destination at the same time of day.
- Routes heading to a common destination are not spaced evenly (except for operations within regional growth centers).

5. Route directness

A route that operates directly between two locations is faster and more attractive to riders than one that takes a long, circuitous path. Circulators or looping routes do not have competitive travel times compared to walking or other modes of travel, so they tend to have low ridership and poor performance. Some small loops

may be necessary to turn the bus around at the end of routes and to provide supplemental coverage, but such extensions should not diminish the overall cost-effectiveness of the route. Directness should be considered in relation to the market for the service.

Route deviations are places where a route travels away from its major path to serve a specific destination. For individual route deviations, the delay to riders on board the bus should be considered in relation to the ridership gained on a deviation. New deviations may be considered when the delay is less than 10 passenger-minutes per person boarding or exiting the bus along the deviation.

$$\frac{\text{Riders traveling through} \times \text{Minutes of deviation}}{\text{Boardings and exitings along deviation}} \leq 10 \text{ minutes}$$

6. Bus stop spacing

Bus stops should be spaced to balance the benefit of increased access to a route against the delay that an additional stop would create for all other riders. While close stop-spacing reduces walk time, it may increase total travel time and reduce reliability, since buses must slow down and stop more frequently.

Service	Average stop spacing
RapidRide	½ mile
All other services	¼ mile

Portions of routes that operate in areas where riders cannot access service, such as along freeways or limited-access roads, are excluded when calculating average stop spacing. Additional considerations for bus stop spacing include the pedestrian facilities, the geography of the area around a bus stop, passenger amenities, and major destinations.

7. Route length and neighborhood route segments

A bus route should be long enough to provide useful connections for riders and to be more attractive than other travel modes. A route that is too short will not attract many riders, since the travel time combined with the wait for the bus is not competitive compared to the time it would take to walk. Longer routes offer the opportunity to make more trips without a transfer, resulting in increased ridership and efficiency. However, longer routes may also have poor reliability because travel time can vary significantly from day to day over a long distance. Where many routes converge, such as in regional growth centers, they may be through-routed[11] to increase efficiency, reduce the number of buses providing overlapping service, and reduce the need for layover space in congested areas.

In some places, routes extend beyond regional growth centers and transit activity centers to serve lower density residential neighborhoods. Where routes operate beyond centers, ridership should be weighed against the time spent serving neighborhood segments, to ensure that the service level is appropriate to the level of demand. The percent of time spent serving a neighborhood segment should be considered in relation to the percent of riders boarding and exiting on that segment.

$$\frac{\text{Percent of time spent serving neighborhood segment}}{\text{Percent of riders boarding/exiting on neighborhood segment}} \leq 1.2^{12}$$

11 "Through-routing" means continuous routing of vehicles from one route to another such that a rider would not have to transfer from one route to reach a destination on the other.

12 The value of the service extended into neighborhoods beyond major transit activity centers should be approximately equal to the investment made to warrant the service. A 1:1 ratio was determined to be too strict, thus this ratio was adjusted to 1.2.

8. Operating paths and appropriate vehicles

Buses are large, heavy vehicles and cannot operate safely on all streets. Buses should be routed primarily on arterial streets and freeways, except where routing on local or collector streets is necessary to reach layover areas or needed to ensure that facilities and fleet used in all communities is equivalent in age and quality. Bus routes should also be designed to avoid places where traffic congestion and delay regularly occur, if it is possible to avoid such areas while continuing to meet riders' needs. Bus routes should be routed, where possible, to avoid congested intersections or interchanges unless the alternative would be more time-consuming or would miss an important transfer point or destination. Services should operate with vehicles that are an appropriate size to permit safe operation while accommodating demand. Appropriate vehicles should be assigned to routes throughout the county to avoid concentrating older vehicles in one area, to the extent possible given different fleet sizes, technologies and maintenance requirements. All new vehicles will be equipped with automated stop announcement systems.

9. Route terminals

The location where a bus route ends and the buses wait before starting the next trip must be carefully selected. Priority should be given to maintaining existing layover spaces at route terminals to support continued and future service. People who live or work next to a route end may regard parked buses as undesirable, so new route terminals should be placed where parked buses have the least impact on adjoining properties, if possible. Routes that terminate at a destination can accommodate demand for travel in two directions, resulting in increased ridership and efficiency. Terminals should be located in areas where restroom facilities are available for operators, taking into account the times of day when the service operates and facilities would be needed. Off-street transit centers should be designed to incorporate layover space.

10. Fixed and variable routing

Bus routes should operate as fixed routes in order to provide a predictable and reliable service for a wide range of potential riders. However, in lower-density areas where demand is dispersed, demand-responsive service may be used to provide more effective service over a larger area than could be provided with fixed-route service. Demand-responsive service may be considered where fixed-route service is unlikely to be successful or where unique conditions exist that can be met more effectively through flexible service.

11. Bus stop amenities and bus shelters

Bus stop amenities should be installed based on ridership, in order to benefit the largest number of riders. Bus stop amenities include such things as bus shelters, seating, waste receptacles, lighting, and information signs, maps, and schedules. In addition to ridership, special consideration may be given to areas where:

- high numbers of transfers are expected;
- waiting times for riders may be longer;
- stops are close to facilities such as schools, medical centers, or senior centers; or
- the physical constraints of bus stop sites, preferences of adjacent property owners, and construction costs could require variance from standards.

Major infrastructure such as elevators and escalators will be provided where required by local, state, and federal regulations.

RapidRide Routes

Level of amenity	Boardings
Station	150+
Enhanced stop	50-149
Standard stop	Less than 50

Other Routes

Location	Boardings
City of Seattle	50
Outside Seattle	25

Use and implementation

Metro uses the following guidelines when adding or reducing service as well as in the ongoing development and management of transit service.

Guidelines for adding or reducing service

Guideline	Measures
Productivity	Rides per platform hour Passenger miles per platform mile
Passenger loads	Load factor
Schedule reliability	On-time performance Headway adherence Lateness
All-Day and Peak Network	Current service relative to All-Day and Peak Network

Adding Service

Metro invests in service by using guidelines in the following order:

1. Passenger Loads
2. Schedule Reliability
3. All-Day and Peak Network
4. Productivity

Passenger Loads and Schedule Reliability

Metro first uses the passenger load and schedule reliability guidelines to assess service quality. Routes that do not meet the standards are considered to have low quality service, which has a negative impact on riders and could discourage them from using transit. These routes are the highest priority candidates for investment. Routes that are through-routed but suffer from poor reliability may be candidates for investment, but because of the size and complexity of changes to through-routes, they would not be automatically given top priority.

All-Day and Peak Network

Metro next uses the All-Day and Peak Network guidelines and the target service comparison (as described on p. SG-10) to determine if corridors are below their target levels, meaning a corridor in which the all-day Service Family assignment (see SG-9) is a higher level of service than the corridor currently has. If a corridor is below the target service level it is an investment priority. Investments in corridors below their target service levels are prioritized primarily using the geographic value score. Investments are ordered for implementation on the basis of geographic value score, followed by the land use score, then the social equity score. Other constraints or considerations such as fleet availability or restructuring processes could be used to suggest order of implementation.

When planning improvements to corridors that are below their target service levels or that perform in the bottom 25 percent, Metro will consider the use of alternative services. These alternative services will be used to replace or to supplement the fixed route service in the corridor and cost-effectively maintain or enhance the access to transit for those who live in the corridor.

Also with growing resources, Metro could identify candidate alternative service areas based on feedback from communities about unmet travel needs. Alternative services could respond to travel needs not easily accommodated by fixed-route transit, or could be designed to make the fixed-route service more effective. This could involve adding service in corridors below their target service levels.

As development or transit use increase in corridors with alternative services, Metro will consider converting alternative service into fixed route service. Conversion of alternative service to fixed route service will be guided by alternative service performance thresholds and the cost effectiveness of the alternative service compared to that of fixed route.

Metro will measure the cost per rider for alternative service as one of the measures that can be compared to fixed route service. Other alternative service performance measures and thresholds will be developed as Metro evaluates the demonstrations called for in the five-year plan. Appropriate measures will be used to evaluate each alternative service and will be included as part of the service guidelines report.

Metro is open to forming partnerships with cities and private companies that would fully or partially fund transit service, and will make exceptions to the established priorities to make use of partner funding. Metro's partners are expected to contribute at least one-third of the cost of operating service. Partnerships will be considered according to the following priorities:

1. Service funded fully by Metro's partners would be given top priority over other service investments.
2. On corridors identified as below their target service levels in the All-Day and Peak Network, service that is between one-third and fully funded by Metro's partners would be given top priority among the set of investments identified in corridors below their target service levels. However, this service would not be automatically prioritized above investments to address service quality problems.

Productivity

The final guideline Metro uses to determine if additional service is needed is productivity. Routes with productivity in the top 25 percent perform well in relation to other routes; investment in these services would improve service where it is most efficient.

Reducing service

The service guidelines identify the steps for evaluation when Metro is reducing service. Routes that are in the bottom 25 percent in one or both productivity measures and operate on corridors that are above their target service levels have a higher potential for reduction than routes on corridors that are at or below their target service level. While the guidelines form the basis for identifying services for reduction, Metro also considers other factors such as system efficiencies, simplification, and potential changes to other service in an area. The use of these other factors means that some routes may not be reduced in the priority order stated below.

Metro also considers restructures when making large reductions, to identify areas where restructuring can lead to more efficient service. Reduction of service can range from reduction of a single trip to elimination of an entire route. While no route or area is exempt from change during large-scale system reductions, Metro will seek to maintain service at All-Day and Peak Network levels, and to avoid reducing service on corridors already identified as below their target service levels.

Service restructuring allows Metro to serve trip needs at a reduced cost by consolidating and focusing service in corridors such as those in the All-Day and Peak Network. Restructuring allows Metro to make reductions while minimizing impacts to riders. Metro strives to eliminate duplication and match service to demand during large-scale reductions. As a result of service consolidation some routes may increase in frequency to accommodate projected loads, even while the result of the restructure is a reduction in service hours.

Metro serves some urbanized areas of east and south King County adjacent to or surrounded by rural land. Elimination of all service in these areas would result in significant reduction in the coverage that Metro provides. To ensure that Metro continues to address mobility needs, ensure social equity and provide geographic value to people throughout King County, connections to these areas would be preserved when making service reductions, regardless of productivity.

During service reductions Metro will consider the use of alternative services that can reduce costs on corridors with routes that are in the bottom 25 percent in one or both productivity measures. In this way, alternative services may help maintain public mobility in a cost-effective manner. These alternative services will be evaluated according to the measures and performance thresholds developed through the evaluation of the demonstrations called for in the five-year plan.

Priorities for reduction are listed below. Within all of the priorities, Metro ensures that social equity is a primary consideration in any reduction proposal, complying with all state and federal regulations.

1. Reduce service on routes that are below the 25 percent productivity threshold for a given time period. Routes that are below the 25 percent productivity threshold on both measures are considered for reduction before routes that are below the 25 percent productivity threshold for only one measure in the following order:
    - All-day routes that duplicate or overlap with other routes on corridors on the All-Day and Peak Network.
    - Peak routes failing one or both of the criteria.
    - All-day routes that operate on corridors that are above their target service levels, meaning corridors in which the all-day service family assignment (see SG-9) is a lower level of service than the corridor currently has.
    - All-day routes that operate on corridors which are at their target service levels. This worsens the deficiency between existing service and the All-Day and Peak Network service levels.

2. Restructure service to improve efficiency of service.

3. Reduce service on routes that are above the 25 percent productivity threshold for a given time period. Routes that are between the 25 and 50 percent productivity threshold on both measures are considered for reduction before routes that are above the 50 percent productivity threshold for either measure, in the following order:

   - All-day routes that duplicate or overlap with routes on the All-Day and Peak Network.
   - Peak routes that meet both peak criteria or are above the 25 percent threshold.
   - All-day routes on corridors that are above their target service levels.
   - All-day routes on corridors which are at their target service levels. This worsens the deficiency between existing service and the service levels determined through the All-Day and Peak Network analysis.

4. Reduce services on routes that are below the 25 percent productivity threshold for a given time period on corridors identified as below their target service levels. Routes that are below the 25 percent productivity threshold on both measures are considered for reduction before routes that are below the 25 percent productivity threshold for only one measure. This worsens the deficiency between existing service and the All-Day and Peak Network service levels.

In many areas of the county, and especially in urbanized areas adjacent to or surrounded by rural land, Metro may provide service in different ways in the future, including with alternatives to fixed-route transit service (Strategy 6.2.3). These services could include fixed-route with deviations or other Dial-a-Ride Transit, or other alternative services that offer mobility similar to the fixed-route service provided. Services such as Community Access Transportation also provide alternatives to fixed-route service by allowing Metro to partner with local agencies or jurisdictions to provide service in a way that meets the needs of the community and is more efficient and cost-effective than fixed-route transit. This approach is consistent with the *Strategic Plan for Public Transportation 2011-2021* because it considers a variety of products and services appropriate to the market (Strategy 2.1.1).

Implementation

Metro revises service three times each year—in spring, summer, and fall. The summer service change coordinates with the summer schedule for the University of Washington, because service is adjusted each summer on routes serving the UW. In cases of emergency or time-critical construction projects, Metro may make changes at times other than the three regularly scheduled service changes. However, these situations are rare and are kept to a minimum because of the high level of disruption and difficulty they create. Metro will identify and discuss service changes that address performance-related issues in its annual route performance report.

Any proposed changes to routes are subject to approval by the Metropolitan King County Council except as follows (per King County code 28.94.020):

- Any single change or cumulative changes in a service schedule which affect the established weekly service hours for a route by 25 percent or less.
- Any change in route location which does not move the location of any route stop by more than one-half mile.
- Any changes in route numbers.

Adverse Effect of a Major Service Change

An adverse effect of a major service change is defined as a reduction of 25 percent or more of the transit trips serving a census tract, or 25 percent or more of the service hours on a route.

Disparate Impact Threshold

A disparate impact occurs when a major service change results in adverse effects that are significantly greater for minority populations than for non-minority populations. Metro's threshold for determining whether adverse effects are significantly greater for minority compared with non-minority populations is ten percent. Should Metro find a disparate impact, Metro will consider modifying the proposed changes in order to avoid, minimize or mitigate the disparate impacts of the proposed changes.

Metro will measure disparate impacts by comparing changes in the number of trips serving minority or non-minority census tracts, or by comparing changes in the number of service hours on minority or non-minority routes. Metro defines a minority census tract as one in which the percentage of minority population is greater than that of the county as a whole. For regular fixed route service, Metro defines a minority route as one for which the percentage of inbound weekday boardings in minority census tracts is greater than the average percentage of inbound weekday boardings in minority census tracts for all Metro routes.

Disproportionate Burden Threshold

A disproportionate burden occurs when a major service change results in adverse effects that are significantly greater for low-income populations than for non-low-income populations. Metro's threshold for determining whether adverse effects are significantly greater for low-income compared with non-low-income populations is ten percent. Should Metro find a disproportionate burden, Metro will consider modifying the proposed changes in order to avoid, minimize or mitigate the disproportionate burden of the proposed changes.

Metro will measure disproportionate burden by comparing changes in the number of trips serving low-income or non-low-income census tracts, or by comparing changes in the number of service hours on low-income or non-low-income routes. Metro defines a low-income census tract as one in which the percentage of low-income population is greater than that of the county as a whole. For regular fixed route service, Metro defines a low-income route as one for which the percentage of inbound weekday boardings in low-income census tracts is greater than the average percentage of inbound weekday boardings in low-income census tracts for all Metro routes.

Public outreach

Metro conducts outreach to gather input from the public when considering major changes. Outreach ranges from relatively limited activities, such as posting rider alerts at bus stops, to more extensive outreach including mailed informational pieces and questionnaires, websites, media notices and public open houses.

For service changes that affect multiple routes or large areas, Metro may convene a community-based sounding board. Sounding board members attend public meetings, offer advice about public outreach, and provide feedback about what changes to bus service would be best for the local communities. Metro considers sounding board recommendations as it develops recommendations.

Proposed changes may require County Council approval, as described above. The Council holds a public hearing before making a final decision on changes.

Future guidelines

As the transit system changes over time, Metro may need to change some guidelines as well. Updates to the guidelines will be considered along with updates to Metro's *Strategic Plan for Public Transportation 2011-2021*.

As part of the required 2013 review and re-adoption of the strategic plan and service guidelines, the results of a collaborative process that addresses the factors, methodology and prioritization of adding service consistent with Strategy 6.1.1 will be included. Key goals include:

A. More closely align factors used to serve and connect centers in the development of the All-Day and Peak Network and resulting service level designations, including consideration of existing public transit services, with jurisdictions' growth decisions, such as zoning, and transit-supportive design requirements, and actions, associated with but not limited to permitting, transit operating enhancements, parking controls and pedestrian facilities; and

B. Create a category of additional service priority, complementary to existing priorities for adding service contained within the King County Metro Service Guidelines, so that priorities include service enhancements to and from, between and within *Vision 2040* Regionally Designated Centers, and other centers where plans call for transit-supportive densities and jurisdictions have invested in capital facilities, made operational changes that improve the transit operating environment and access to transit and implemented programs that incentivize transit use.

APPENDIX 1: **Centers in King County**

Regional Growth Centers

Auburn
Bellevue Downtown
Burien
Federal Way
First Hill/Capitol Hill
Kent
Northgate
Overlake
Redmond
Renton
SeaTac
Seattle CBD
South Lake Union
Totem Lake
Tukwila
University District
Uptown

Manufacturing/Industrial Centers

Ballard/Interbay
Duwamish
Kent
North Tukwila

Transit Activity Centers

Alaska Junction
Aurora Village Transit Center
Ballard (Ballard Ave NW/NW Market St)
Beacon Hill Station
Black Diamond
Bothell (UW Bothell/Cascadia Community College)
Carnation
Central District (23rd Ave E/E Jefferson St)
Children's Hospital
Columbia City Station
Covington (172nd Ave SE/SE 272nd St)
Crossroads (156th Ave NE/NE 8th St)
Crown Hill (15th Ave NW/NW 85th St)
Des Moines (Marine View Dr/S 223rd St)
Duvall
Eastgate (Bellevue College)
Enumclaw
Factoria (Factoria Blvd SE/SE Eastgate Wy)
Fairwood (140th Ave SE/SE Petrovitsky Rd)
Maple Valley (Four Corners, SR-169/Kent-Kangley Rd)
Fremont (Fremont Ave N/N 34th St)
Georgetown (13th Ave S/S Bailey St)
Green River Community College
Greenwood (Greenwood Ave N/N 85th St)
Harborview Medical Center
Highline Community College
Issaquah Highlands
Issaquah (Issaquah Transit Center)
Juanita (98th Ave NE/NE 116th St)
Kenmore (Kenmore Park and Ride)
Kent East Hill (104th Ave SE/SE 240th St)
Kirkland (Kirkland Transit Center)
Kirkland (South Kirkland Park and Ride)
Lake City
Lake Forest Park
Lake Washington Technical College
Madison Park (42nd Ave E/E Madison St)
Magnolia (34th Ave W/W McGraw St)
Mercer Island
Mount Baker Station
Newcastle
North Bend
North City (15th Ave NE/NE 175th St)
Oaktree (Aurora Ave N/N 105th St)
Othello Station
Rainier Beach Station
Renton Highlands (NE Sunset Blvd/NE 12th St)
Renton Technical College
Roosevelt (12th Ave NE/NE 65th St)
Sammamish (228th Ave NE/NE 8th St)
Sand Point (Sand Point Way/NE 70th St)
Shoreline (Shoreline Community College)
Snoqualmie
SODO (SODO Busway/Lander St)
South Mercer Island
South Park (14th Ave S/S Cloverdale St)
South Seattle Community College
Tukwila International Blvd Station
Twin Lakes (21st Ave SW/SW 336th St)
Valley Medical Center
Vashon
Wallingford (Wallingford Ave N/N 45th St)
Westwood Village
Woodinville (Woodinville Park and Ride)

APPENDIX 2: Corridors evaluated for All-Day and Peak network

Connections		
Between	**And**	**Via**
Admiral District	Southcenter	California Ave SW, Military Rd, TIBS
Alki	Seattle CBD	Admiral Way
Auburn	Pacific	Algona
Auburn	Burien	Kent, SeaTac
Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd
Aurora Village	Seattle CBD	Aurora Ave N
Aurora Village	Northgate	Meridian Av N
Avondale	Kirkland	NE 85th St, NE Redmond Wy, Avondale Wy NE
Ballard	Seattle CBD	15th Ave W
Ballard	University District	Green Lake, Greenwood
Ballard	Lake City	Holman Road, Northgate
Ballard	Seattle CBD	W Nickerson, Westlake Av N, 9th Ave
Ballard	University District	Wallingford (N 45th St)
Beacon Hill	Seattle CBD	Beacon Ave
Bellevue	Eastgate	Lake Hills Connector
Bellevue	Redmond	NE 8th St, 156th Ave NE
Bellevue	Renton	Newcastle, Factoria
Burien	Seattle CBD	1st Ave S, South Park, Airport Wy
Burien	Seattle CBD	Delridge, Ambaum
Burien	Seattle CBD	Des Moines Mem Dr, South Park
Capitol Hill	Seattle CBD	15th Ave E
Capitol Hill	Seattle CBD	Madison St
Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill
Central District	Seattle CBD	E Jefferson St
Colman Park	Seattle CBD	Leschi, Yesler
Cowen Park	Seattle CBD	University Way, I-5
Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Av W
Eastgate	Bellevue	Newport Wy , S. Bellevue, Beaux Arts
Eastgate	Overlake	Phantom Lake
Eastgate	Bellevue	Somerset, Factoria, Woodridge
Enumclaw	Auburn	Auburn Wy S, SR 164
Fairwood	Renton	S Puget Dr, Royal Hills
Federal Way	Kent	Military Road
Federal Way	SeaTac	SR-99
Fremont	Broadview	8th Av NW, 3rd Av NW

Connections		
Between	**And**	**Via**
Fremont	Seattle CBD	Dexter Ave N
Fremont	University District	N 40th St
Green River CC	Kent	132nd Ave SE
Greenwood	Seattle CBD	Greenwood Ave N
High Point	Seattle CBD	35th Ave SW
Issaquah	North Bend	Fall City, Snoqualmie
Issaquah	Eastgate	Newport Way
Issaquah	Overlake	Sammamish, Bear Creek
Kenmore	Totem Lake	Finn Hill, Juanita
Kenmore	Kirkland	Juanita
Kenmore	Shoreline	Lake Forest Park, Aurora Village TC
Kenmore	University District	Lake Forest Park, Lake City
Kennydale	Renton	Edmonds Av NE
Kent	Renton	84th Av S, Lind Av SW
Kent	Renton	Kent East Hill
Kent	Burien	Kent-DM Rd, S. 240th St, 1st Av S
Kent	Maple Valley	Kent-Kangley Road
Kent	Seattle CBD	Tukwila
Kirkland	Factoria	Overlake, Crossroads, Eastgate
Kirkland	Bellevue	South Kirkland
Lake City	University District	35th Ave NE
Lake City	University District	Lake City, Sand Point
Lake City	Seattle CBD	NE 125th St, Northgate, I-5
Laurelhurst	University District	NE 45th St
Madison Park	Seattle CBD	Madison St
Madrona	Seattle CBD	Union St
Magnolia	Seattle CBD	34th Ave W, 28th Ave W
Mercer Island	S Mercer Island	Island Crest Way
Mirror Lake	Federal Way	S 312th St
Mount Baker	Seattle CBD	31st Av S, S Jackson St
Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE
Mt Baker	University District	23rd Ave E
Northeast Tacoma	Federal Way	SW 356th St, 9th Ave S
Northgate	Seattle CBD	Green Lake, Wallingford
Northgate	University District	Roosevelt
Northgate	University District	Roosevelt Way NE, NE 75th St
Othello Station	Columbia City	Seward Park
Overlake	Bellevue	Bell-Red Road
Overlake	Bellevue	Sammamish Viewpoint, Northup Way

Connections		
Between	**And**	**Via**
Queen Anne	Seattle CBD	Queen Anne Ave N
Queen Anne	Seattle CBD	Taylor Ave N
Rainier Beach	Seattle Center	Martin Luther King Jr Wy, E John St, Denny Way
Rainier Beach	Seattle CBD	Rainier Ave
Rainier Beach	Capitol Hill	Rainier Ave
Redmond	Eastgate	148th Ave, Crossroads, Bellevue College
Redmond	Fall City	Duvall, Carnation
Redmond	Totem Lake	Willows Road
Renton	Enumclaw	Maple Valley, Black Diamond
Renton	Seattle CBD	Martin Luther King Jr Wy, I-5
Renton	Renton Highlands	NE 4th St, Union Ave NE
Renton	Burien	S 154th St
Renton	Seattle CBD	Skyway, S. Beacon Hill
Renton	Rainier Beach	West Hill, Rainier View
Renton Highlands	Renton	NE 7th St, Edmonds Av NE
Richmond Beach	Northgate	Richmond Bch Rd, 15th Ave NE
Sand Point	University District	NE 55th St
Shoreline	University District	Jackson Park, 15th Av NE
Shoreline CC	Greenwood	Greenwood Av N
Shoreline CC	Northgate	N 130th St, Meridian Av N
Shoreline CC	Lake City	N 155th St, Jackson Park
Totem Lake	Seattle CBD	Kirkland, SR-520
Tukwila	Des Moines	McMicken Heights, Sea-Tac
Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S
Tukwila	Fairwood	S 180th St, Carr Road
Twin Lakes	Federal Way	S 320th St
Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S
University District	Seattle CBD	Broadway
University District	Seattle CBD	Eastlake, Fairview
University District	Seattle CBD	Lakeview
University District	Bellevue	SR-520
UW Bothell	Redmond	Woodinville, Cottage Lake
UW Bothell/CCC	Kirkland	132nd Ave NE, Lake Washington Tech
Vashon	Tahlequah	Valley Center
Wedgwood	Cowen Park	View Ridge, NE 65th St
West Seattle	Seattle CBD	Fauntleroy, Alaska Junction
White Center	Seattle CBD	16th Ave SW, SSCC
White Center	Seattle CBD	Highland Park, 4th Ave S
Woodinville	Kirkland	Kingsgate

King County Metro Transit

2014 Service Guidelines Report

October 2014

King County METRO

We'll Get You There

Department of Transportation
Metro Transit Division
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Using the Guidelines to Plan, Assess and Change Service

Where do we provide service?

Our Transit network is comprised of corridors connecting centers

Centers:

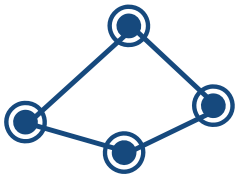
- Transit centers and places where many people work, live or go for services or activities
- 85 centers across King County today

Corridors

112 Metro corridors serve centers

All-Day and Peak Network

These 112 corridors create Metro's all-day transit network. Metro provides additional peak only service to meet demand.



How much service should we provide?

Target corridor service levels are set in two steps:

1. What is the preliminary service level?

Productivity (Jobs & Households)

+

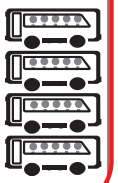
Social Equity (low-income & minority riders)

+

Geographic Value (connections to centers)

Preliminary Service Level

2. Does preliminary service level provide enough buses?

Preliminary Service level	Current Riders	Target
		

How is service performing?

Service analysis looks at both routes and corridors:

Route Productivity Rides/ Hr. Pass.Mi/ Mi.

Top 25%		Bottom 25%

Service Reliability

< 5 Minutes late

Overcrowding

Avg. load < 125% seats: regular service
Avg. load < 150% seats: 10 min. service
Standing load <20 min all service

Peak Criteria
Travel time
Ridership

Target Service Comparison

Target	Existing
	 Below

Above	At	Below

What should we do differently?

+ Investment Priorities

Invest to:

- Reduce overcrowding
- Improve reliability
- Achieve target service levels
- Become more productive

- Reduction Priorities

Reduce service to:

- Meet budget constraints
- Re-invest in investment priorities

Improvements & Restructures

Make improvements and restructures to:

- Match design guidelines
- Meet investment priorities

=

Service Change Proposals

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.

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.

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.

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
	Total investment need	**547,350**
4	Increase service on high-productivity routes: A substantial portion of the growth needed to meet the *Transportation 2040* 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.

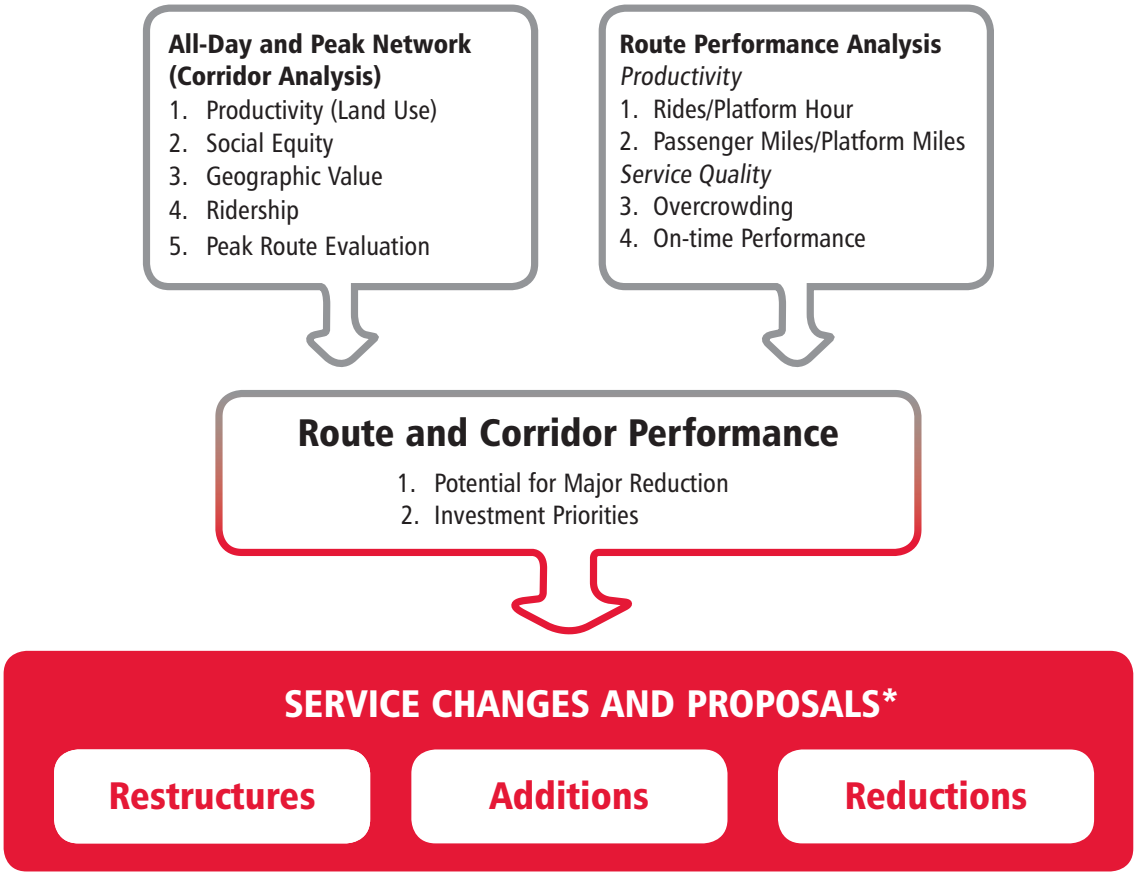
Where and how is Metro investing in alternative services? Section 3 presents information about performance of alternative services and steps we are taking to expand these services.

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.

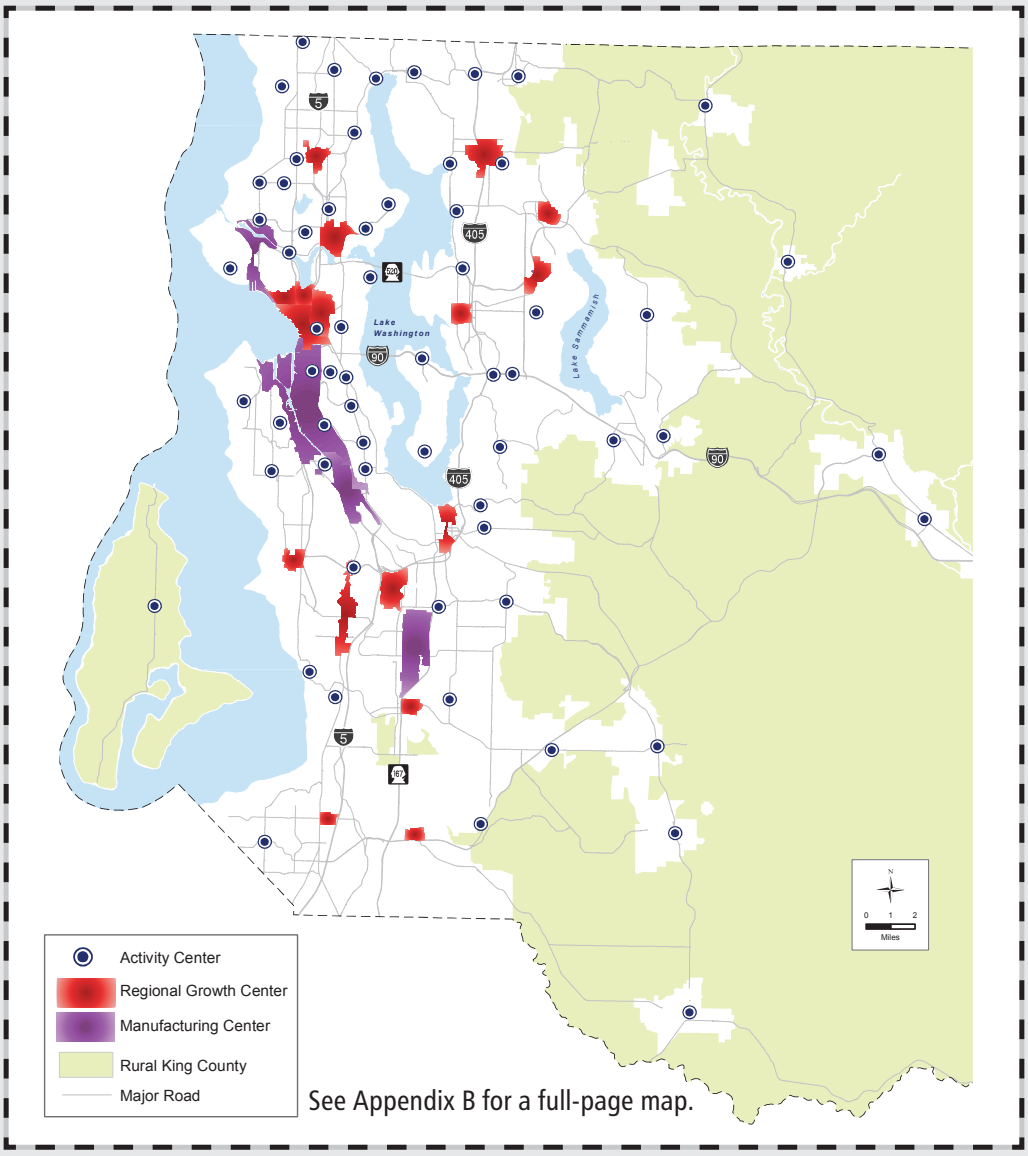
Primary Connections	Number of Corridors
Between regional growth centers	31
Between transit activity centers	49

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



See Appendix B for a full-page map.

SECTION 1

SERVICE ANALYSIS

When Metro plans changes to our transit system, we analyze both the performance of routes (productivity and service quality) and how those routes serve the All-Day and Peak Network. This section describes how we do this analysis and then presents the results. This analysis is the starting point for planning service revisions but is not a service change proposal.

Route performance

We assess each route's performance by measuring its productivity using two measures:

- **Rides per platform hour** – total ridership divided by the total hours a bus travels from the time it leaves its base until it returns.
- **Passenger miles per platform mile** – total miles traveled by all passengers divided by the total miles the bus operates from its base until it returns.

We analyze productivity in peak, off-peak, and night periods in the market the route serves:

- **Seattle core** routes serve downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District, or Uptown.
- **Non-Seattle-core** routes serve other areas of Seattle and King County.

Routes below the productivity threshold are those in the bottom 25 percent of routes that operate in the same time period and market. High-productivity routes are those in the top 25 percent. The performance thresholds for 2014 are shown in Tables 1 and 2.

Change in route performance thresholds. The route performance thresholds change in each report to reflect current network performance. In 2014, the performance thresholds showed relatively little change from 2013 for most

What are corridors and routes?

Corridors are major transit pathways that connect regional growth, manufacturing/industrial, and activity centers; park-and-rides and transit hubs; and major destinations throughout King County. The service guidelines use the corridor analysis to evaluate and set target service levels for the 112 corridors of the All-Day and Peak Network.

Routes are the actual services provided. Service within a single corridor might be provided by multiple bus routes. For example, the corridor from Fremont to downtown Seattle via Dexter Avenue North is served by two different bus routes, 26 and 28, and both of these routes extend beyond Fremont. Some routes also cover multiple corridors. Route 271 serves three distinct travel markets: Issaquah-Eastgate, Eastgate-Bellevue, and Bellevue-University District. The service guidelines evaluate routes for productivity and service quality.

periods in both markets. This reflects a relatively stable period in the Metro system, with some increases in performance due to overall ridership growth. Performance thresholds increased or remained stable for most measures for non-Seattle core routes, with the exception of off-peak rides per platform hour. The change in performance thresholds for Seattle core routes was mixed, with increases or no change for most peak measures, declines in most night measures, and mixed changes in off-peak measures. Night service was added on several routes in 2013 and may be one cause of this change in night performance. Route performance threshold changes between 2013 and 2014 are shown in Tables 1 and 2. A table of performance by route is in Appendix C.

TABLE 1

2013-2014 Route Performance Threshold Changes for Top 25%

Market	Performance	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
Routes that DO NOT serve Seattle core	2014	25.2	8.1	24.7	8.0	18.8	6.3
	2013	24.1	7.4	24.5	7.9	18.8	6.3
	Change	1.1	0.7	0.2	0.1	0.0	0.0
Routes that serve Seattle core	2014	48.2	17.1	51.1	14.9	35.1	10.2
	2013	47.3	16.6	51.3	15.4	34.9	10.8
	Change	0.9	0.5	-0.2	-0.5	0.2	-0.6

TABLE 2

2013-2014 Route Performance Threshold Changes for Bottom 25%

Market	Performance	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
Routes that DO NOT serve Seattle core	2014	12.0	2.4	11.3	2.7	11.3	2.7
	2013	12.1	2.4	12.0	2.7	10.9	2.6
	Change	-0.1	0.0	-0.7	0.0	0.4	0.1
Routes that serve Seattle core	2014	24.3	10.7	33.7	9.8	20.7	5.9
	2013	24.0	10.7	32.6	9.8	21.4	6.3
	Change	0.3	0.0	1.1	0.0	-0.7	-0.4

All-Day and Peak Network

The All-Day and Peak Network analysis examines corridors and peak service.

1) Corridor analysis

Each corridor in the All-Day and Peak Network is assigned a target service level based on productivity, social equity, and geographic value. Table 3 shows the service family categories based on the target service levels. The All-Day and Peak Network analysis compares the target service levels to existing service to determine whether a corridor is below, at, or above the target levels. The steps of the corridor analysis as well as the results are in Appendix I.

TABLE 3
Service Families

Service family	Frequency (minutes)			Days of service	Hours of service
	Peak[1]	Off-peak	Night		
Very frequent	15 or better	15 or better	30 or better	7 days	16-20 hours
Frequent	15 or better	30	30	7 days	16-20 hours
Local	30	30 - 60	*	5-7 days	12-16 hours
Hourly	60 or worse	60 or worse	--	5 days	8-12 hours
Peak	8 trips/day minimum	--	--	5 days	Peak
Alternative services	Determined by demand and community collaboration process				

1 Peak periods are 5-9 a.m. and 3-7 p.m. weekdays; off-peak are 9 a.m. to 3 p.m. weekdays and 5 a.m. to 7 p.m. weekends; night is 7 p.m. to 5 a.m. all days.

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

As an outcome of our analysis of spring 2014 data, fewer corridors were targeted for very frequent or hourly service and more corridors were targeted for frequent and local service than in 2013, as seen in Table 4.

TABLE 4
Number of All-Day Corridors by Assigned Service Levels

Service Level	2013	2014	Change
Very frequent	53	51	-2
Frequent	22	25	3
Local	26	29	2
Hourly	11	7	-3

Ten all-day corridors moved to a more frequent service level and eight moved to a less frequent level. A list of all corridors that changed target service families and the reasons for the changes are in Appendix F.

Ten corridors received additional points from changes in the number of jobs per corridor mile. This reflects actual changes in the number of jobs or universities/college enrollment with access to transit. Three corridors received more points for ridership in minority census tracts, while one corridor received fewer points. Eight corridors received more points for ridership in low-income census tracts, while eight received fewer points. Five corridors moved to a higher service family in part because of higher demand/ridership on the corridor.

The target service levels are directly affected by changes in the use of bus service by people living and working in local communities and in the environment that local jurisdictions help create through policy and planning actions.

The complete network: integration with Sound Transit

On June 12, 2014, Executive Dow Constantine issued an executive order directing Metro to develop an integrated transit service plan in coordination with Sound Transit and partner agencies. Executive Constantine also authored a motion, passed by the Sound Transit Board on June 26, 2014, directing Sound Transit to study bus-rail integration in coordination with partner agencies.

Responding to the Executive's directives, Metro and Sound Transit worked together to develop the Sound Transit/Metro integration report that was submitted to the King County Council and Sound Transit Board in September 2014. This report identifies potential efficiencies, and savings as well as ways the two agencies can collaborate to deliver better transit service and gain "efficiency dividends." It also lays the foundation for coordinated efforts to optimize the region's investments in high-capacity rail and bus service. The report outlines how the two agencies will move together in the following areas:

1. Short-term integration
2. Long-term integration
3. Rider engagement and information
4. Capital facilities
5. Operational efficiencies

The two agencies are discussing new ways to better coordinate their analysis of corridors where both agencies operate service. At present, Metro's All-Day Network does not include corridors where Sound Transit is the primary provider of all-day service. Key corridors in King County where Sound Transit is the primary provider of two-way, all-day transit service are listed in the table below. In many of these corridors, Metro mainly operates peak service that complements Sound Transit's all-day service.

TABLE 5

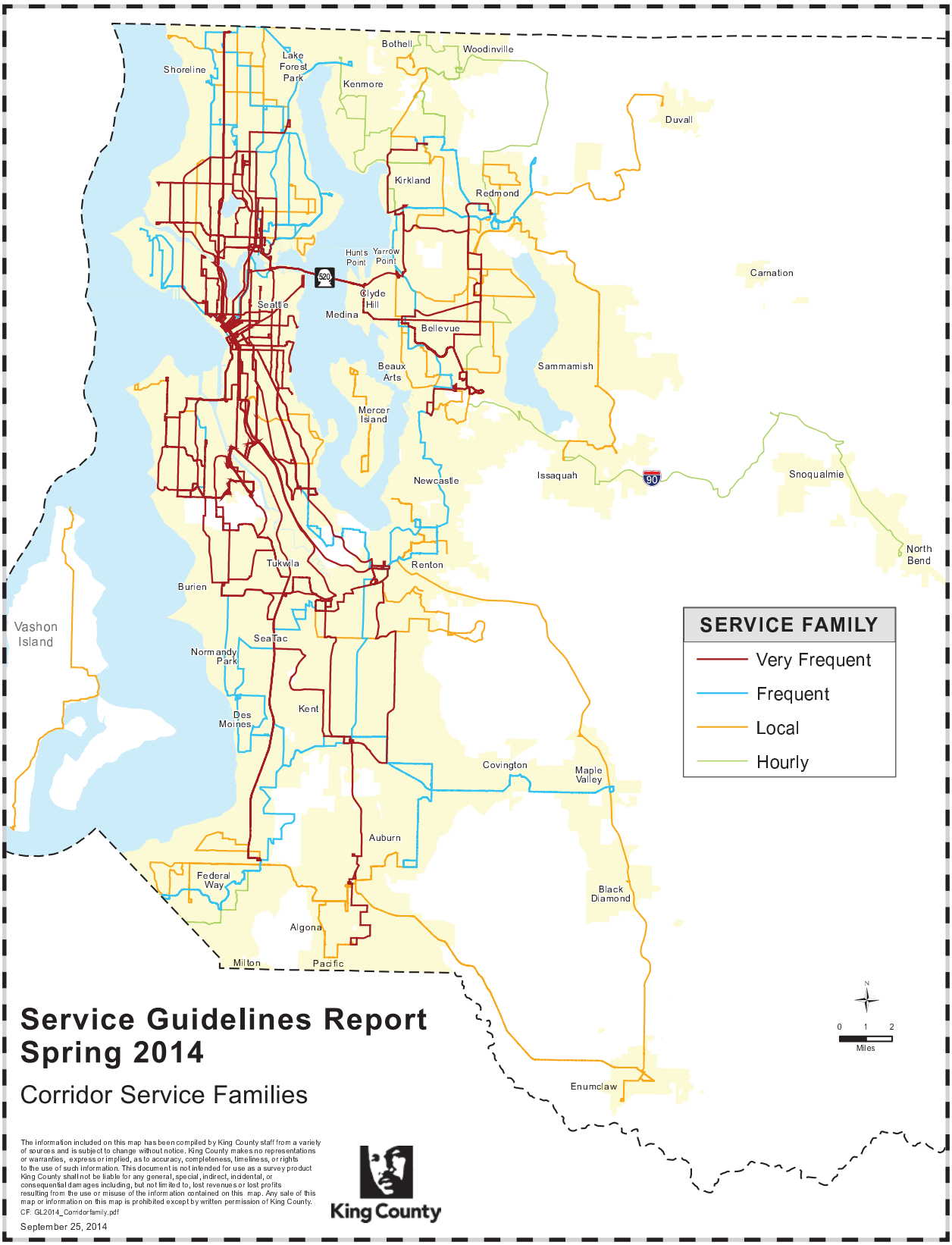
Corridors Served Primarily by Sound Transit

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
SeaTac	Downtown Seattle	Rainier Valley	Link light rail

As Link service expands, Sound Transit will become the primary provider in additional corridors such as the Northgate-to-downtown Seattle corridor. As services are introduced and modified, Metro and Sound Transit will make adjustments to the network.

FIG. 2

Corridor Service Families



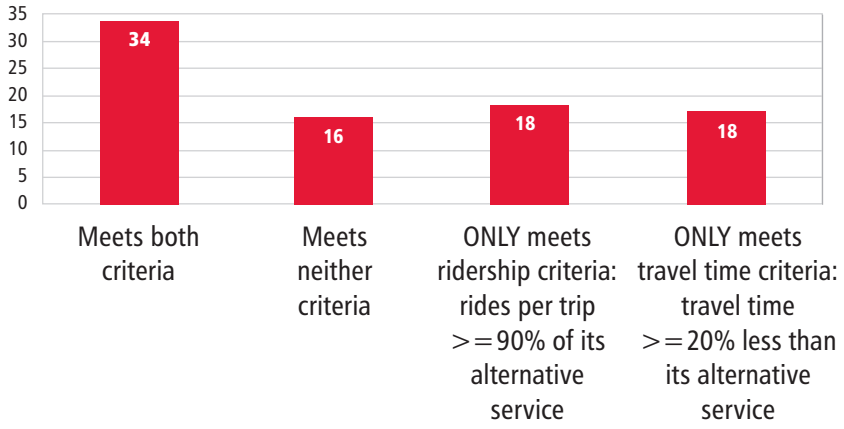
2) Peak analysis

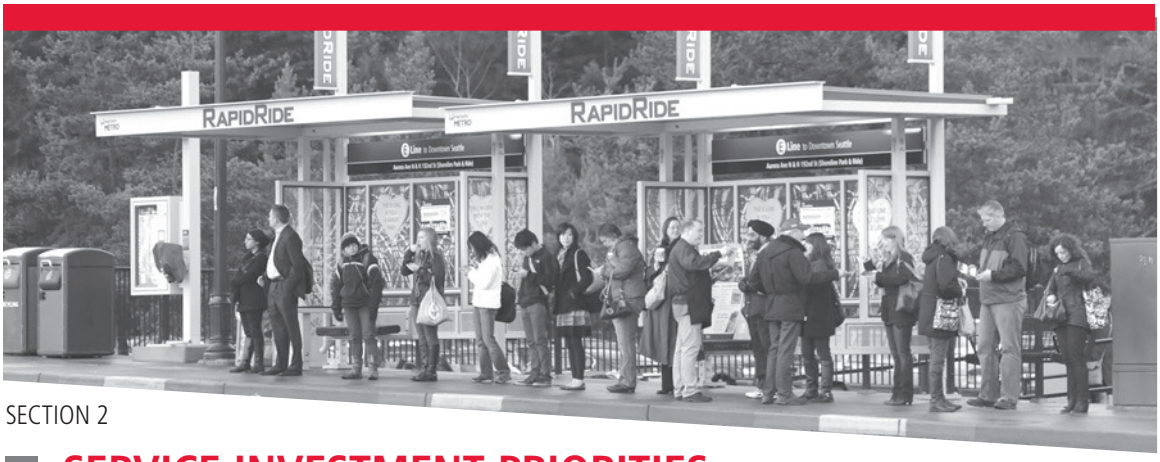
This analysis compares rides per trip and travel time on peak-period routes to those on the local alternative. For peak service to be justified, a peak route must have at least 90 percent of the rides per trip that its alternative service has and must be at least 20 percent faster than its alternative. Information about whether routes meet one or both criteria is used in planning future service changes. Peak routes meeting neither criteria may be considered for change or restructuring to improve performance and use resources more efficiently.

In 2014, Metro analyzed 86 peak routes, two more than in 2013. The chart below shows the number of peak routes that meet one, two or neither of the peak criteria. This year, more routes meet both criteria than in 2013, and fewer routes meet neither or only one criteria. The results of the peak analysis are in Figure 3 and Appendix E.

FIG. 3

2014 Peak Route Analysis Results





SECTION 2

SERVICE INVESTMENT PRIORITIES

This section identifies where investments are needed to provide high-quality service and to meet target service levels. When Metro has resources available to invest, or reallocates existing service hours, these findings and the priorities defined in the guidelines will be the basis for investments.

The investment needs identified in this analysis of spring 2014 data are shown in Table 6 below. The investment needs to reduce passenger crowding, improve schedule reliability, and meet target service levels are higher than those in the previous year's analysis

TABLE 6

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
	Total investment need	**547,350**
4	Increase service on high-productivity routes	See discussion on page 2

* Referred to in the service guidelines as "corridors below target service levels"

Annual service hours needed to reduce passenger crowding increased from 15,400 to 22,200; hours needed to improve schedule reliability increased from 27,800 to 38,650; and hours needed to meet target service levels in the All Day and Peak Network increased from 467,500 to 486,500. The investment needs changed for several reasons:

- **Passenger crowding.** Growth in ridership resulted in more passenger crowding.
- **Schedule reliability declined** as a result of more crowded buses, more roadway construction, and traffic congestion that has worsened as the economy has improved.
- **Target service levels** changed for many corridors on the All-Day and Peak Network as a result of changes in ridership demand, land use, and distribution of low-income and minority riders. In addition, Metro made a significant investment in service on the corridor between Aurora Village and the Seattle central business district by starting the RapidRide E Line. This investment met the need identified on that corridor in last year's report. The RapidRide F Line began service in summer 2014 but is not reflected in this year's analysis because it was launched after the spring service change period.

Priority 1 – Passenger crowding investments

Investment in the most-crowded routes is the highest priority in the service guidelines. When service is chronically very crowded, it is poor quality and has a negative impact on riders and reduces overall ridership. Overcrowding is defined as a trip that on average has 25 to 50 percent more riders than seats (depending on service frequency) or has people standing for longer than 20 minutes. The passenger load thresholds are set so that we accept standing passengers on many of our services, but take action where crowding is at an unacceptable level on a regular basis. To ensure that investments are warranted to address problems, we consider performance over a longer period than a single service change.

The table below and Figure 4 identify routes that need additional trips to reduce crowding.

TABLE 7

Routes Needing Investment to Reduce Passenger Crowding

Shading indicates route is new to list of routes needing investment to reduce crowding

Route	Description	Day	Estimated Annual Hours Needed
C Line	Westwood Village - Alaska Junction - Seattle CBD	Weekday	1,400
D Line	Ballard - Seattle Center - Seattle CBD	Weekday	1,600
E Line	Aurora Village - Seattle CBD	Weekday	1,600
5	Shoreline CC - Seattle CBD	Weekday	1,300
8	Seattle Center - Capitol Hill - Rainier Beach	Weekday	600
15EX	Blue Ridge - Ballard - Seattle CBD	Weekday	1,100
16	Northgate TC - Wallingford - Seattle CBD	Weekday	1,600
18EX	North Beach - Ballard - Seattle CBD	Weekday	500
28	Whittier Heights - Ballard - Seattle CBD via Leary Av NW	Weekday	400
40	Northgate TC - Ballard - Seattle CBD via Leary Av NW	Weekday	700
41	Lake City - Seattle CBD via Northgate	Weekday	900
44	Ballard - Wallingford - Montlake	Weekday	300
48	Mount Baker - University District - Loyal Heights	Weekday	500
70	University District - Seattle CBD	Weekday	300
71	Wedgwood - University District - Seattle CBD	Weekday	400
72	Lake City - University District - Seattle CBD	Sunday	100
74EX	Sand Point - Seattle CBD	Weekday	500
101	Renton TC - Seattle CBD	Weekday	1,100
143EX	Black Diamond - Renton TC - Seattle CBD	Weekday	1,600
179	Twin Lakes - Seattle CBD	Weekday	600
214	Issaquah - Seattle CBD	Weekday	500
216	Sammamish - Seattle CBD	Weekday	700
218	Issaquah Highlands - Seattle CBD	Weekday	500
219	Redmond - Sammamish - Seattle CBD	Weekday	500
240	Bellevue - Newcastle - Renton	Weekday	1,700
268	Redmond - Seattle CBD	Weekday	600
372EX	Woodinville - Lake City - University District	Weekday	600
		Total hours needed	**22,200**

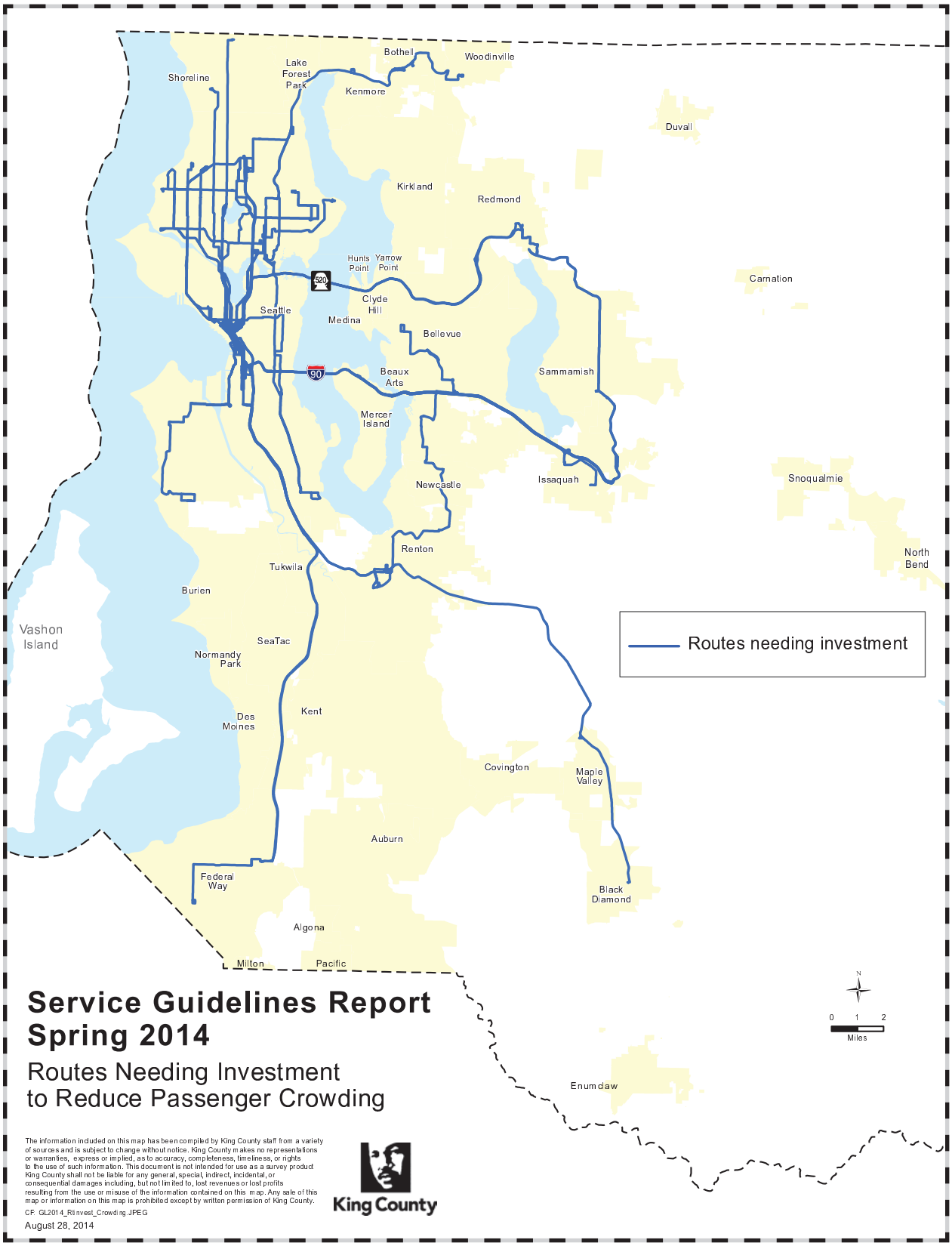
Metro did not have resources to make investments in routes identified as overcrowded in 2013. Ten routes identified in last year's report continue to need investment, and the need has grown significantly on routes 15 Express, 101, 240, and the D Line. This year, several routes operating between East King County and downtown Seattle were identified as needing investment that were not identified in last year's report, specifically peak-period I-90 services such as routes 214, 216, 218, and 219.

Some additional routes were identified as overcrowded but were determined to not need immediate investment either because surrounding trips had capacity or because passenger crowding could be accommodated by assigning a larger bus. Routes 67, 68, 131 and 166 had crowded trips that could be mitigated by assigning a larger bus. Routes 11, 17 Express, 31, 32, 66 Express, 72, 73, 76, 120, 123, 131, 212, 252, 255, 257, 271, 301 and 311 had crowded trips, but trips on nearby routes had capacity available. These routes will continue to be monitored for possible future investments.

In 2014, Metro transmitted to the King County Council a report on alternative passenger crowding measures. This report described possible new ways to measure crowding in future reporting, and analyzed potential impacts to service needs from using different measures. This report discussed the use of performance measures based on the floor area of a bus rather than the number of seats on the bus. See Section 5 for more information about this process.

FIG. 4

Routes Needing Investment to Reduce Passenger Crowding



Priority 2 – Improve schedule reliability

Schedule reliability is measured as the percentage of trips that arrive between 1 minute early and 5 minutes late. Routes that are on time less than 80 percent of the time (65 percent for weekday PM peak) are candidates for investment of service hours. This threshold allows for variations in travel time, congestion, and ridership. In our 2014 report, we used reliability data from June 2013 – May 2014. We use a longer time period for this analysis when possible to ensure that schedule reliability needs are not understated by using data from just the four-month spring period.

The table below lists the 89 routes identified as needing service-hour investments to improve their reliability based on data from June 2013 to May 2014; Figure 8 is a map of those routes. Total need increased from 27,800 hours in 2013 to 38,650 annual hours in 2014. This year more routes experienced reliability problems on weekends. Several routes with larger identified needs in 2014 were affected by construction projects; for example, the Mercer Street project in South Lake Union was a likely cause of increased need for hours on routes 8, 40 and 70.

The total need was calculated based on how far above the lateness threshold the routes were during the different time period. While this calculation provides a reasonable estimate of total needs, individual routes may receive more or less investment than estimated depending on the scheduling techniques available to improve reliability.

TABLE 8

Routes Needing Investment to Improve Schedule Reliability

Shading indicates route is new to list of routes needing investment to improve reliability

Route	Area	Day	Estimated Annual Hours Needed
C Line	Westwood Village - Alaska Junction - Seattle CBD	Saturday	50
D Line	Ballard - Seattle Center - Seattle CBD	Saturday	100
1	Kinnear - Seattle CBD	Weekday, Saturday, Sunday	400
2	West Queen Anne - Seattle CBD - Madrona Park	Weekday, Saturday	650
3	North Queen Anne - Seattle CBD - Madrona Park	Weekday	500
4	East Queen Anne - Seattle CBD - Judkins Park	Weekday, Saturday	600
5	Shoreline CC - Seattle CBD	Saturday	100
7	Rainier Beach - Seattle CBD	Saturday	50
8	Seattle Center - Capitol Hill - Rainier Beach	Weekday	2,200
10	Capitol Hill - Seattle CBD	Weekday	250
11	Madison Park - Seattle CBD	Weekday, Saturday, Sunday	1,000
14	Mount Baker - Seattle CBD	Weekday, Saturday, Sunday	950
16	Northgate TC - Wallingford - Seattle CBD	Saturday, Sunday	25
17EX	Sunset Hill - Ballard - Seattle CBD	Weekday	250
18EX	North Beach - Ballard - Seattle CBD	Weekday	250
21EX	Arbor Heights - Westwood Village - Seattle CBD	Weekday	250
21	Arbor Heights - Westwood Village - Seattle CBD	Saturday	100
24	Magnolia - Seattle CBD	Weekday, Saturday	1,000
25	Laurelhurst - University District - Seattle CBD	Weekday	400
26EX	East Green Lake - Wallingford - Seattle CBD	Weekday	250
26	East Green Lake - Wallingford - Seattle CBD	Weekday, Saturday, Sunday	800
27	Colman Park - Leschi Park - Seattle CBD	Weekday, Saturday, Sunday	550

Route	Area	Day	Estimated Annual Hours Needed
28	Whittier Heights - Ballard - Seattle CBD via Leary Ave NW	Weekday, Saturday, Sunday	850
28EX	Broadview - Ballard - Seattle CBD via Leary Ave NW	Weekday	250
29	Ballard - Queen Anne - Seattle CBD	Weekday	400
31	University District - Fremont - Magnolia	Weekday, Saturday	350
32	University District - Fremont - Seattle Center	Saturday, Sunday	200
33	Discovery Park - Seattle CBD	Saturday	50
37	Alaska Junction - Alki - Seattle CBD	Weekday	250
40	Northgate TC - Ballard - Seattle CBD via Leary Ave NW	Weekday, Saturday, Sunday	2,100
41	Lake City - Seattle CBD via Northgate	Weekday	300
43	University District - Capitol Hill - Seattle CBD	Saturday	100
44	Ballard - Wallingford - Montlake	Saturday	50
48	Mt Baker - University District - Loyal Heights	Weekday, Saturday, Sunday	1,200
49	University District - Capitol Hill - Seattle CBD	Sunday	50
55	Admiral District - Alaska Junction - Seattle CBD	Weekday	250
56	Alki – Seattle CBD	Weekday	300
57	Alaska Junction - Seattle CBD	Weekday	300
60	Westwood Village - Georgetown - Capitol Hill	Saturday	100
64EX	Lake City - First Hill	Weekday	250
66EX	Northgate TC - Eastlake - Seattle CBD	Weekday	500
70	University District - Seattle CBD	Weekday	1,300
71	Wedgwood - University District - Seattle CBD	Weekday, Saturday, Sunday	350
72	Lake City - University District - Seattle CBD	Weekday, Saturday, Sunday	350
74EX	Sand Point - Seattle CBD	Weekday	250
76	Wedgwood - Seattle CBD	Weekday	250
83	Seattle CBD - Ravenna	Saturday	50
99	International District - Waterfront	Saturday, Sunday	100
101	Renton TC - Seattle CBD	Weekday, Saturday, Sunday	500
102	Fairwood - Renton TC - Seattle CBD	Weekday	250
105	Renton Highlands - Renton TC	Weekday, Sunday	300
111	Lake Kathleen - Seattle CBD	Weekday	400
114	Renton Highlands - Seattle CBD	Weekday	250
119EX	Dockton - Seattle CBD via ferry	Weekday	250
124	Tukwila - Georgetown - Seattle CBD	Weekday, Saturday, Sunday	1,600
128	Southcenter - Westwood Village - Admiral District	Weekday	700
131	Burien TC - Highland Park - Seattle CBD	Weekday, Saturday, Sunday	2,300
132	Burien TC - South Park - Seattle CBD	Weekday, Saturday, Sunday	1,000
143EX	Black Diamond - Renton TC - Seattle CBD	Weekday	400
157	Lake Meridian - Seattle CBD	Weekday	250
158	Kent East Hill - Seattle CBD	Weekday	250
159	Timberlane - Seattle CBD	Weekday	250
166	Kent Station - Burien TC	Weekday	300
167	Renton – Newport Hills – University District	Weekday	250
168	Maple Valley - Kent Station	Sunday	50

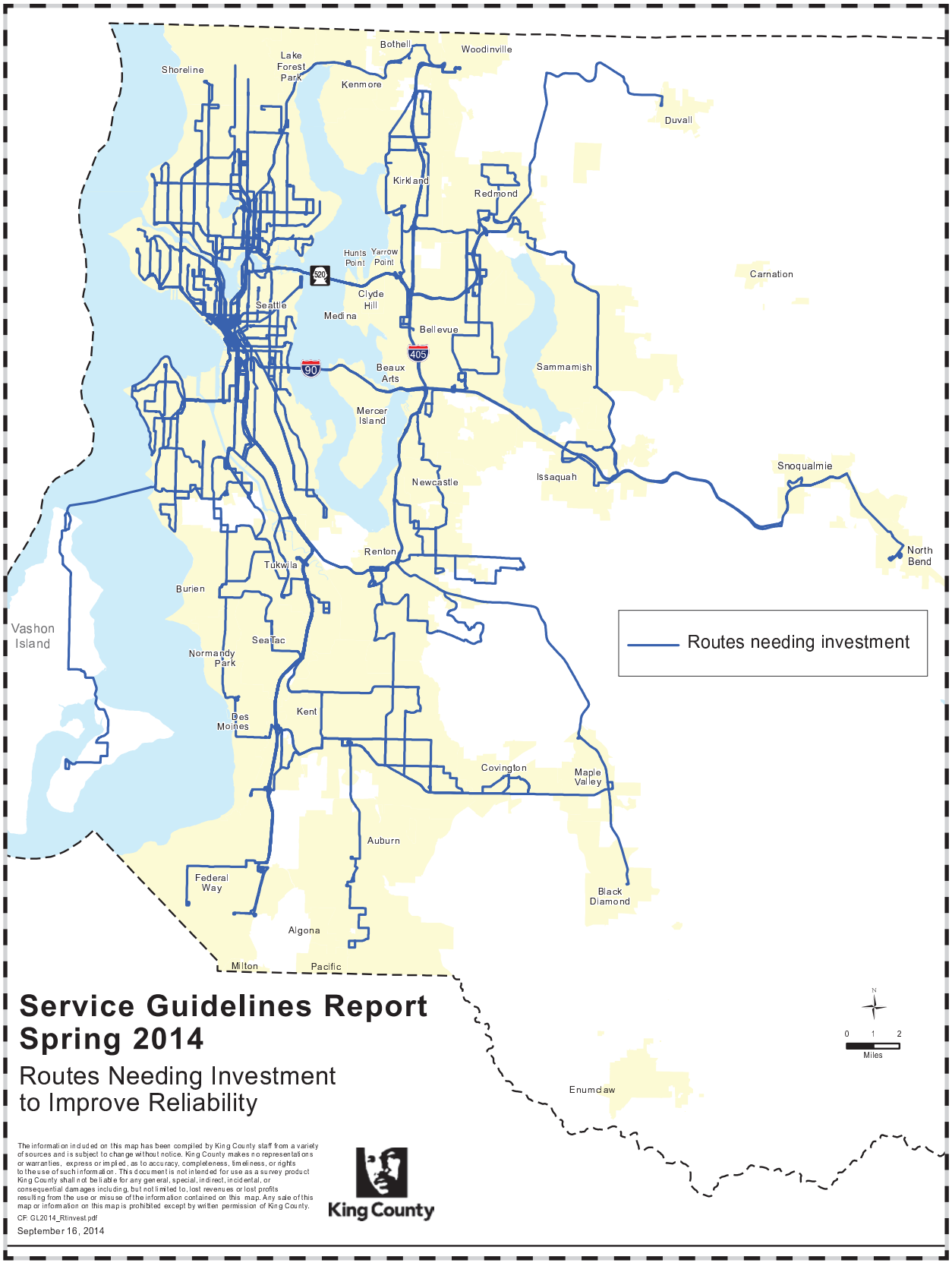
Route	Area	Day	Estimated Annual Hours Needed
169	Kent Station - East Hill - Renton TC	Weekday	800
177	Federal Way - Seattle CBD	Weekday	300
178	South Federal Way - Seattle CBD	Weekday	1,000
179	Twin Lakes - Seattle CBD	Weekday	600
180	Auburn - SeaTac Airport - Burien TC	Weekday	250
190	Redondo Heights - Seattle CBD	Weekday	250
192	Star Lake - Seattle CBD	Weekday	250
193EX	Federal Way - First Hill	Weekday	250
208	North Bend - Snoqualmie - Issaquah	Weekday, Saturday	300
219	Redmond - Sammamish - Seattle CBD	Weekday	250
221	Education Hill - Overlake - Eastgate	Sunday	50
232	Duvall - Bellevue	Weekday	250
237	Woodinville - Bellevue	Weekday	250
242	North City - Overlake	Weekday	250
245	Kirkland - Overlake - Factoria	Saturday, Sunday	200
255	Brickyard - Kirkland TC - Seattle CBD	Saturday	50
257	Brickyard - Seattle CBD	Weekday	250
269	Issaquah - Overlake	Weekday	300
277	Juanita - University District	Weekday	250
309EX	Kenmore - First Hill	Weekday	250
311	Duvall - Woodinville - Seattle CBD	Weekday	500
316	Meridian Park - Seattle CBD	Weekday	250
355EX	Shoreline CC - University District - Seattle CBD	Weekday	300
372EX	Woodinville - Lake City - University District	Weekday	250
601EX	Seattle CBD - Group Health (Tukwila)	Weekday	250
		Total hours needed	**38,650**

Some other routes had reliability problems but were determined not to need immediate investment because they were deleted in fall 2014 or have had major changes since spring 2014.

Reliability for all routes as measured during the period analyzed for this report is in Appendix D.

FIG. 5

Routes Needing Investment to Improve Schedule Reliability



Priority 3 – Corridors below target service levels

Our analysis found that 58 corridors in the All-Day and Peak Network were below target service levels in one or more time periods in spring 2014. Eleven corridors are new to this list in 2014 and 16 corridors from the 2013 list no longer have identified need in at least one time period. To bring service up to the target levels, an estimated 486,500 annual hours of investment would be needed—higher than the 2013 need of 467,500 annual hours and substantially higher than the 2012 need of 309,800 annual hours.

Table 9 lists the corridors that were below target service levels as of spring 2014; they are shown in Figure 6. Priority among these corridors was established according to the service guidelines by ordering the corridors in descending order of points, first by the geographic value score, then by the productivity score, and finally by the social equity score. This priority order helps ensure that service enhancements are distributed and productive throughout Metro's service area.

TABLE 9

2014 Corridors Below Target Service Levels and Estimated Hours to Meet Service Level Targets, Ordered by Investment Priority

Shading indicates corridor is new to list of corridors below target service level

Corridor number	Between	And	Major route	Estimated hours to meet target
105	U. District	Seattle CBD	49	4,700
10	Ballard	Seattle CBD	D Line	9,100
12	Ballard	Seattle CBD	40	4,400
25	Cowen Park	Seattle CBD	71/72/73/74EX	4,800
68	Northgate	U. District	66EX/67	6,100
69	Northgate	Seattle CBD	16	25,900
99	Tukwila	Seattle CBD	124	11,900
9	Ballard	Northgate	40	4,400
19	Burien	Seattle CBD	132	15,300
20	Capitol Hill	White Center	60	19,300
84	Renton	Seattle CBD	101/102	7,500
51	Kent	Seattle CBD	150	7,700
81	Redmond	Totem Lake	930	11,000
33	Federal Way	Kent	183	12,500
50	Kent	Renton	169	12,800
52	Kent	Renton	153	13,000
83	Renton	Burien	140	18,000
3	Auburn	Burien	180	21,900
100	Tukwila	Des Moines	156	5,000
59	Madison Park	Seattle CBD	11	7,800
38	Greenwood	Seattle CBD	5	2,700
61	Magnolia	Seattle CBD	24	4,600
8	Ballard	U. District	48	5,000
111	West Seattle	Seattle CBD	C Line	6,200
18	Burien	Seattle CBD	131	13,000
79	Rainier Beach	Capitol Hill	9EX	17,900
86	Renton	Seattle CBD	106	16,900

Corridor number	Between	And	Major route	Estimated hours to meet target
94	Shoreline CC	Northgate	345	4,400
16	Bellevue	Renton	240	10,600
87	Renton	Renton Highlands	105	2,700
112	White Center	Seattle CBD	125	3,700
95	Shoreline CC	Lake City	330	3,200
7	Avondale	Kirkland	248	4,200
37	Green River CC	Kent	164	5,700
48	Kent	Burien	166	5,300
1	Admiral District	Southcenter	128	21,000
31	Fairwood	Renton	148	1,200
41	Issaquah	Overlake	269	11,300
44	Kenmore	Shoreline	331	5,000
46	Kenmore	Totem Lake	935 DART	2,800
49	Kent	Maple Valley	168	7,600
82	Redmond	Fall City	224	5,200
101	Tukwila	Fairwood	906 DART	6,000
30	Enumclaw	Auburn	186/915 DART	2,600
24	Colman Park	Seattle CBD	27	9,000
64	Mount Baker	Seattle CBD	14	8,200
107	U. District	Seattle CBD	25	8,600
26	Discovery Park	Seattle CBD	33	5,000
72	Eastgate	Bellevue	226	6,500
92	Sand Point	U. District	30	3,400
70	Northgate	U. District	68	8,100
58	Laurelhurst	U. District	25	3,400
28	Eastgate	Bellevue	246	6,200
93	Shoreline	U. District	373EX	24,900
47	Kennydale	Renton	909 DART	3,000
89	Renton Highlands	Renton	908 DART	3,000
102	Twin Lakes	Federal Way	903 DART	2,300
74	Pacific	Auburn	917 DART	3,000
			Total	**486,500**

Change from 2013

The list of corridors below target service levels identified in spring 2014 differs from the spring 2013 list because of service investments and changes in corridor scores since the last report. Corridor scores reflect changes in the underlying land use, social equity, and performance data. Table 10 lists the corridors that were below target service levels in 2013 but are no longer targeted for investment in at least one time period. Some of these corridors still have identified needs but have fewer time periods with needs this year. Reasons for change include:

- Service improvements made in 2014. Service was improved when the RapidRide E Line began.
- Changes in ridership and productivity. The ridership and productivity of major routes changed on several corridors. While some corridors increased their target service levels, other corridors were targeted for less service because they needed less to meet existing demand.

In general, we expect to see changes each year in corridors that are below target service levels as ridership, productivity, and social conditions evolve. Our analysis takes such changes into account as we determine what investments may be needed.

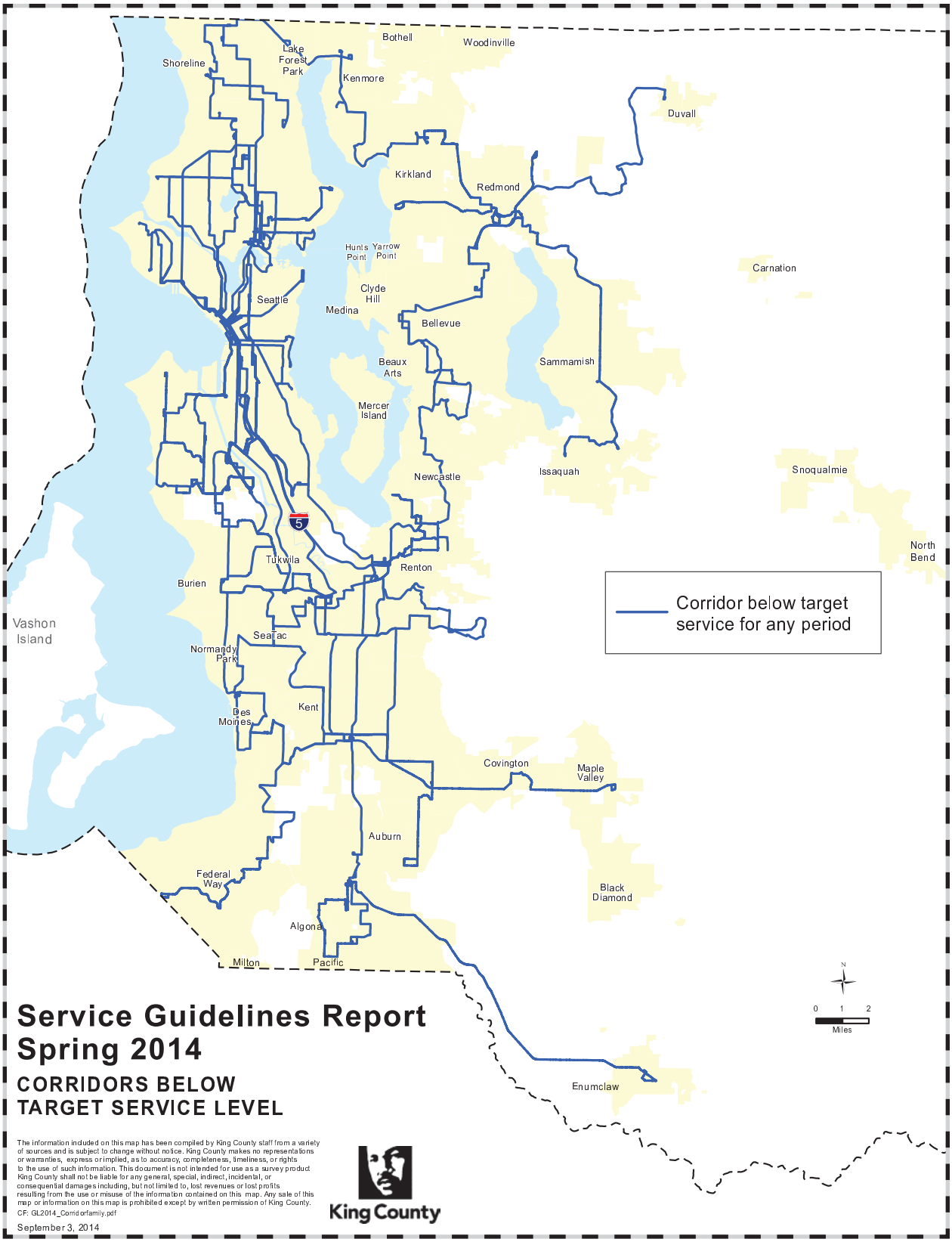
TABLE 10

2013 Corridors Below Target Service Levels that are No Longer Targeted for Investment

Corridor Number	Between	And	Major route	Reason for Change
2	Alki	SODO	50	Lower peak loads
5	Aurora Village	Seattle CBD	E Line	Start of RapidRide E Line (service improvement)
27	Eastgate	Bellevue	241	Lower proportion of riders from low-income census tracts
32	Federal Way	SeaTac	A Line	Lower off-peak loads
35	Fremont	U. District	31/32	Lower peak and off-peak loads
37	Green River CC	Kent	164	Off-peak service no longer targeted because of lower off-peak loads; peak and night service remain targeted
45	Kenmore	U. District	372EX	Lower off-peak loads; lower proportion of riders from low-income census tracts
55	Lake City	Seattle CBD	41	Corrections to current frequency calculation; lower off-peak loads and night cost recovery
56	Northgate	U. District	75	Lower proportion of riders from low-income census tracts
57	Lake City	U. District	65	Corrections to current frequency calculation
65	Mountlake Terrace	Northgate	347	Lower cost recovery at night
70	Northgate	U. District	68	Corrections to current frequency calculation; off-peak and night service remain targeted
71	Othello Station	SODO	50	Lower peak loads
94	Shoreline CC	Northgate	345	Off-peak service no longer targeted due to lower proportion of riders from low-income tracts; peak and night service remain targeted
100	Tukwila	Des Moines	156	Night service no longer targeted because 2013 guidelines report erroneously showed no night service; peak service remains targeted
112	White Center	Seattle CBD	125	Night service no longer targeted as result of more accurate current frequency calculation and lower cost recovery; peak service remains targeted

FIG. 6

2014 Corridors Below Target Service Levels



Priority 4 – High-productivity routes

Route productivity is assessed using two measures: rides per platform hour or passenger miles per platform mile (see Section 1). High-productivity routes are defined as those that perform in the top 25 percent of comparable routes on one or both measures in at least one time period. In the spring 2014 period, of the 214 routes evaluated, 81 were in the top 25 percent in at least one time period on one or both productivity measures.

Metro must become more productive and carry more riders to help fulfill the public transportation expectation set in *Transportation 2040*—this is one reason why the guidelines define highly productive services as an investment priority. Investing in high-productivity routes in areas where there is latent demand for transit will result in higher ridership. A substantial portion of the growth needed to meet the *Transportation 2040* expectation (an additional 2.6 million annual service hours) will be on high-productivity services.

Metro has demonstrated that investments in highly productive service lead to increased ridership. We will continue to invest in high-productivity services when we restructure service, form service partnerships with local jurisdictions, or have other opportunities.

Many services that performed highly in 2013 continued to do so in 2014. Some notable groups of high-productivity routes include:

- **RapidRide lines.** Investments to improve frequency and quality of service have resulted in ridership growth on all RapidRide corridors. The A, B, D, and E lines are among the top 25 percent of routes on both performance measures in all time periods. The C Line and Route 140 (now F Line) were among the top 25 percent of routes on one or both performance measures in all time periods.
- **Downtown Seattle to University District routes.** Routes 49, 71, 72, 73 and 74 Express continue to be top performers that connect the largest transit markets in King County.
- **Commuter routes serving north Seattle.** Routes 15 Express, 74 Express, 76, 77 and 316 are the top-performing commuter routes. These highly successful commuter routes operate in areas that have high demand for service, including Ballard, the University District, northeast Seattle, and Shoreline.
- **Routes connecting regional growth centers in south King County.** The network of routes that connect regional growth centers in south King County—128, 140 (future F Line), 164, 166, 169, 180, and 181—continued to perform well in 2014. Their good performance is indicative of the strong demand for transit between regional growth and activity centers in south King County.
- **Routes that connect neighborhoods to Northgate.** The network of all-day routes in north King County connects several routes with the high-performing Route 41, which connects Northgate to downtown Seattle. Routes 345, 346 and 347 provide neighborhood circulation as well as a connection to Northgate. This group of routes performs well on the neighborhood routes that both circulate and connect to the trunk service and the all-day service to downtown Seattle.
- **Peak routes serving Eastgate Park and Ride.** Several peak routes that provide service between Eastgate Park and Ride and downtown Seattle perform well on passenger miles per platform mile--including routes 212, 216, 217, 218 and 219. Goal performance on the passenger miles measure indicates that service is well-used and buses are full along most of these routes.

TABLE 11

2014 Routes in Top 25% on Both Measures in All Time Periods Served

Shading indicates route is new to list of routes in top 25% on both measures

Route	Description	Time Period
A Line	Federal Way - Tukwila	Peak, off peak, night
B Line	Bellevue - Crossroads - Redmond	Peak, off peak, night
D Line	Ballard - Seattle Center - Seattle CBD	Peak, off peak, night
E Line	Aurora Village - Seattle CBD	Peak, off peak, night
15EX	Blue Ridge - Ballard - Seattle CBD	Peak
41	Lake City - Seattle CBD via Northgate	Peak, off peak, night
49	University District - Capitol Hill - Seattle CBD	Peak, off peak, night
71	Wedgwood - University District - Seattle CBD	Peak, off peak, night
72	Lake City - University District - Seattle CBD	Peak, off peak, night
73	Jackson Park - University District - Seattle CBD	Peak, off peak, night
74EX	Sand Point - Seattle CBD	Peak
76	Wedgwood - Seattle CBD	Peak
77	North City - Seattle CBD	Peak
164	Green River CC - Kent Station	Peak, off peak, night
166	Kent Station - Burien TC	Peak, off peak, night
169	Kent Station - East Hill - Renton TC	Peak, off peak, night
316	Meridian Park - Seattle CBD	Peak

SECTION 3

ALTERNATIVE SERVICES PERFORMANCE AND PROGRESS REPORT

This section presents the annual progress report for the King County Metro Transit Five-Year Implementation Plan for Alternative Services to Traditional Transit Service Delivery, complying with the request for an annual report in King County Motion 13736. Annual reporting for alternative services is being combined with the Service Guidelines Report to provide a comprehensive overview of services and performance. This section reviews both the actions Metro is taking to plan for and deliver alternative services and the performance of alternative services that were operating in spring 2014.

Historically, alternative services have included non-fixed-route services directly provided or supported by Metro: Community Access Transportation, Vanpool, Vanshare, and the Hyde Shuttle program. All of these programs provide access to local destinations and to fixed-route transit service.

Recently, Metro has focused on expanding alternative services on corridors that cannot be cost-effectively served by fixed-route transit. The first large-scale project in the Snoqualmie Valley resulted in the Snoqualmie Valley Shuttle, a deviated route funded through a partnership and operated by a local nonprofit organization. In 2014, Metro continued operations and support for alternative services, including the Snoqualmie Valley Shuttle and DART routes. We also began planning the Redmond alternative service project, focused on first/last mile connections, and engaged in discussions with several local jurisdictions about ways that alternative services could be provided in the future, primarily to offset the impact of service reductions.

Annual performance report

The Snoqualmie Valley Shuttle provides service between North Bend and Duvall, connecting riders to fixed-route transit service at both ends of the route and local destinations along the way. The shuttle has flexible service areas at the ends of the route. It is funded through a public/private partnership between Metro and the Snoqualmie Tribe, and is operated by a local nonprofit organization, Snoqualmie Valley Transportation. The Snoqualmie Valley Shuttle began operating in fall 2013, replacing portions of low-performing routes 224 and 311.

In spring 2014, both routes 224 and 311 had lower costs per vehicle trip and more rides per hour than before they were revised. Cost per ride increased because growth in cost per hour outpaced growth in rides per hour. The Snoqualmie Valley Shuttle had 2.1 rides per hour at an average cost to Metro of $56.70 per trip, significantly lower than the cost per trip of the two routes it replaced. A comparison of these routes is shown in Table 12.

TABLE 12

Alternative Services Performance – Snoqualmie Valley Shuttle and Routes Changed in 2013

Route	Cost per vehicle trip (2013)	Cost per vehicle trip (2014)	Cost per ride (2013)	Cost per ride (2014)	Rides per hour (2013)	Rides per hour (2014)
224	$201.10	$121.20	$18.84	$18.88	7.1	7.4
311	$319.77	$282.74	$6.57	$6.71	21.7	22.2
Snoqualmie Valley Shuttle	n/a	$56.70 /$64.67*	n/a	$16.88 /$19.25*	n/a	2.1

* Including Snoqualmie Tribe contribution

Fare and policy changes

Metro is assessing the need to modify fare policy related to potential expansion of alternative services. The Snoqualmie Valley Shuttle operates with a suggested donation of $1 per trip. Shuttle riders who connect to regular Metro service pay a fare on the Metro portion of their trip. In the spring 2014 service period, total donations on the Snoqualmie Valley Shuttle averaged about $590 per month which was between 2 and 3 percent of operating costs. As Metro considers an expanded alternative service program, we will assess methods for ensuring that enough revenue is recovered to sustain the program.

Metro is currently considering policy changes that would support expansion of the alternative services program. One potential change would be to extend program eligibility to the general public. We will also consider policy changes relevant to alternative services in the 2015 update of the strategic plan and service guidelines. Metro is currently following policies updated in 2013 by incorporating alternative services more fully into our performance measurement.

Collaboration with local jurisdictions

In 2014, Metro focused on two projects: continuing to support the Snoqualmie Valley Shuttle and working with the City of Redmond to develop an alternative service concept to serve the southeast Redmond and Willows Road employment centers. As we shared information on service reductions, we also worked with stakeholders to discuss options for using alternative services to meet critical needs resulting from those reductions.

Under the Snoqualmie Valley Shuttle service agreement, Snoqualmie Valley Transportation (SVT) is primarily responsible for marketing and outreach. Metro worked with SVT to update the Metro and SVT websites to maximize cross-promotion of the shuttle and connections to Metro services, and provided materials to support SVT's outreach through email and events. Metro and SVT are also collaborating on future outreach campaigns to increase shuttle ridership and promote the connection to Route 224 in Duvall. To help address the deletion of routes 209 and 215 in September 2014, Metro conducted an outreach campaign targeting affected riders that encouraged them to investigate Vanpool and Vanshare opportunities.

Metro and the City of Redmond conducted extensive employee outreach, working through employers in those areas. This project included four focus groups to fine-tune alternative service concepts and a survey to assess receptivity to these concepts that was completed by almost 800 commuters at over 16 worksites. One of the concepts, flexible carpooling and ridesharing, is currently being discussed with stakeholders. The current target for introducing alternative services in Redmond is first quarter of 2015.

Metro also discussed options for alternative services in several areas affected by service reductions. Metro is working with the Daybreak Star Indian Cultural Center in Magnolia to determine possible ways to serve the center after service reductions. Metro is also working with the City of Burien to identify potential services to mitigate elimination of Route 139, including looking at options for starting a Hyde Shuttle as part of Metro's overall program.

Next steps

As part of Metro's 2015-2016 budget, the County Executive has proposed an expansion of the alternative services program. This effort is designed to continue and expand partnerships with local cities and organizations and to provide service better tailored to the unique travel patterns, schedules, and needs of communities.

Specific elements of the program could include:

- Community Shuttle services involve smaller buses that run on a designated route serving a flexible service area provided through a community partnership. Shuttle vehicles would be provided by Metro along with funds to pay a driver. Community partners could contribute resources and marketing/ promotion. Shuttles would be open to the general population, operate during pre-determined hours and focus on common destinations helping riders with all-day travel needs.
- Community Hub services include creation of multi-modal transportation hubs where individuals can access services such as community shuttles/vans and bicycles as well as information on transportation options. Community van services, which can provide both regularly scheduled trips as well as one-time trips as necessary, and bike sharing services create a strong centralized focal point within a community and rely on strong community partners to be successful.
- Flexible Rideshare services build on the success of Uber and Lyft; this program provides the opportunity for individuals to participate in variable ridesharing as an alternative to the current vanpool program. Individuals can use their own or a Metro-provided vehicle and use a web-based or mobile application to find rides, designate specific pick-up points and connect to other services such as fixed route bus to complete their commute.

SECTION 4

THE GUIDELINES AT WORK

Metro uses the guidelines as we revise service three times each year, in the spring, summer, and fall. Metro launched the RapidRide E and F lines in February and June of 2014, respectively. In preparation for service reductions in September 2014, Metro limited service changes in February and June 2014 to minor routing and construction-mitigation changes. In September 2014, Metro implemented system-wide service reductions. A full list of changes made in 2014 is in Appendix G.

RapidRide E Line

In February 2014, Metro started the RapidRide E Line, which operates between downtown Seattle and the Aurora Village Transit Center via Green Lake and North Seattle. Like all of Metro's RapidRide service, the E Line offers free Wi-Fi, real-time bus arrival signs at stations, well-lit shelters, new buses, and frequent service all day, every day.

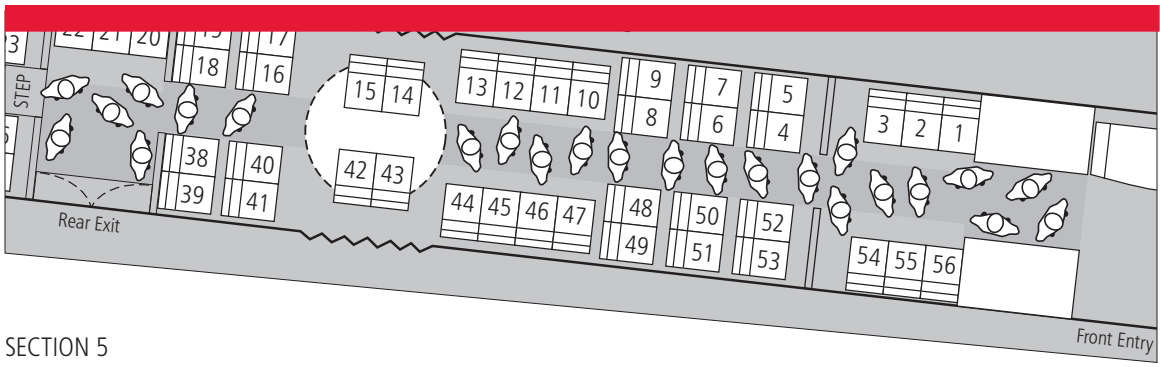
The E line operates 24 hours a day. On weekdays, service operates every 5 to 12 minutes during peak commute hours, every 12 minutes most other times of the day, and every 20 to 60 minutes after 10 p.m. On weekends, the E Line operates every 12 to 20 minutes most of the day and every 20 to 60 minutes after 10 p.m.

The E Line operates in business access and transit (BAT) lanes between Shoreline and North 38th Street in Seattle. Transit signal priority and queue jumps also help buses move more efficiently. Early results shows a 23 percent travel time savings on the E Line compared to the prior service (358 EX). The E Line has 58 total stops (not including downtown Seattle stops), including 31 stations with ORCA card readers and real-time information signs.

In the months following its launch, the E Line had a 16 percent ridership increase over the baseline period. After only three months, the overall rider satisfaction level was 83 percent. Eighty percent of riders were satisfied with how long their trip takes.

Service reductions

Metro implemented large-scale service reductions in September 2014, cutting 28 bus routes and revising 13 additional routes. The reduction of 161,000 annual service hours was approved by the King County Council in summer 2014. These reductions targeted low-performing service. A full list of September 2014 reductions is in Appendix G.



SECTION 5

POTENTIAL CHANGES TO THE SERVICE GUIDELINES AND STRATEGIC PLAN

The *2014 Guidelines Report* reflects changes to the service guidelines methodology that were adopted when the strategic plan and guidelines were updated in 2013. Metro strives to improve and refine the service guidelines, and is preparing for a 2015 update. Topics that may be addressed include the following:

1) **Reviewing social equity and geographic value measures.** Metro stakeholders have expressed interest in further review of the social equity and geographic measures in the Strategic Plan and Service Guidelines. Metro will be working with those stakeholders to explore how these issues are considered and balanced in the current guidelines and any potential policy changes. That discussion could also consider how to ensure that services are assessed appropriately by market.

2) **Long-range plan development.** Our process of developing a long-range plan over the next two years may prompt us to consider updates to the strategic plan and service guidelines. The long-range plan will create a foundation for better coordination with partners, cities and other stakeholders; provide direction for cities in land-use and policy decisions; and provide better guidance on the future of Metro's service network. It will include service and capital elements of a future transit network.

3) **Revisions to passenger load measures.** Metro is working with the Regional Transit Committee and King County Council staff to consider revisions to passenger load measures, including moving from a measure based on the number of seats in the bus to a measure based on area in the bus. Moving to area-based thresholds would resolve a concern that the guidelines will identify more crowding as Metro uses more low-floor buses, which have fewer seats. The Regional Transit Committee is reviewing this report and working with Metro to develop policy language and guidance about what to include in the 2015 update.

4) **Alternative services.** Metro is continuing to identify and support development of alternative services, including developing concepts for new pilot projects. As this program grows and performance information becomes available, we will be developing performance measures for alternative services. Development of this program may lead to updates of the alternative services policies in the strategic plan.

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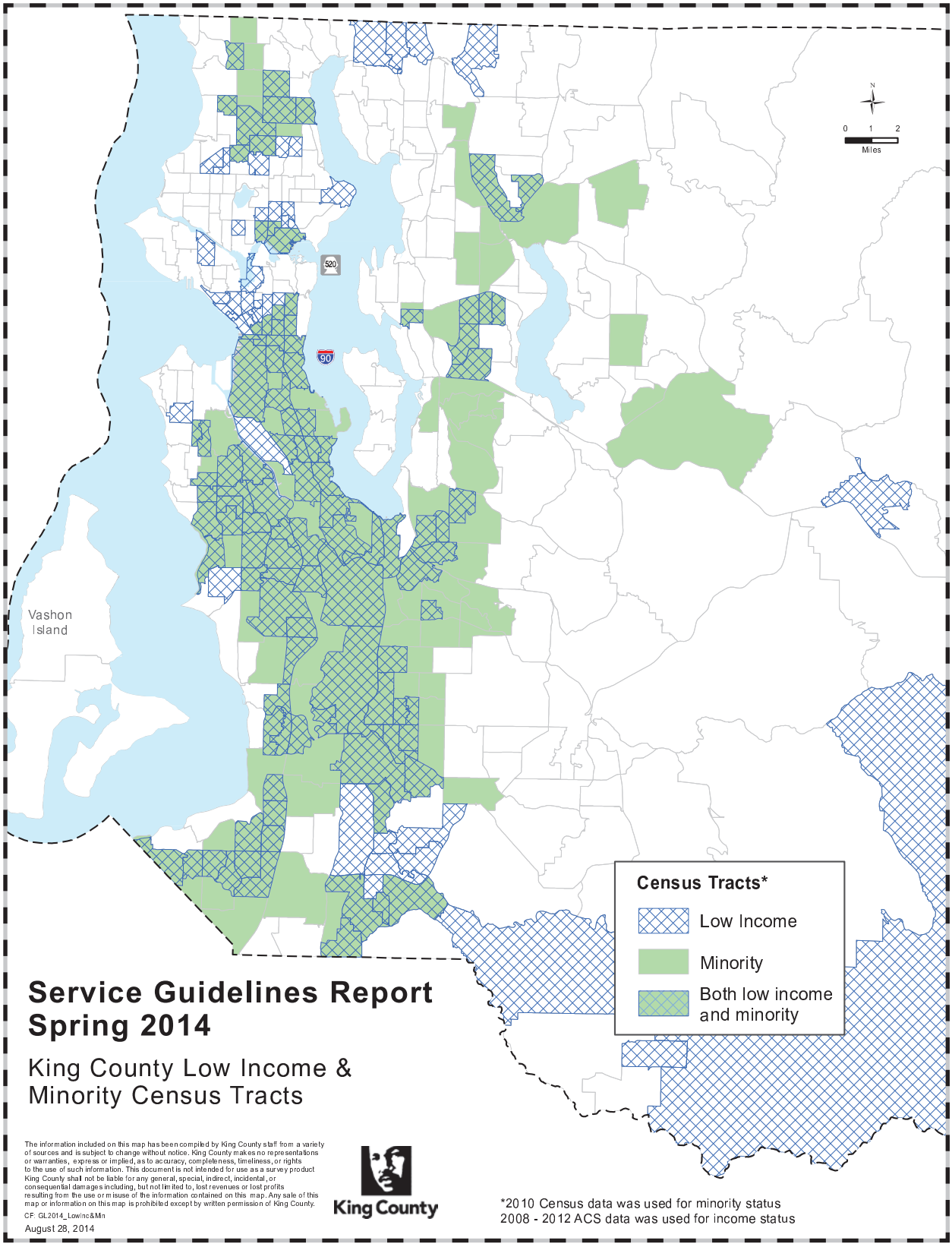
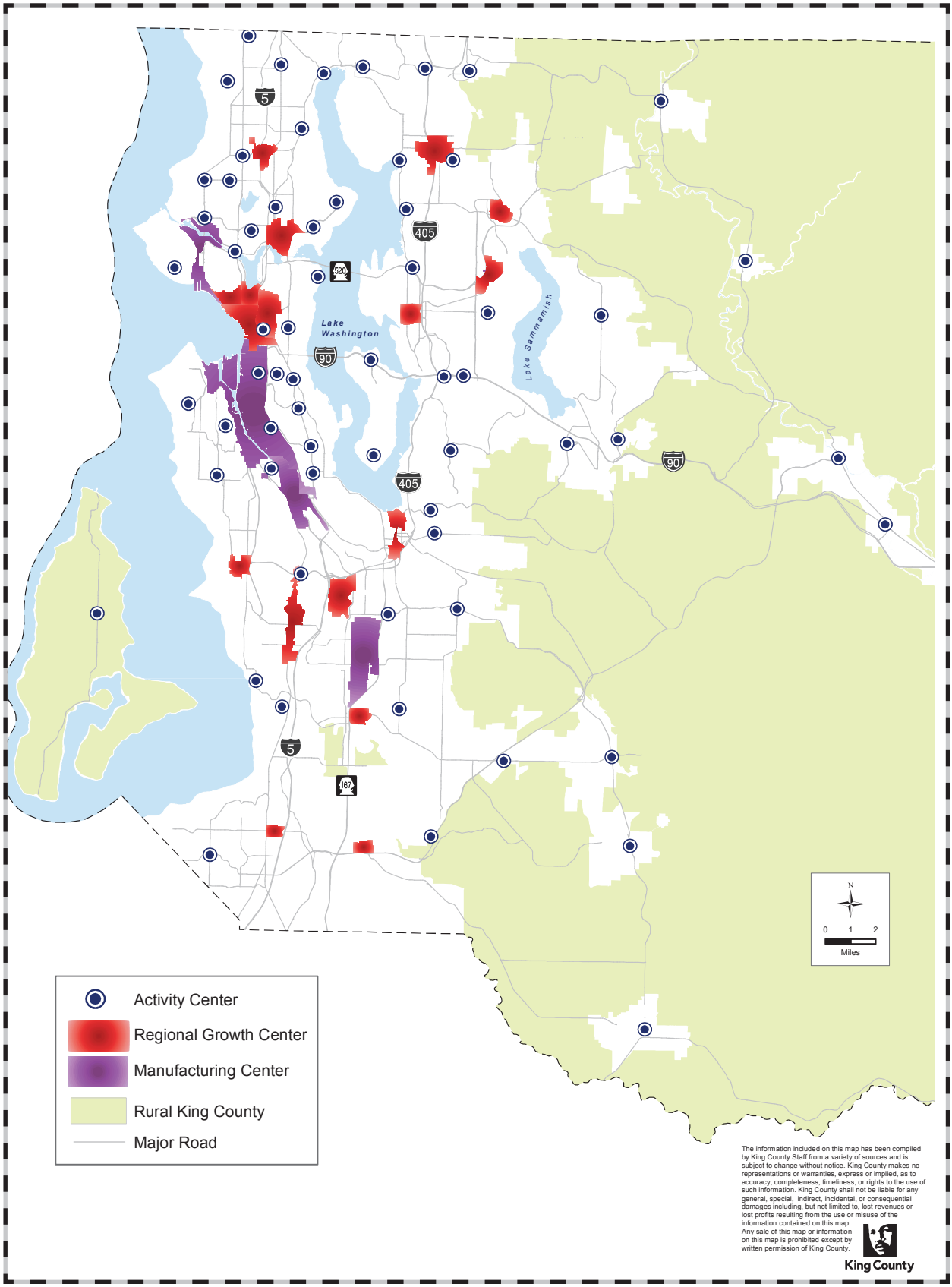
APPENDICES

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



Appendix B:
Transit Activity Centers and Regional Growth/Manufacturing Centers



Appendix C:
Route Productivity Data

Routes that Do Not Serve the Seattle Core

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
A Line	Federal Way - Tukwila	56.1	15.5	59.7	19.0	41.1	12.0
B Line	Bellevue - Crossroads - Redmond	43.5	12.3	37.2	10.7	30.2	7.5
22	Arbor Heights - Westwood Village - Alaska Junction	**11.9**	2.5	**9.5**	**2.2**	**5.5**	**1.4**
50	Alki - Columbia City - Othello Station	22.4	4.9	19.3	4.8	**9.8**	**2.5**
61	North Beach - Ballard	**7.2**	**1.0**	**7.8**	**1.2**	**4.1**	**0.6**
105	Renton Highlands - Renton TC	32.8	8.6	27.8	8.0	19.1	5.7
107	Renton TC - Rainier Beach	24.0	6.3	22.1	6.1	16.0	4.3
110	Tukwila Station - North Renton	12.1	**2.1**				
118	Tahlequah - Vashon	14.7	2.6	12.1	**1.9**	**10.6**	3.1
119	Dockton - Vashon	13.2	**2.1**	11.3	**1.5**		
128	Southcenter - Westwood Village - Admiral District	34.4	11.0	34.6	11.6	17.1	5.5
139	Burien TC - Gregory Heights	**7.1**	**1.1**	**9.0**	**1.5**		
140	Burien TC - Renton TC	27.3	8.1	30.6	9.7	23.5	8.3
148	Fairwood - Renton TC	17.2	5.6	17.5	6.3	22.4	8.5
153	Kent Station - Renton TC	20.2	5.8				
154	Tukwila Station - Boeing Industrial	17.9	4.5				
156	Southcenter - SeaTac Airport - Highline CC	19.0	5.6	18.0	6.6	11.5	4.0
164	Green River CC - Kent Station	43.5	12.0	42.5	15.1	29.3	8.3
166	Kent Station - Burien TC	28.3	10.2	29.5	10.8	19.3	6.5
168	Maple Valley - Kent Station	25.3	7.7	24.7	8.9	20.9	5.3
169	Kent Station - East Hill - Renton TC	43.0	17.8	42.5	17.6	29.7	10.5
173	Federal Way TC - Federal Center South	**11.7**	5.9				
180	Auburn - SeaTac Airport - Burien TC	36.6	11.5	34.5	12.1	18.2	6.9
181	Twin Lakes P&R - Green River CC	29.3	10.2	27.6	10.2	18.3	4.7
182	NE Tacoma - Federal Way TC	16.5	4.5	21.7	7.0		
183	Federal Way - Kent Station	21.0	6.2	21.8	9.0		
186	Enumclaw - Auburn Station	**11.6**	3.0				
187	Federal Way TC - Twin Lakes	24.8	6.3	26.6	7.4	16.3	3.6
200	Downtown Issaquah - North Issaquah	**7.6**	**1.5**	12.8	3.5		
201	South Mercer Island - Mercer Island P&R via Mercer Way	**4.2**	**0.9**				
203	Mercer Island P&R - Shorewood	12.7	**1.9**	13.2	**1.3**		
204	South Mercer Island - Mercer Island P&R via Island Crest			**9.4**	**1.5**		
208	Issaquah - North Bend	**5.5**	3.1	**7.9**	5.0		
209	North Bend - Snoqualamie - Issaquah	**4.7**	**2.3**				
213	Mercer Island P&R - Covenant Shores			**7.2**	**0.8**		
221	Education Hill - Overlake - Eastgate	20.4	6.7	18.4	5.4	11.7	2.7
224	Duvall - Redmond TC	**7.4**	3.1	**7.4**	3.3		
226	Eastgate - Crossroads - Bellevue	31.2	8.3	29.3	7.0	11.9	2.9

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
232	Duvall - Bellevue	18.7	6.9				
234	Kenmore - Kirkland TC - Bellevue	22.6	8.0	18.2	6.3	12.4	3.7
235	Kingsgate - Kirkland TC - Bellevue	21.7	7.3	16.5	6.3	11.3	3.9
236	Woodinville - Totem Lake - Kirkland	**8.9**	**2.3**	**7.7**	**2.2**	**5.6**	**1.3**
237	Woodinville - Bellevue	19.9	8.1				
238	Bothell - Totem Lake - Kirkland	**11.0**	3.0	12.5	3.6	**6.3**	**1.6**
240	Bellevue - Newcastle - Renton	28.6	10.7	23.4	10.0	14.7	6.5
241	Eastgate - Factoria - Bellevue	19.9	4.9	17.5	4.1	**11.2**	**2.5**
242	North City - Overlake	18.6	10.9				
244	Kenmore - Overlake	13.1	5.2				
245	Kirkland - Overlake - Factoria	27.5	8.4	24.6	7.4	17.5	5.0
246	Eastgate - Factoria - Bellevue	13.7	3.4	12.3	3.0		
248	Avondale - Redmond TC - Kirkland	24.1	6.8	19.4	5.1	11.4	2.7
249	Overlake - South Kirkland - South Bellevue	18.2	4.4	13.4	3.3		
269	Issaquah - Overlake	12.1	5.5				
330	Shoreline CC - Lake City	25.3	6.3	30.2	9.6		
331	Shoreline CC - Kenmore	17.5	6.2	18.8	5.9	**8.6**	**2.5**
342	Shoreline - Bellevue TC - Renton	20.1	10.9				
345	Shoreline CC - Northgate	38.5	10.4	36.8	10.3	16.9	6.0
346	Aurora Village - Northgate	38.2	11.1	29.7	10.0	14.2	5.7
347	Mountlake Terrace - Northgate	27.0	8.7	23.3	7.5	18.7	6.2
348	Richmond Beach - Northgate	23.6	6.1	24.0	6.6	16.9	5.2
901DART	Mirror Lake - Federal Way TC	16.1	3.5	18.0	3.1	17.2	4.8
903DART	Twin Lakes - Federal Way TC	16.9	3.3	18.2	**2.5**	**11.2**	**1.9**
906DART	Fairwood - Southcenter	13.4	5.3	14.3	7.0		
907DART	Enumclaw - Renton TC	**3.4**	**1.3**	**5.4**	2.7		
908DART	Renton Highlands - Renton TC	9.7	**1.8**	**7.0**	**1.8**		
909DART	Kennydale - Renton TC	12.2	**2.1**	**10.8**	**2.1**		
910DART	North Auburn - SuperMall			**11.1**	**1.8**		
913DART	Kent Station - Riverview	14.1	**2.2**				
914DART	Kent - Kent East Hill			22.4	5.5		
915DART	Enumclaw - Auburn Station			15.7	4.1		
916DART	Kent - Kent East Hill			17.8	4.7		
917DART	Pacific - Auburn	12.3	**2.3**	**8.3**	**2.0**		
919DART	SE Auburn - Auburn P&R			13.5	**2.0**		
927DART	Issaquah - Lake Sammamish	**6.8**	**1.7**	**7.9**	3.2		
930DART	Kingsgate - Redmond	**9.5**	**1.3**				
931DART	Bothell - Redmond	**7.9**	**1.9**	**7.8**	2.8		
935DART	Totem Lake - Kenmore	**5.6**	**1.0**				

Spring 2014 Thresholds Routes that Do Not serve the Seattle Core	Peak		Off Peak		Night	
Bottom 25%	**12.0**	**2.4**	**11.3**	**2.7**	**11.3**	**2.7**
Top 25%	25.2	8.1	24.7	8.0	18.8	6.3

Routes that Serve the Seattle Core

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
C Line	Westwood Village - Alaska Junction - Seattle CBD	50.4	20.9	45.7	20.0	30.1	12.6
D Line	Ballard - Seattle Center - Seattle CBD	76.1	20.8	66.2	19.8	45.0	12.7
E Line	Aurora Village - Seattle CBD	49.8	19.4	53.1	22.9	37.9	14.9
1	Kinnear - Seattle CBD	54.6	12.1	46.2	**9.4**	32.7	6.8
2	West Queen Anne - Seattle CBD - Madrona Park	49.0	11.2	44.8	10.0	28.4	6.7
3	North Queen Anne - Seattle CBD - Madrona	53.7	11.1	49.4	10.6	24.7	**5.6**
4	East Queen Anne - Seattle CBD - Judkins Park	50.4	**10.5**	44.8	**9.4**	25.1	5.9
5EX	Shoreline CC - Seattle CBD	44.9	15.7				
5	Shoreline CC - Seattle CBD	58.5	18.5	48.0	14.3	35.0	10.7
7EX	Rainier Beach - Seattle CBD	35.6	**8.7**				
7	Rainier Beach - Seattle CBD	53.2	15.8	60.2	17.6	35.2	11.0
8	Seattle Center - Capitol Hill - Rainier Beach	54.7	12.2	44.4	10.7	33.2	7.4
9EX	Rainier Beach - Capitol Hill	40.3	11.5	46.0	14.5		
10	Capitol Hill - Seattle CBD	56.1	**10.5**	56.1	11.1	35.6	7.3
11	Madison Park - Seattle CBD	61.8	11.8	55.4	9.8	38.1	5.9
12	Interlaken Park - Seattle CBD	54.4	**10.1**	36.9	**7.1**	**17.3**	**4.3**
13	Seattle Pacific University - Queen Anne - Seattle CBD	60.2	14.2	59.9	14.1	30.9	7.0
14	Mount Baker - Seattle CBD	42.4	**9.7**	45.0	**9.1**	23.4	**4.9**
15EX	Blue Ridge - Ballard - Seattle CBD	49.2	20.1				
16	Northgate TC - Wallingford - Seattle CBD	35.7	12.9	**28.1**	10.4	**18.6**	6.4
17EX	Sunset Hill - Ballard - Seattle CBD	48.3	17.1				
18EX	North Beach - Ballard - Seattle CBD	48.2	18.3				
19	West Magnolia - Seattle CBD	29.2	**7.5**				
21EX	Arbor Heights - Westwood Village - Seattle CBD	34.9	14.3				
21	Arbor Heights - Westwood Village - Seattle CBD	43.5	14.6	33.7	11.4	21.4	7.8
24	Magnolia - Seattle CBD	48.1	14.3	**28.8**	9.8	**19.8**	**5.7**
25	Laurelhurst - University District - Seattle CBD	24.8	**6.4**	**18.4**	**5.0**		
26EX	East Green Lake - Wallingford - Seattle CBD	48.6	16.3				
26	East Green Lake - Wallingford - Seattle CBD	54.2	13.1	34.8	11.1	24.5	7.2
27	Colman Park - Leschi Park - Seattle CBD	41.4	10.7	**29.9**	**5.7**	**18.2**	**3.9**
28	Whittier Heights - Ballard - Seattle CBD via Leary Ave NW	52.3	13.2	37.0	**9.7**	22.7	**5.3**
28EX	Broadview - Ballard - Seattle CBD via Leary Ave NW	41.3	13.4				
29	Ballard - Queen Anne - Seattle CBD	39.1	**10.0**				
30	Sand Point - University District	27.6	**7.2**	**24.9**	**6.0**	24.7	**4.7**

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
31	University District - Fremont - Magnolia	40.0	**8.8**	35.1	**9.0**		
32	University District - Fremont - Seattle Center	43.2	13.0	38.4	11.7	26.8	7.1
33	Discovery Park - Seattle CBD	45.8	13.9	**27.5**	**8.2**	21.0	6.5
36	Othello Station - Beacon Hill - Seattle CBD	46.1	13.2	49.9	13.6	25.3	7.0
37	Alaska Junction - Alki - Seattle CBD	**17.1**	**7.9**				
40	Northgate TC - Ballard - Seattle CBD via Leary Ave NW	41.3	13.5	37.7	12.0	25.1	8.8
41	Lake City - Seattle CBD via Northgate	60.1	25.9	56.8	26.0	39.7	20.7
43	University District - Capitol Hill - Seattle CBD	58.6	15.5	49.9	12.5	37.8	10.1
44	Ballard - Wallingford - Montlake	61.0	16.6	53.9	13.6	34.9	9.7
47	Summit - Seattle CBD	38.3	**8.4**	**27.4**	**5.2**	**16.5**	**2.9**
48EX	Mount Baker - University District - Loyal Heights	35.4	**8.8**				
48	Mount Baker - University District - Loyal Heights	48.7	13.3	51.1	14.8	30.3	8.4
49	University District - Capitol Hill - Seattle CBD	61.8	19.7	58.6	17.2	52.1	15.8
55	Admiral District - Alaska Junction - Seattle CBD	30.3	12.3				
56	Alki - Seattle CBD	35.0	13.2				
57	Alaska Junction - Seattle CBD	33.9	13.3				
60	Westwood Village - Georgetown - Capitol Hill	33.3	**9.2**	**31.4**	**8.5**	**19.6**	5.9
62	Ballard - Seattle Pacific University - Seattle CBD	**18.6**	**4.8**				
64EX	Lake City - First Hill	33.9	**10.6**				
65	Lake City - University District	34.7	**8.4**	38.8	**9.6**	23.8	7.3
66EX	Northgate TC - Eastlake - Seattle CBD	42.3	14.9	33.7	12.3	**19.5**	6.6
67	Northgate TC - University District	45.0	12.8	52.0	17.5	26.2	7.1
68	Northgate TC - Ravenna - University District	36.4	**8.7**	54.5	12.9		
70	University District - Seattle CBD	48.6	15.3	39.9	12.5		
71	Wedgwood - University District - Seattle CBD	61.8	21.4	60.7	21.1	38.0	11.9
72	Lake City - University District - Seattle CBD	62.1	21.0	61.9	22.6	38.4	12.1
73	Jackson Park - University District - Seattle CBD	62.2	21.4	58.9	20.4	45.6	14.1
74EX	Sand Point - Seattle CBD	62.0	19.3				
75	Northgate TC - Lake City - Seattle CBD	45.2	11.2	47.1	11.9	35.9	9.1
76	Wedgwood - Seattle CBD	51.6	18.7				
77	North City - Seattle CBD	59.1	27.4				
82	Seattle CBD - Greenwood					**10.9**	**2.9**
83	Seattle CBD - Ravenna					**12.6**	**3.9**
84	Seattle CBD - Madison Park - Madrona					**7.3**	**1.5**
98	South Lake Union Streetcar	82.9	12.0	51.1	**8.5**	22.3	**3.8**
99	International District - Waterfront	**23.1**	**5.4**				

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
101	Renton TC - Seattle CBD	41.5	22.2	50.0	26.8	35.3	20.4
102	Fairwood - Renton TC - Seattle CBD	36.0	20.4				
106	Renton TC - Rainier Beach - Seattle CBD	39.7	13.3	38.6	14.1	25.6	9.8
111	Lake Kathleen - Seattle CBD	25.4	16.6				
113	Shorewood - Seattle CBD	25.4	11.7				
114	Renton Highlands - Seattle CBD	**18.5**	11.2				
116EX	Fauntleroy Ferry - Seattle CBD	**19.5**	**8.6**				
118EX	Tahlequah - Seattle CBD via ferry	**21.3**	12.0				
119EX	Dockton - Seattle CBD via ferry	**14.4**	**6.4**				
120	Burien TC - Westwood Village - Seattle CBD	42.4	17.6	46.0	19.5	35.7	16.0
121	Highline CC -Burien TC - Seattle CBD via 1st Ave S	**19.5**	**8.7**				
122	Highline CC -Burien TC - Seattle CBD via Des Moines Memorial Dr S	**21.1**	**10.3**				
123	Burien - Seattle CBD	25.8	15.6				
124	Tukwila - Georgetown - Seattle CBD	37.4	13.5	38.0	14.9	23.9	9.9
125	Westwood Village - Seattle CBD	35.9	14.3	**29.4**	12.5	**19.9**	8.1
131	Burien TC - Highland Park - Seattle CBD	41.6	16.7	33.7	13.1	23.8	10.3
132	Burien TC - South Park - Seattle CBD	33.9	13.9	**27.6**	11.0	**18.5**	7.5
143	Black Diamond - Renton TC - Seattle CBD	**23.0**	14.2				
150	Kent Station - Southcenter - Seattle CBD	38.8	19.9	38.7	21.4	**14.8**	10.1
152	Auburn - Seattle CBD	**17.4**	11.3				
157	Lake Meridian - Seattle CBD	**15.2**	**10.6**				
158	Kent East Hill - Seattle CBD	**22.1**	16.1				
159	Timberlane - Seattle CBD	**20.8**	14.1				
161	Lake Meridian - Seattle CBD	**18.5**	11.1				
167	Renton - Newport Hills - University District	25.0	21.5				
177	Federal Way - Seattle CBD	**20.1**	13.0				
178	South Federal Way - Seattle CBD	24.5	17.7				
179	Twin Lakes - Seattle CBD	**23.3**	17.2				
190	Redondo Heights - Seattle CBD	**20.7**	13.2				
192	Star Lake - Seattle CBD	**18.7**	12.5				
193EX	Federal Way - First Hill	**24.2**	15.9				
197	Twin Lakes - University District	**20.6**	16.3				
202	South Mercer Island - Seattle CBD	**12.1**	**4.2**				
205EX	South Mercer Island - First Hill - University District	**19.2**	**6.5**				
210	Issaquah - Factoria - Seattle CBD	26.0	12.0				
211EX	Issaquah Highlands - First Hill	**17.0**	**6.8**				
212	Eastgate - Seattle CBD	36.0	19.2				
214	Issaquah - Seattle CBD	26.0	16.1				
215	North Bend - Seattle CBD	**15.7**	**10.5**				
216	Sammamish - Seattle CBD	37.0	24.0				
217	Issaquah - Eastgate - Seattle CBD	29.1	18.9				
218	Issaquah Highlands - Seattle CBD	42.1	23.4				
219	Redmond - Sammamish - Seattle CBD	31.3	21.6				

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
243	Jackson Park - Bellevue	**23.2**	**9.5**				
250	Overlake - Seattle CBD	**20.8**	11.4				
252	Kingsgate - Seattle CBD	27.0	16.9				
255	Brickyard - Kirkland TC - Seattle CBD	31.5	16.3	**25.9**	13.4	24.2	13.2
257	Brickyard - Seattle CBD	24.3	15.6				
260	Finn Hill - Seattle CBD	**18.0**	**10.4**				
265	Overlake - Houghton - First Hill	**17.7**	**9.5**				
268	Redmond - Seattle CBD	28.2	18.3				
271	Issaquah - Bellevue - University District	27.6	11.3	**28.4**	12.4	21.1	8.9
277	Juanita - University District	**12.5**	**4.9**				
280	Seattle CBD - Bellevue - Renton					**16.8**	9.5
301	Aurora Village - Seattle CBD	34.2	19.8				
303EX	Shoreline - First Hill	34.1	17.3				
304	Richmond Beach - Seattle CBD	30.0	18.4				
306EX	Kenmore - Seattle CBD	34.5	19.0				
308	Horizon View - Seattle CBD	**22.8**	13.0				
309EX	Kenmore - First Hill	37.0	20.9				
311	Woodinville - Seattle CBD	**22.2**	14.7				
312EX	Bothell - Seattle CBD	33.4	16.0				
316	Meridian Park - Seattle CBD	53.7	20.1				
355EX	Shoreline CC - University District - Seattle CBD	30.5	10.7				
372EX	Woodinville - Lake City - University District	39.9	13.7	44.0	15.9	34.0	8.5
373EX	Aurora Village - University Village	35.4	13.2				
601EX	Seattle CBD - Group Health (Tukwila)	**5.7**	**2.6**				

Spring 2014 Thresholds Routes that serve Seattle Core	Peak		Off Peak		Night	
Bottom 25%	**24.3**	**10.7**	**33.7**	**9.8**	**20.7**	**5.9**
Top 25%	48.2	17.1	51.1	14.9	35.1	10.2

Appendix D:
Route Reliability Data

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
A Line	16%	18%	12%	12%
B Line	13%	15%	8%	4%
C Line	18%	20%	21%	12%
D Line	19%	21%	22%	12%
E Line	21%	22%	21%	11%
1	22%	25%	33%	23%
2	24%	29%	21%	17%
3	23%	33%	18%	16%
4	23%	34%	29%	17%
5EX	15%	14%	--	--
5	18%	24%	22%	15%
7EX	20%	32%	--	--
7	17%	21%	20%	20%
8	30%	44%	29%	27%
9EX	19%	26%	--	--
10	22%	26%	18%	12%
11	30%	40%	25%	31%
12	16%	18%	10%	9%
13	20%	28%	16%	12%
14	29%	32%	25%	22%
15EX	19%	23%	--	--
16	18%	26%	25%	20%
17EX	30%	42%	--	--
18EX	23%	34%	--	--
19	20%	25%	--	--
21EX	26%	40%	--	--
21	16%	24%	25%	17%
22	9%	21%	16%	4%
24	31%	36%	31%	17%
25	32%	55%	--	--
26EX	24%	--	--	--
26	25%	25%	36%	24%
27	27%	38%	37%	23%
28	27%	32%	31%	22%
28EX	20%	39%	--	--
29	30%	46%	--	--
30	6%	10%	6%	3%

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
31	23%	32%	26%	--
32	19%	24%	27%	26%
33	19%	29%	30%	17%
36	17%	22%	12%	12%
37	34%	34%	--	--
40	25%	38%	30%	34%
41	21%	40%	11%	14%
43	13%	21%	23%	11%
44	17%	27%	21%	11%
47	9%	22%	12%	6%
48EX	21%	28%	--	--
48	22%	34%	30%	27%
49	15%	21%	13%	20%
50	17%	25%	16%	19%
55	24%	37%	--	--
56	31%	53%	--	--
57	42%	68%	--	--
60	19%	25%	26%	18%
61	14%	14%	17%	13%
62	23%	21%	--	--
64EX	26%	32%	--	--
65	15%	18%	20%	9%
66EX	24%	30%	13%	14%
67	7%	12%	--	--
68	16%	26%	10%	--
70	30%	40%	17%	--
71	25%	--	24%	20%
72	19%	56%	25%	22%
73	18%	--	18%	19%
74EX	28%	44%	--	--
75	15%	21%	15%	14%
76	24%	35%	--	--
77	16%	29%	--	--
82	7%	--	9%	1%
83	19%	--	22%	12%
84	5%	--	15%	7%
99	19%	26%	48%	35%

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
101	22%	26%	27%	26%
102	23%	30%	--	--
105	24%	30%	17%	24%
106	18%	20%	15%	10%
107	11%	13%	13%	8%
110	7%	7%	--	--
111	29%	42%	--	--
113	15%	18%	--	--
114	26%	39%	--	--
116EX	16%	12%	--	--
118	10%	8%	17%	--
118EX	17%	32%	--	--
119	13%	18%	--	--
119EX	34%	30%	--	--
120	13%	18%	15%	14%
121	14%	22%	--	--
122	17%	27%	--	--
123	15%	21%	--	--
124	30%	40%	36%	23%
125	9%	11%	16%	--
128	24%	30%	9%	8%
131	38%	41%	42%	25%
132	25%	29%	36%	25%
139	13%	16%	5%	2%
140	12%	14%	15%	6%
143EX	32%	40%	--	--
148	10%	12%	16%	13%
150	20%	27%	13%	18%
152	21%	23%	--	--
153	19%	28%	--	--
154	13%	9%	--	--
156	7%	12%	10%	13%
157	28%	35%	--	--
158	22%	31%	--	--
159	20%	30%	--	--
161	19%	22%	--	--
164	20%	26%	8%	--
166	23%	37%	13%	10%
167	20%	25%	--	--
168	16%	22%	15%	25%

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
169	28%	43%	19%	11%
173	28%	21%	--	--
177	28%	28%	--	--
178	47%	53%	--	--
179	35%	33%	--	--
180	21%	33%	9%	9%
181	16%	24%	16%	9%
182	17%	20%	11%	5%
183	7%	13%	9%	--
186	12%	21%	--	--
187	13%	20%	14%	8%
190	30%	20%	--	--
192	24%	22%	--	--
193EX	25%	32%	--	--
197	17%	19%	--	--
200	7%	6%	--	--
201	4%	4%	--	--
202	23%	31%	--	--
203	6%	10%	7%	1%
204	13%	16%	18%	6%
205EX	19%	17%	--	--
209	27%	25%	27%	--
210	23%	30%	--	--
211EX	16%	16%	--	--
212	13%	22%	--	--
213	10%	--	15%	3%
214	13%	19%	--	--
215	19%	28%	--	--
216	18%	26%	--	--
217	18%	19%	--	--
218	14%	18%	--	--
219	26%	33%	--	--
221	15%	30%	12%	21%
224	19%	35%	--	--
226	19%	28%	9%	8%
232	20%	31%	--	--
234	14%	21%	20%	8%
235	12%	21%	6%	2%
236	10%	13%	17%	10%

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
237	40%	50%	--	--
238	16%	18%	14%	11%
240	18%	26%	13%	9%
241	17%	29%	11%	8%
242	26%	38%	--	--
243	25%	51%	--	--
244	20%	30%	--	--
245	15%	17%	29%	26%
246	13%	22%	--	--
248	12%	28%	10%	6%
249	12%	16%	10%	5%
250	20%	28%	--	--
252	20%	29%	--	--
255	18%	31%	20%	10%
257	23%	35%	--	--
260	22%	36%	--	--
265	18%	23%	--	--
268	18%	18%	--	--
269	25%	32%	--	--
271	11%	15%	17%	11%
277	22%	37%	--	--
280	45%	--	34%	41%
301	14%	32%	--	--
303EX	15%	26%	--	--
304	14%	17%	--	--
306EX	15%	20%	--	--
308	12%	21%	--	--
309EX	21%	39%	--	--
311	29%	31%	--	--
312EX	12%	16%	--	--
316	24%	36%	--	--
330	15%	27%	--	--
331	8%	11%	10%	4%
342	19%	33%	--	--
345	11%	13%	12%	7%
346	7%	12%	7%	3%
347	7%	11%	20%	11%
348	16%	25%	19%	7%
355EX	28%	49%	--	--

Route	All-Day % Late	PM % Late	Saturday % Late	Sunday % Late
372EX	21%	23%	--	--
373EX	20%	32%	--	--
601EX	43%	--	--	--

Appendix E:
Peak Route Analysis Results

Route	Description	Alternative Route(s)*	Ridership >= 90% of alternative	Travel Time >= 20% faster than alternative
5EX	Shoreline CC - Seattle CBD	5	No	No
7EX	Rainier Beach - Seattle CBD	7	No	Yes
15EX	Blue Ridge - Ballard - Seattle CBD	D Line	Yes	Yes
17EX	Sunset Hill - Ballard - Seattle CBD	61	Yes	Yes
18EX	North Beach - Ballard - Seattle CBD	40	No	No
19	West Magnolia - Seattle CBD	24	No	Yes
21EX	Arbor Heights - Westwood Village - Seattle CBD	21	Yes	Yes
26EX	East Green Lake - Wallingford - Seattle CBD	26	Yes	No
28EX	Broadview - Ballard - Seattle CBD via Leary Ave NW	28	Yes	Yes
29	Ballard - Queen Anne - Seattle CBD	2	Yes	Yes
37	Alaska Junction - Alki - Seattle CBD	773 DART	Yes	Yes
48EX	Mount Baker - University District - Loyal Heights	48	No	No
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
62	Ballard - Seattle Pacific University - Seattle CBD	40	No	No
64EX	Lake City - First Hill	76	No	Yes
74EX	Sand Point - Seattle CBD	30	Yes	No
76	Wedgwood - Seattle CBD	71	No	No
77	North City - Seattle CBD	73	Yes	Yes
99	International District - Waterfront	1	No	Yes
102	Fairwood - Renton TC - Seattle CBD	148	Yes	No
110	Tukwila Station - North Renton	140	No	Yes
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	C Line	No	No
118EX	Tahlequah - Seattle CBD via ferry	118	Yes	No
119EX	Dockton - Seattle CBD via ferry	119	Yes	No
121	Highline CC -Burien TC - Seattle CBD via 1st Ave S	166	Yes	Yes
122	Highline CC -Burien TC - Seattle CBD via Des Moines Memorial Dr S	156	Yes	Yes
123	Burien - Seattle CBD	139	Yes	No
143EX	Black Diamond - Renton TC - Seattle CBD	None	Yes	Yes
152	Auburn - Seattle CBD	None	Yes	Yes
154	Tukwila Station - Boeing Industrial	140	No	Yes
157	Lake Meridian - Seattle CBD	None	Yes	Yes
158	Kent East Hill - Seattle CBD	164	No	No
159	Timberlane - Seattle CBD	164	No	No
161	Lake Meridian - Seattle CBD	169	Yes	Yes
167	Renton - Newport Hills - University District	560EX	Yes	Yes
173	Federal Way TC - Federal Center South	A Line	No	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

* Alternative routes must serve at least 50% of riders on the peak-only route.

Route	Description	Alternative Route(s)*	Ridership >= 90% of alternative	Travel Time >= 20% faster than alternative
192	Star Lake - Seattle CBD	574EX	No	Yes
193EX	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
202	South Mercer Island - Seattle CBD	205EX	No	No
205EX	South Mercer Island - First Hill - University District	202	Yes	No
210	Issaquah - Factoria - Seattle CBD	241	Yes	Yes
211EX	Issaquah Highlands - First Hill	212	No	No
212	Eastgate - Seattle CBD	554EX	No	No
214	Issaquah - Seattle CBD	554EX	No	No
215	North Bend - Seattle CBD	209	Yes	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	Bear Creek P&R - Sammamish - Seattle CBD	None	Yes	Yes
232	Duvall - Bellevue	248	Yes	Yes
237	Woodinville - Bellevue	311	No	Yes
242	North City - Overlake	66EX	No	Yes
243	Jackson Park - Bellevue	372EX	No	Yes
244	Kenmore - Overlake	None	Yes	Yes
250	Overlake - Seattle CBD	249	Yes	No
252	Kingsgate - Seattle CBD	255	No	Yes
257	Brickyard - Seattle CBD	238	Yes	Yes
260	Finn Hill - Seattle CBD	234	Yes	No
265	Overlake - Houghton - First Hill	245	No	Yes
268	Redmond - Seattle CBD	545EX	No	Yes
277	Juanita - University District	235	No	Yes
301	Aurora Village - Seattle CBD	E Line	No	Yes
303EX	Shoreline - First Hill	None	Yes	Yes
304	Richmond Beach - Seattle CBD	348	Yes	Yes
306EX	Kenmore - Seattle CBD	522EX	Yes	No
308	Horizon View - Seattle CBD	331	Yes	No
309EX	Kenmore - First Hill	312EX	Yes	Yes
311	Duvall - Woodinville - Seattle CBD	232	Yes	Yes
312EX	Bothell - Seattle CBD	522EX	Yes	No
316	Meridian Park - Seattle CBD	16	Yes	Yes
342	Shoreline - Bellevue TC - Renton	None	Yes	Yes
355EX	Shoreline CC - University District - Seattle CBD	5	No	No
601EX	Seattle CBD - Group Health (Tukwila)	None	Yes	Yes
913DART	Kent Station - Riverview	None	Yes	Yes

* Alternative routes must serve at least 50% of riders on the peak-only route.

Routes 153, 186, 269, 373 Express, 930, and 935 are included in the corridor analysis because they each serve as the only route on one of Metro's 112 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.

Appendix F:
Corridors that Changed Target Service Levels from 2013 to 2014

Corridor Number	Between	And	Major Route	2013 Service Level	2014 Service Level	Reasons for Change (Simplified)
2	Alki	SODO	50	Frequent	Local	Lower demand and night cost recovery
7	Avondale	Kirkland	248	Local	Frequent	Higher social equity score
24	Colman Park	Seattle CBD	27	Frequent	Very Frequent	Higher social equity score
27	Eastgate	Bellevue	241	Frequent	Local	Lower social equity score
37	Green River CC	Kent	164	Very Frequent	Frequent	Lower demand
40	Issaquah	Eastgate	271	Local	Hourly	Lower land use score
42	Issaquah	North Bend	208/215	Hourly	Local	Higher demand
44	Kenmore	Shoreline	331	Local	Frequent	Higher demand
45	Kenmore	U. District	372EX	Very Frequent	Frequent	Lower social equity score
47	Kennydale	Renton	909DART	Hourly	Local	Corridor revision; higher land use and social equity scores
48	Kent	Burien	166	Local	Frequent	Higher social equity score
50	Kent	Renton	169	Frequent	Very Frequent	Higher demand
53	Kirkland	Bellevue	234/235	Very Frequent	Frequent	Lower demand and cost recovery
71	Othello Station	SODO	50	Frequent	Local	Lower demand
82	Redmond	Fall City	224	Hourly	Local	Corridor revision; higher social equity and land use scores
88	Renton	Enumclaw	143EX/ 907DART	Hourly	Local	Higher demand
91	S Vashon	N Vashon	118	Hourly	Local	Higher demand
94	Shoreline CC	Northgate	345	Very Frequent	Frequent	Lower social equity score
102	Twin Lakes	Federal Way	903DART	Local	Frequent	Higher demand

Appendix G:
2014 Service Changes

Month	Route	Description of Change	Type
February	8	Revised layover in Uptown to assure sufficient capacity	Layover revision
February	8	Cut trips to help fund added running time and improve on-time performance.	Reduced trips
February	17EX/18EX	Routes shifted to serve the northbound green stops on 3rd ave. transit spine instead of the red stops.	Revised routing
February	28	New layover and turnaround loop	Layover revision
February	50	Deleted deviation into the VAMC campus. Pathway remains on S. Columbian Way in both directions.	Revised routing
February	60	Deleted deviation into the VAMC campus. Pathway remains on S. 15th Ave. S. in both directions.	Revised routing
February	64	Revised AM layover and extend PM route to NE 145 St farside of 15th Ave NE	Layover revision, revised routing
February	65	Terminal revised from Lake City to Jackson Park	Revised routing
February	159	Afternoon terminal revised from Blanchard St to Lenora St farside 5th Ave.	Layover revision
February	200	Revised layover to SE Clark St. farside 2nd Ave NE	Layover revision
February	237/342/952	Northbound routing revised to new temporary on-ramp from NE 160th St to northbound I-5.	Revised routing
February	311	Northbound routing revised to new temporary on-ramp from NE 160th St to northbound I-5.	Revised routing
February	312/372/522	Routing revised to use newly constructed segments of SR-522 and 98th Ave NE	Revised routing
February	342	Routing revised to use newly constructed segments of SR-522 and 98th Ave NE	Revised routing
February	358EX	Delete, replaced by RapidRide E Line	Delete route
February	D Line	New turnaround loop using 7th Ave NW between Holman Rd and NW 100th Pl.	Revised routing
February	E Line	RapidRide E Line started	Added new route
February	49	Night owl layover location revised	Layover revision
February	71/72/73/74/ 76/77	Moved routes to operate out of North Base	
February	82	Revised night owl layover location	Layover revision
February	83	Revised night owl layover location, minor inbound routing revision	Layover revision, revised routing
February	84	Revised night owl layover location	Layover revision
February	156	Revised routing in response to a long term road closure	Revised routing
February	280	Revised night owl layover location	Layover revision
February	C Line/D Line	Converted service hours dedicated to “cover” buses into regular trips	Add trips
June	48	Re-scheduled trips in peak period to emphasize a consistent 10-15 min. frequency, added additional trips to provide overload relief when demand is high.	Revised schedule, add trips
June	110	Discontinued route, replaced by RapidRide F Line	Delete route
June	140	Discontinued route, replaced by RapidRide F Line	Delete route
June	154	Revised routing to serve new Tukwila Sounder Station	Revised routing

Month	Route	Description of Change	Type
June	221/245	Revised schedule to serve Education Hill every other trip. Northbound AM trips will be shortened to end at the Redmond TC	Revise schedule, revised routing
June	F Line	New RapidRide F Line started	Added new route
September	7EX	Discontinued route in response to Metro's budget deficit	Delete route
September	19	Discontinued route in response to Metro's budget deficit	Delete route
September	27/33	Discontinued all weekend and weekday off-peak service on Route 27. Route 33, which is interlined with route 27, now live-loops in Pioneer Square during off-peak times when route 27 does not operate.	Reduced trips
September	30	Discontinued off-peak service	Reduced trips
September	47	Discontinued route in response to Metro's budget deficit	Delete route
September	48	Discontinued route in response to Metro's budget deficit	Delete route
September	61	Discontinued route in response to Metro's budget deficit	Delete route
September	62	Discontinued route in response to Metro's budget deficit	Delete route
September	139	Discontinued route in response to Metro's budget deficit	Delete route
September	152	Discontinued route in response to Metro's budget deficit	Delete route
September	161	Discontinued route in response to Metro's budget deficit	Delete route
September	173	Discontinued route in response to Metro's budget deficit	Delete route
September	200	Discontinued peak service	Reduced trips
September	202	Discontinued route in response to Metro's budget deficit	Delete route
September	203	Discontinued route in response to Metro's budget deficit	Delete route
September	204	Added weekday peak service, reduce off-peak frequency	Add trips, revised schedule
September	205	Discontinued route in response to Metro's budget deficit	Delete route
September	208	Added trips to operate in both directions during the peak periods. Reduce frequency.	Add trips, revised schedule
September	209	Discontinued route in response to Metro's budget deficit	Delete route
September	210	Discontinued route in response to Metro's budget deficit	Delete route
September	211	Discontinued route in response to Metro's budget deficit	Delete route
September	212	Added trips to help mitigate the deletion of Route 210	Add trips
September	213	Discontinued route in response to Metro's budget deficit	Delete route
September	215	Discontinued route in response to Metro's budget deficit	Delete route
September	236	Discontinued weekday trips after 8:00 p.m.	Reduced trips
September	238	Discontinued weekday and Saturday trips after 7:00 p.m.	Reduced trips
September	243	Discontinued route in response to Metro's budget deficit	Delete route
September	249	Reduced trips weekdays and weekends	Reduced trips
September	250	Discontinued route in response to Metro's budget deficit	Delete route
September	260	Discontinued route in response to Metro's budget deficit	Delete route
September	265	Discontinued route in response to Metro's budget deficit	Delete route
September	280	Discontinued route in response to Metro's budget deficit	Delete route
September	306	Discontinued route in response to Metro's budget deficit	Delete route
September	312	Added trips to help mitigate the deletion of Route 306	Add trips
September	331/345	Discontinued weekday trips after 7:00 p.m.	Reduced trips
September	903DART	Reduced frequency and span of trips	Reduced trips, revised schedule
September	909DART	Discontinued route in response to Metro's budget deficit	Delete route
September	919DART	Discontinued route in response to Metro's budget deficit	Delete route
September	927DART	Discontinued route in response to Metro's budget deficit	Delete route

Month	Route	Description of Change	Type
September	931DART	Discontinued off-peak service	Reduced trips
September	935DART	Discontinued route in response to Metro's budget deficit	Delete route
September	24	Revised routing for 2 AM and 2 PM trips currently scheduled to start/end at 35th Ave W/W McGraw St to begin at Magnolia Blvd W/W Emerson St instead	Revised routing
September	49	On Sunday through Friday, shifted northern terminal to southbound University Way NE farside NE 52 St.	Revised routing
September	82	Discontinued route in response to Metro's budget deficit	Delete route
September	83	Discontinued route in response to Metro's budget deficit	Delete route
September	84	Discontinued route in response to Metro's budget deficit	Delete route
September	96	Implemented Seattle Streetcar First Hill Line	Added new route
September	122	Revised AM inbound routing to operate between S 152 St and the Burien Transit Center via 1st Ave S and SW 150 St	Revised routing
September	167/242/252/ 257/268/277/ 311/982	Revised routing to use new facilities in the SR-520 corridor, including inside HOV lanes, Evergreen Point Road and Clyde Hill/ Yarrow Point Freeway Stations	Revised routing
September	255/540/986	Revised routing to use new facilities in the SR-520 corridor, including inside HOV lanes, Evergreen Point Road and Clyde Hill/ Yarrow Point Freeway Stations and new HOV direct access ramps to and from 108th Ave NE	Revised routing
September	271	Discontinued service to/from Evergreen Point	Revised routing
September	894	New Mercer Island School District route	Added new route

Appendix H:
Route-level Ridership (weekday average, Spring 2013 and Spring 2014)

The table below contains weekday ridership and platform hour changes between 2013 and 2014 for all routes in the system. This list includes numerous custom bus routes which are excluded from the route analysis provided in this report. Weekday ridership has been rounded to the nearest 100, except where the weekday ridership is below 50 passengers. " – " indicates that the route did not operate during that period, therefore no weekday rides or platform hours exist.

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
1	2,300	2,400	100	48	48	(0)
2	5,700	5,600	(100)	127	127	0
3	6,700	6,600	(100)	136	132	(3)
4	5,300	5,000	(300)	112	113	1
5	8,000	7,900	(100)	153	153	(1)
7EX	400	400	-	12	12	0
7	12,900	13,100	200	247	247	(0)
8	10,300	10,300	-	209	211	2
9	2,700	2,800	100	65	65	0
10	4,400	4,700	300	88	84	(4)
11	3,200	3,700	500	64	65	0
12	3,500	3,500	-	76	74	(2)
13	3,200	3,200	-	61	61	(0)
14	2,700	2,700	-	66	66	0
15EX	1,000	1,000	-	20	21	1
16	5,200	4,800	(400)	155	160	4
17EX	700	700	-	14	15	1
18EX	1,000	900	(100)	19	19	(0)
19	300	300	-	9	10	0
21EX	1,000	1,000	-	28	29	1
21	3,800	4,000	200	111	111	(0)
22	200	200	-	16	16	0
24	2,300	2,400	100	61	61	0
25	500	600	100	27	27	0
26EX	800	700	(100)	15	15	(0)
26	2,700	3,000	300	73	71	(2)
27	1,400	1,400	-	39	39	0
28	2,800	3,000	200	72	74	2
28EX	1,200	1,200	-	28	28	0
29	1,300	1,200	(100)	33	32	(1)
30	1,300	1,300	-	49	49	0
31	1,800	2,100	300	52	52	0
32	2,600	2,800	200	72	70	(1)
33	1,800	1,700	(100)	45	44	(1)
36	10,600	10,600	-	232	232	(0)
37	200	200	-	11	11	0
40	7,900	7,900	-	202	206	4

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
41	10,400	9,700	(700)	180	170	(10)
43	7,900	7,700	(200)	147	144	(3)
44	7,100	7,400	300	133	136	3
47	800	800	-	26	26	0
48	11,500	12,000	500	249	251	2
49	8,500	8,000	(500)	136	134	(1)
50	2,000	2,200	200	109	108	(0)
55	700	600	(100)	22	21	(1)
56	800	700	(100)	21	19	(1)
57	300	400	100	10	10	1
60	5,100	4,900	(200)	154	152	(1)
61	300	200	(100)	35	35	0
62	300	300	-	17	16	(1)
64	800	800	-	22	24	2
65	3,000	3,200	200	91	88	(4)
66	3,400	3,100	(300)	76	89	13
67	1,700	1,800	100	42	42	0
68	2,300	2,200	(100)	47	48	0
70	4,700	4,600	(100)	101	101	(0)
71	5,000	5,300	300	86	92	6
72	4,900	4,800	(100)	80	83	3
73	6,600	6,100	(500)	96	102	6
74EX	1,400	1,400	-	23	22	(0)
75	4,500	4,400	(100)	97	98	0
76	1,100	1,100	-	20	21	1
77	1,100	1,000	(100)	24	17	(6)
82	<50	<50	-	3	4	1
83	100	<50	-	3	4	0
84	<50	<50	-	4	3	(0)
99	400	400	-	16	16	(1)
101	5,000	4,900	(100)	107	110	3
102	900	900	-	24	25	0
105	1,100	1,100	-	38	37	(1)
106	5,100	5,100	-	136	134	(2)
107	1,500	1,500	-	63	63	0
110	200	100	(100)	13	12	(1)
111	900	900	-	35	34	(0)
113	300	300	-	12	12	0
114	400	300	(100)	17	17	0
116EX	500	500	-	26	26	0
118EX	200	200	-	9	9	0
118	500	400	(100)	31	31	0
119EX	100	100	-	5	5	0
119	200	200	-	13	13	(0)
120	8,600	9,000	400	206	209	3

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
121	1,000	900	(100)	47	47	(0)
122	600	500	(100)	26	26	(0)
123	300	300	-	12	12	(0)
124	3,300	3,400	100	95	96	1
125	1,800	1,900	100	56	57	1
128	4,400	4,400	-	134	134	(0)
131	2,900	3,100	200	82	81	(1)
132	3,100	3,000	(100)	99	102	3
139	200	100	(100)	15	15	(1)
140	3,500	3,600	100	114	132	18
143EX	600	600	-	27	27	0
148	600	700	100	38	38	0
150	7,100	7,000	(100)	184	185	1
152	300	300	-	20	15	(5)
153	400	400	-	20	20	(0)
154	200	200	-	9	9	(0)
155	400	-	(400)	22	-	(22)
156	1,000	1,200	200	71	65	(6)
157	200	200	-	15	16	1
158	600	600	-	26	26	(1)
159	500	500	-	23	23	0
161	400	400	-	22	22	0
164	2,100	2,000	(100)	47	48	1
166	2,200	2,200	-	79	78	(0)
167	400	400	-	16	16	0
168	1,700	1,700	-	68	68	1
169	3,000	3,200	200	78	78	0
173	100	100	-	6	6	0
177	700	600	(100)	29	30	1
178	700	700	-	29	28	(1)
179	700	700	-	29	31	1
180	4,600	5,000	400	149	149	0
181	2,200	2,400	200	81	86	5
182	500	500	-	29	28	(1)
183	700	700	-	34	35	0
186	200	200	-	20	20	0
187	500	500	-	21	20	(1)
190	400	400	-	18	20	1
192	300	200	(100)	12	12	0
193EX	700	600	(100)	27	27	(1)
197	800	800	-	38	38	(1)
200	400	300	(100)	34	35	1
201	<50	<50	-	2	2	0
202	200	200	-	15	17	2
203	100	100	-	8	8	0

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
204	100	100	-	11	11	0
205	200	200	-	12	12	0
208	-	200	200	-	24	24
209	300	<50	(300)	33	8	(25)
210	200	400	200	15	16	1
211EX	400	400	-	26	24	(2)
212	2,400	2,000	(400)	67	56	(11)
213	<50	<50	-	1	1	0
214	800	1,000	200	34	38	4
215	600	400	(200)	24	23	(2)
216	700	900	200	24	24	1
217	200	200	-	8	8	(0)
218	2,000	1,000	(1,000)	44	23	(21)
219	-	900	900	-	28	28
221	1,500	1,500	-	82	80	(2)
224	100	100	-	20	16	(3)
226	1,600	1,800	200	61	60	(1)
232	400	400	-	21	21	1
234	1,500	1,500	-	72	73	1
235	1,100	1,200	100	66	66	(0)
236	500	500	-	59	60	1
237	100	100	-	5	5	(0)
238	900	800	(100)	72	71	(1)
240	2,600	2,500	(100)	115	97	(18)
241	700	800	100	41	41	0
242	500	400	(100)	22	22	0
243	200	200	-	8	8	0
244	200	200	-	18	18	0
245	3,700	3,800	100	156	146	(10)
246	500	400	(100)	41	29	(11)
248	1,100	1,200	100	56	55	(0)
249	1,200	1,000	(200)	69	58	(12)
250	400	300	(100)	19	14	(5)
252	600	700	100	24	24	1
255	6,100	6,400	300	218	217	(1)
257	500	500	-	21	21	1
260	200	200	-	11	11	(0)
265	600	500	(100)	36	29	(7)
268	400	400	-	14	15	1
269	600	600	-	48	49	1
271	6,000	6,400	400	223	224	1
277	300	200	(100)	19	19	0
280	100	100	-	4	3	(1)
301	1,600	1,600	-	48	48	0
303EX	1,300	1,300	-	38	37	(1)

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
304	400	400	-	16	15	(1)
306EX	400	600	200	19	17	(2)
308	200	200	-	9	9	0
309EX	200	500	300	14	13	(1)
311	1,100	1,000	(100)	51	44	(8)
312EX	2,000	1,800	(200)	54	55	1
316	1,000	900	(100)	17	16	(1)
330	300	400	100	14	14	(0)
331	1,100	1,000	(100)	54	55	0
342	300	300	-	16	16	0
345	1,500	1,300	(200)	36	36	0
346	1,600	1,400	(200)	43	43	(0)
347	1,300	1,400	100	56	56	(0)
348	1,300	1,300	-	56	56	0
355EX	1,000	900	(100)	29	29	0
358EX	12,000	-	12,000)	222	-	(222)
372EX	5,300	5,100	(200)	124	126	2
373EX	900	1,000	100	29	29	0
601EX	<50	<50	-	5	5	(0)
A Line	8,700	10,100	1,400	179	179	(0)
B Line	6,100	6,700	600	164	162	(2)
C Line	7,000	8,100	1,100	169	171	2
D Line	8,800	11,000	2,200	156	160	3
E Line	-	13,700	13,700	-	277	277
773	100	100	-	8	8	0
775	100	100	-	5	5	0
823	100	100	-	2	2	0
824	100	100	-	2	2	(0)
887	100	100	-	2	2	0
888	100	100	-	3	3	0
889	100	100	-	2	2	0
891	100	100	-	3	3	0
892	100	100	-	2	2	0
893	100	100	-	2	2	(0)
901DART	400	300	(100)	19	19	0
903DART	500	500	-	28	28	0
906DART		400	400		26	26
907DART	100	100	-	19	19	0
908DART	100	100	-	10	10	0
909DART	100	200	100	14	14	0
910DART	100	100	-	9	9	(0)
913DART	200	200	-	13	13	0
914DART	200	200	-	10	10	0
915DART	100	100	-	7	7	0
916DART	200	200	-	11	11	0

Route	Weekday Rides in 2013	Weekday Rides in 2014	Change in Rides	Weekday Platform Hours in 2013	Weekday Platform Hours in 2014	Change in Platform Hours
917DART	200	100	(100)	14	14	0
919DART	100	100	-	8	8	0
927DART	100	200	100	21	21	0
930DART	100	100	-	13	13	0
931DART	300	300	-	39	39	0
935DART	100	100	(100)	19	19	0
952	300	300	-	25	25	0
980	<50	<50	-	2	2	0
981	<50	<50	-	2	2	(0)
982	100	100	-	3	3	0
983	<50		-	2		(2)
984	<50	<50	-	1	1	0
986	100	100	-	3	3	0
987	100	100	-	3	3	0
988	100	100	-	3	3	0
989	100	100	-	4	4	(0)
994	100	100	-	3	3	0
995	100	100	-	3	3	0

Appendix I:
Corridor Analysis

	Connections				Land Use - Productivity				Social Equity - Demographics				Geographic Value - Primary Connections						Preliminary Target Service Levels		
CORRIDOR ID NUMBER	BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS/CORRIDOR MILE	POINTS	JOBS/CORRIDOR MILE	POINTS	MINORITY	POINTS	LOW-INCOME	POINTS	ACTIVITY CENTERS	POINTS	REGIONAL & MANUFACTURING/INDUSTRICAL CENTERS	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
1	Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	1025	2	937	2	69%	5	61%	0	Yes	5	No	0	14		30	30	0
2	Alki	SODO	Alaska Junction	50	1228	4	1898	4	20%	0	73%	5	Yes	5	No	0	18		30	30	0
3	Auburn	Burien	Kent, SeaTac	180	571	0	1199	2	73%	5	99%	5	No	0	Yes	10	22		15	30	30
4	Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	585	0	1230	2	24%	0	95%	5	No	0	Yes	10	17		30	30	0
5	Aurora Village	Seattle CBD	Aurora Ave N	E Line	2272	6	9022	8	56%	5	37%	0	Yes	5	No	0	24	Yes	< 15	15	15
6	Aurora Village	Northgate	Meridian Av N	346	1101	2	2624	4	99%	5	45%	0	Yes	5	No	0	16		30	30	0
7	Avondale	Kirkland	NE 85th St, NE Redmond Wy, Avondale Wy NE	248	1156	2	1549	4	80%	5	64%	5	Yes	5	No	0	21		15	30	30
8	Ballard	U. District	Green Lake, Greenwood	48	2321	6	8250	8	9%	0	29%	0	Yes	5	No	0	19		15	30	30
9	Ballard	Northgate	Holman Road, Northgate	40	1969	6	3477	6	16%	0	51%	0	No	0	Yes	10	22		15	30	30
10	Ballard	Seattle CBD	15th Ave W	D Line	3205	10	12778	10	0%	0	24%	0	No	0	Yes	10	30	Yes	< 15	15	15
11	Ballard	U. District	Wallingford (N 45th St)	44	2381	6	13573	10	16%	0	29%	0	No	0	Yes	10	26		15	15	30
12	Ballard	Seattle CBD	Ballard/Interbay MIC, Fremont, South Lake Union	40	3159	10	22747	10	1%	0	21%	0	No	0	Yes	10	30		15	15	30
13	Beacon Hill	Seattle CBD	Beacon Ave	36	2327	6	13789	10	95%	5	87%	5	No	0	No	0	26		15	15	30
14	Bellevue	Eastgate	Lake Hills Connector	271	747	2	5718	8	98%	5	91%	5	Yes	5	No	0	25		15	15	30
15	Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	1280	4	4237	6	91%	5	55%	0	No	0	Yes	10	25	Yes	< 15	15	15
16	Bellevue	Renton	Newcastle, Factoria	240	951	2	3669	6	91%	5	71%	5	Yes	5	No	0	23		15	30	30
17	Burien	Seattle CBD	Delridge, Ambaum	120	1282	4	5794	8	73%	5	61%	0	No	0	Yes	10	27		15	15	30
18	Burien	Seattle CBD	1st Ave S, South Park, Airport Wy	131	1336	4	8684	8	70%	5	100%	5	Yes	5	No	0	27		15	15	30
19	Burien	Seattle CBD	Des Moines Mem Dr, South Park	132	1153	2	8112	8	71%	5	100%	5	No	0	Yes	10	30		15	15	30
20	Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	1575	4	3858	6	89%	5	78%	5	No	0	Yes	10	30		15	15	30
21	Capitol Hill	Seattle CBD	15th Ave E	10	5463	10	22871	10	0%	0	87%	5	No	0	No	0	25		15	15	30
22	Capitol Hill	Seattle CBD	Madison St	12	4648	10	38510	10	0%	0	100%	5	No	0	Yes	10	35		15	15	30
23	Central District	Seattle CBD	E Jefferson St	3/4	4261	10	34891	10	64%	5	100%	5	Yes	5	No	0	35		15	15	30
24	Colman Park	Seattle CBD	Leschi, Yesler	27	2999	8	20257	10	85%	5	85%	5	No	0	No	0	28		15	15	30
25	Cowen Park	Seattle CBD	University Way, I-5	71EX/72EX/73EX/74EX	1720	4	20145	10	71%	5	100%	5	No	0	Yes	10	34		15	15	30
26	Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Av W	33	2797	8	13616	10	0%	0	19%	0	No	0	No	0	18		30	30	0
27	Eastgate	Bellevue	Newport Wy , S. Bellevue, 112th	241	948	2	6556	8	78%	5	59%	0	No	0	No	0	15		30	30	0
28	Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	933	2	5565	8	85%	5	32%	0	No	0	No	0	15		30	30	0
29	Eastgate	Overlake	Phantom Lake	226	683	2	2619	4	31%	0	31%	0	No	0	No	0	6		60	60	0
30	Enumclaw	Auburn	Auburn Wy S, SR 164	186/915	207	0	486	0	43%	0	97%	5	Yes	5	No	0	10		30	30	0
31	Fairwood	Renton	S Puget Dr, Royal Hills	148	741	2	743	2	100%	5	34%	0	Yes	5	No	0	14		30	30	0
32	Federal Way	SeaTac	SR-99	A Line	784	2	2256	4	100%	5	94%	5	No	0	Yes	10	26	Yes	< 15	15	15
33	Federal Way	Kent	Military Road	183	811	2	659	2	97%	5	69%	5	No	0	Yes	10	24		15	30	30
34	Fremont	Seattle CBD	Dexter Ave N	26/28	4248	10	25973	10	0%	0	5%	0	No	0	Yes	10	30		15	15	30
35	Fremont	U. District	N 40th St	31/32	2141	6	25297	10	6%	0	6%	0	Yes	5	No	0	21		15	30	30
36	Fremont	Whittier Hts	8th Av NW, 3rd Av NW	28	1630	4	1965	4	0%	0	8%	0	No	0	No	0	8		60	60	0
37	Green River CC	Kent	132nd Ave SE	164	937	2	1869	4	44%	0	82%	5	Yes	5	No	0	16		30	30	0
38	Greenwood	Seattle CBD	Greenwood Ave N	5	3606	10	13783	10	0%	0	23%	0	Yes	5	No	0	25		15	15	30
39	High Point	Seattle CBD	35th Ave SW	21	1851	6	9731	8	69%	5	69%	5	Yes	5	No	0	29		15	15	30

† Figures rounded for display purposes.

Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points	Threshold	Points
> 3000	10	> 10250	10	≥ 51%	5	≥ 63%	5	Yes	5	Yes	10
> 2400	8	> 5500	8	DART 46%	5	DART 41%	5	No	0	No	0
> 1800	6	> 3000	6	< 51%	0	< 63%	0				
> 1200	4	> 1400	4								
> 600	2	> 500	2								

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

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CORRIDOR ID NUMBER	Connections			Land Use - Productivity				Social Equity - Demographics				Geographic Value - Primary Connections					Preliminary Target Service Levels		
	BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS/ CORRIDOR MILE	POINTS	JOBS/CORRIDOR MILE	POINTS	MINORITY	POINTS	LOW-INCOME	POINTS	ACTIVITY CENTERS	POINTS	REGIONAL & MANUFACTURING/ INDUSTRICAL CENTERS	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
40	Issaquah	Eastgate	Newport Way	271	256	0	2471	4	60%	5	46%	0	No	0	No	0	9		60	60	0
41	Issaquah	Overlake	Sammamish, Bear Creek	269	441	0	1794	4	85%	5	0%	0	Yes	5	No	0	14		30	30	0
42	Issaquah	North Bend	Fall City, Snoqualmie	208/209	127	0	382	0	1%	0	18%	0	Yes	5	No	0	5		60	60	0
43	Kenmore	Kirkland	Juanita	234	1004	2	725	2	0%	0	0%	0	Yes	5	No	0	9		60	60	0
44	Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	696	2	994	2	11%	0	23%	0	Yes	5	No	0	9		60	60	0
45	Kenmore	U. District	Lake Forest Park, Lake City	372EX	1182	2	6976	8	32%	0	61%	0	Yes	5	No	0	15		30	30	0
46	Kenmore	Totem Lake	Finn Hill, Juanita	935	767	2	1151	2	0%	0	3%	0	Yes	5	No	0	9		60	60	0
47	Kennydale	Renton	Edmonds Av NE	909	1080	2	2592	4	91%	5	45%	5	No	0	No	0	16		30	30	0
48	Kent	Burien	Kent-DM Rd, S. 240th St, 1st Av S	166	836	2	1361	2	61%	5	83%	5	Yes	5	No	0	19		15	30	30
49	Kent	Maple Valley	Kent-Kangley Road	168	619	2	679	2	41%	0	34%	0	Yes	5	No	0	9		60	60	0
50	Kent	Renton	Kent East Hill	169	781	2	1213	2	100%	5	73%	5	No	0	Yes	10	24		15	30	30
51	Kent	Seattle CBD	Tukwila	150	449	0	4703	6	99%	5	100%	5	No	0	Yes	10	26		15	15	30
52	Kent	Renton	84th Av S, Lind Av SW	153	363	0	2779	4	100%	5	100%	5	No	0	Yes	10	24		15	30	30
53	Kirkland	Bellevue	South Kirkland	234/235	1555	4	7108	8	1%	0	1%	0	Yes	5	No	0	17		30	30	0
54	Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	889	2	3338	6	62%	5	44%	0	Yes	5	No	0	18		30	30	0
55	Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	1309	4	9122	8	87%	5	100%	5	No	0	Yes	10	32		15	15	30
56	Northgate	U. District	Lake City, Sand Point	75	1194	2	8734	8	33%	0	63%	0	Yes	5	No	0	15		30	30	0
57	Lake City	U. District	35th Ave NE	65	1431	4	8538	8	44%	0	40%	0	Yes	5	No	0	17		30	30	0
58	Laurelhurst	U. District	NE 45th St	25	855	2	11481	10	0%	0	17%	0	No	0	No	0	12		30	30	0
59	Madison Park	Seattle CBD	Madison St	11	4449	10	17424	10	28%	0	79%	5	Yes	5	No	0	30		15	15	30
60	Madrona	Seattle CBD	Union St	2	3816	10	23475	10	28%	0	84%	5	No	0	No	0	25		15	15	30
61	Magnolia	Seattle CBD	34th Ave W, 28th Ave W	24	2897	8	13561	10	0%	0	25%	0	Yes	5	No	0	23		15	30	30
62	Mercer Island	S Mercer Island	Island Crest Way	202/204	615	2	736	2	0%	0	0%	0	Yes	5	No	0	9		60	60	0
63	Mirror Lake	Federal Way	S 312th St	901	872	2	569	2	97%	5	63%	5	No	0	No	0	14		30	30	0
64	Mount Baker	Seattle CBD	31st Av S, S Jackson St	14	2492	8	18196	10	100%	5	100%	5	No	0	No	0	28		15	15	30
65	Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	1239	4	2121	4	44%	0	30%	0	No	0	No	0	8		60	60	0
66	Mt Baker	U. District	23rd Ave E	48	1643	4	11372	10	85%	5	90%	5	Yes	5	No	0	29		15	15	30
67	NE Tacoma	Federal Way	SW 356th St, 9th Ave S	182	341	0	1082	2	54%	5	32%	0	No	0	No	0	7		60	60	0
68	Northgate	U. District	Roosevelt	66EX/67	1680	4	13290	10	17%	0	72%	5	No	0	Yes	10	29		15	15	30
69	Northgate	Seattle CBD	Green Lake, Wallingford	16	2154	6	8116	8	30%	0	57%	0	No	0	Yes	10	24		15	30	30
70	Northgate	U. District	Roosevelt Way NE, NE 75th St	68	1649	4	12949	10	22%	0	86%	5	No	0	No	0	19		15	30	30
71	Othello Station	SODO	Columbia City Station	50	975	2	1403	4	100%	5	61%	0	No	0	No	0	11		30	30	0
72	Eastgate	Bellevue	Bell-Red Road	226	1856	6	10613	10	94%	5	82%	5	No	0	No	0	26		15	15	30
73	Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	1007	2	4838	6	39%	0	4%	0	Yes	5	No	0	13		30	30	0
74	Pacific	Auburn	Algona	917	304	0	466	0	94%	5	63%	5	No	0	No	0	10		30	30	0
75	Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	4474	10	20650	10	0%	0	80%	5	No	0	No	0	25		15	15	30
76	Queen Anne	Seattle CBD	Taylor Ave N	3/4	4435	10	22144	10	0%	0	95%	5	No	0	No	0	25		15	15	30
77	Rainier Beach	Seattle CBD	Rainier Ave	7	2024	6	11812	10	96%	5	82%	5	No	0	No	0	26		15	15	30
78	Rainier Beach	Seattle Center	MLK Jr Wy, E John St, Denny Way	8	2922	8	4045	6	39%	0	100%	5	No	0	Yes	10	29		15	15	30

† Figures rounded for display purposes.

Threshold	Points
> 3000	10
> 2400	8
> 1800	6
> 1200	4
> 600	2

Threshold	Points
> 10250	10
> 5500	8
> 3000	6
> 1400	4
> 500	2

Threshold	Points
≥ 51%	5
DART 46%	5
< 51%	0

Threshold	Points
≥ 63%	5
DART 41%	5
< 63%	0

Threshold	Points
Yes	5
No	0

Threshold	Points
Yes	10
No	0

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

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CORRIDOR ID NUMBER	Connections				Land Use - Productivity			Social Equity - Demographics				Geographic Value - Primary Connections						Preliminary Target Service Levels		
	BETWEEN	AND	VIA	MAJOR ROUTE	HOUSEHOLDS/ CORRIDOR MILE	POINTS	JOBS/CORRIDOR MILE	POINTS	MINORITY	POINTS	LOW-INCOME	POINTS	ACTIVITY CENTERS	POINTS	REGIONAL & MANUFACTURING/ INDUSTRIAL CENTERS	POINTS	TOTAL SCORE	RAPIDRIDE	PEAK	OFFPEAK	NIGHT
79	Rainier Beach	Capitol Hill	Rainier Ave	9EX	2353	6	4931	6	97%	5	80%	5	Yes	5	No	0	27		15	15	30
80	Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	751	2	2198	4	83%	5	58%	0	Yes	5	No	0	16		30	30	0
81	Redmond	Totem Lake	Willows Road	930	685	2	2948	4	66%	5	36%	0	No	0	Yes	10	21		15	30	30
82	Redmond	Fall City	Duvall, Carnation	224	429	0	547	2	60%	5	17%	0	Yes	5	No	0	12		30	30	0
83	Renton	Burien	S 154th St	140	513	0	1615	4	97%	5	100%	5	No	0	Yes	10	24	Yes	< 15	15	15
84	Renton	Seattle CBD	MLK Jr Wy, I-5	101/102	876	2	6824	8	95%	5	100%	5	No	0	Yes	10	30		15	15	30
85	Renton	Rainier Beach	West Hill, Rainier View	107	838	2	535	2	100%	5	93%	5	No	0	No	0	14		30	30	0
86	Renton	Seattle CBD	Skyway, S. Beacon Hill	106	1066	2	7485	8	93%	5	78%	5	Yes	5	No	0	25		15	15	30
87	Renton	Renton Highlands	NE 4th St, Union Ave NE	105	1217	4	2607	4	97%	5	90%	5	Yes	5	No	0	23		15	30	30
88	Renton	Enumclaw	Maple Valley, Black Diamond	143EX/907	183	0	260	0	17%	0	0%	0	Yes	5	No	0	5		60	60	0
89	Renton Highlands	Renton	NE 7th St, Edmonds Av NE	908	995	2	2824	4	87%	5	77%	5	No	0	No	0	16		30	30	0
90	Richmond Beach	Northgate	Richmond Bch Rd, 15th Ave NE	348	1331	4	2199	4	61%	5	56%	0	Yes	5	No	0	18		30	30	0
91	S Vashon	N Vashon	Valley Center	118	39	0	90	0	0%	0	0%	0	No	0	No	0	0		60	60	0
92	Sand Point	U. District	NE 55th St	30	1855	6	12790	10	9%	0	74%	5	No	0	No	0	21		15	30	30
93	Shoreline	U. District	Jackson Park, 15th Av NE	373EX	1146	2	5588	8	100%	5	56%	0	No	0	No	0	15		30	30	0
94	Shoreline CC	Northgate	N 130th St, Meridian Av N	345	1240	4	3989	6	61%	5	62%	0	Yes	5	No	0	20		15	30	30
95	Shoreline CC	Lake City	N 155th St, Jackson Park	330	1346	4	1961	4	31%	0	12%	0	Yes	5	No	0	13		30	30	0
96	Shoreline CC	Greenwood	Greenwood Av N	5	1824	6	2326	4	12%	0	38%	0	Yes	5	No	0	15		30	30	0
97	Totem Lake	Seattle CBD	Kirkland, SR-520	255	1129	2	6172	8	0%	0	3%	0	No	0	Yes	10	20		15	30	30
98	Woodinville	Kirkland	Kingsgate	236	994	2	1230	2	24%	0	24%	0	Yes	5	No	0	9		60	60	0
99	Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S	124	1413	4	10200	8	88%	5	84%	5	No	0	Yes	10	32		15	15	30
100	Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	524	0	1150	2	93%	5	71%	5	No	0	Yes	10	22		15	30	30
101	Tukwila	Fairwood	S 180th St, Carr Road	906	588	0	1386	2	100%	5	49%	0	Yes	5	No	0	12		30	30	0
102	Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	775	2	1208	2	100%	5	68%	5	No	0	No	0	14		30	30	0
103	Twin Lakes	Federal Way	S 320th St	187	744	2	621	2	61%	5	57%	0	No	0	No	0	9		60	60	0
104	U. District	Seattle CBD	Eastlake, Fairview	70/71/72/73	3142	10	32153	10	39%	0	89%	5	No	0	Yes	10	35		15	15	30
105	U. District	Seattle CBD	Broadway	49	3284	10	19087	10	47%	0	78%	5	No	0	Yes	10	35		15	15	30
106	U. District	Bellevue	SR-520	271	885	2	11825	10	79%	5	51%	0	No	0	Yes	10	27		15	15	30
107	U. District	Seattle CBD	Lakeview	25	2542	8	23654	10	20%	0	66%	5	No	0	No	0	23		15	30	30
108	UW Bothell	Redmond	Woodinville, Cottage Lake	931	349	0	1066	2	6%	0	30%	0	Yes	5	No	0	7		60	60	0
109	UW Bothell/CCC	Kirkland	132nd Ave NE, Lk Wash Inst of Tech	238	875	2	1947	4	0%	0	32%	0	Yes	5	No	0	11		30	30	0
110	Wedgwood	Cowen Park	View Ridge, NE 65th St	71EX	1381	4	422	0	0%	0	22%	0	No	0	No	0	4		60	60	0
111	West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	1979	6	8113	8	16%	0	57%	0	Yes	5	No	0	19	Yes	< 15	15	15
112	White Center	Seattle CBD	16th Ave SW, SSCC	125	684	2	4793	6	94%	5	47%	0	Yes	5	No	0	18		30	30	0

† Figures rounded for display purposes.

Threshold	Points
> 3000	10
> 2400	8
> 1800	6
> 1200	4
> 600	2

Threshold	Points
> 10250	10
> 5500	8
> 3000	6
> 1400	4
> 500	2

Threshold	Points
≥ 51%	5
DART 46%	5
< 51%	0

Threshold	Points
≥ 63%	5
DART 41%	5
< 63%	0

Threshold	Points
Yes	5
No	0

Threshold	Points
Yes	10
No	0

Levels

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

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CORRIDOR ID NUMBER	Connections			MAJOR ROUTE	Loads at Preliminary Service Level		Load-Based Service Level Improvements		Cost Recovery at Preliminary Service Level			Cost Recovery-Based Service Level Improvements			Night Service Additions			Service Level Improvements			Final Target Service Levels and Family		
	BETWEEN	AND	VIA		PEAK	OFFPEAK	PEAK	OFFPEAK	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	COST RECOVERY BASIS (8% / 16%)	CORRIDOR HAS 15 MIN PEAK SERVICE	ADD WHAT FREQUENCY NIGHT SERVICE?	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	RESULTING SERVICE FAMILY
1	Admiral District	Southcenter	California Ave SW, Military Rd, TIBS	128	0.79	0.76	1	1	41%	27%	13%	-	-	-	-	60	30	30	1	1	-	15	15	30	Very Frequent
2	Alki	SODO	Alaska Junction	50	0.69	0.46	-	-	27%	15%	8%	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
3	Auburn	Burien	Kent, SeaTac	180	0.44	0.85	-	1	15%	27%	14%	-	-	-	60	60	30	30	-	1	-	15	15	30	Very Frequent
4	Auburn/GRCC	Federal Way	15th St SW, Lea Hill Rd	181	0.58	0.55	-	-	24%	21%	14%	-	-	-	60	60	-	60	-	-	-	30	30	60	Local
5	Aurora Village	Seattle CBD	Aurora Ave N	E Line	1.50	0.96	2	1	50%	51%	29%	1	1	-	-	30	30	30	2	1	-	< 15	< 15	15	Very Frequent
6	Aurora Village	Northgate	Meridian Av N	346	0.67	0.54	-	-	46%	23%	11%	-	-	-	-	60	-	60	-	-	-	30	30	60	Local
7	Avondale	Kirkland	NE 85th St, NE Redmond Wy, Avondale Wy NE	248	0.18	0.28	-	-	10%	15%	9%	-	-	-	-	60	30	30	-	-	-	15	30	30	Frequent
8	Ballard	U. District	Green Lake, Greenwood	48	1.23	1.50	1	2	59%	79%	47%	1	1	1	-	30	30	30	1	2	1	< 15	< 15	15	Very Frequent
9	Ballard	Northgate	Holman Road, Northgate	40	1.02	1.10	1	1	50%	58%	19%	-	1	-	60	30	30	30	1	1	1	< 15	15	30	Very Frequent
10	Ballard	Seattle CBD	15th Ave W	D Line	1.30	1.08	1	1	61%	64%	35%	1	1	1	60	30	30	30	1	1	1	< 15	< 15	< 15	Very Frequent
11	Ballard	U. District	Wallingford (N 45th St)	44	1.46	0.56	1	-	74%	42%	54%	1	-	1	60	30	30	30	1	-	1	< 15	15	15	Very Frequent
12	Ballard	Seattle CBD	Ballard/Interbay MIC, Fremont, South Lake Union	40	1.02	0.55	1	-	33%	29%	19%	-	-	-	60	30	30	30	1	-	-	< 15	15	30	Very Frequent
13	Beacon Hill	Seattle CBD	Beacon Ave	36	1.69	1.22	2	1	104%	72%	39%	2	1	1	-	30	30	30	2	1	1	< 15	< 15	15	Very Frequent
14	Bellevue	Eastgate	Lake Hills Connector	271	0.56	0.32	-	-	21%	11%	8%	-	-	-	-	60	30	30	-	-	-	15	15	30	Very Frequent
15	Bellevue	Redmond	NE 8th St, 156th Ave NE	B Line	0.72	0.50	-	-	52%	29%	23%	1	-	-	60	30	30	30	1	-	-	< 15	15	15	Very Frequent
16	Bellevue	Renton	Newcastle, Factoria	240	0.24	0.57	-	-	12%	18%	6%	-	-	-	-	-	30	30	-	-	-	15	30	30	Frequent
17	Burien	Seattle CBD	Delridge, Ambaum	120	1.67	0.52	2	-	96%	36%	28%	1	-	-	60	30	30	30	2	-	-	< 15	15	30	Very Frequent
18	Burien	Seattle CBD	1st Ave S, South Park, Airport Wy	131	0.37	0.25	-	-	25%	13%	18%	-	-	-	-	30	30	30	-	-	-	15	15	30	Very Frequent
19	Burien	Seattle CBD	Des Moines Mem Dr, South Park	132	0.36	0.26	-	-	20%	11%	14%	-	-	-	60	60	30	30	-	-	-	15	15	30	Very Frequent
20	Capitol Hill	White Center	South Park, Georgetown, Beacon Hill, First Hill	60	0.95	0.53	1	-	40%	18%	15%	-	-	-	60	60	30	30	1	-	-	< 15	15	30	Very Frequent
21	Capitol Hill	Seattle CBD	15th Ave E	10	1.52	0.71	2	-	127%	43%	27%	2	-	-	-	30	30	30	2	-	-	< 15	15	30	Very Frequent
22	Capitol Hill	Seattle CBD	Madison St	12	1.01	0.44	1	-	98%	28%	13%	1	-	-	60	60	30	30	1	-	-	< 15	15	30	Very Frequent
23	Central District	Seattle CBD	E Jefferson St	3/4	1.44	1.24	1	1	79%	68%	38%	1	1	1	-	30	30	30	1	1	1	< 15	< 15	15	Very Frequent
24	Colman Park	Seattle CBD	Leschi, Yesler	27	0.56	0.21	-	-	17%	12%	7%	-	-	-	-	-	30	30	-	-	-	15	15	30	Very Frequent
25	Cowen Park	Seattle CBD	University Way, I-5	71EX/72EX/73EX/74EX	1.93	1.41	2	1	98%	92%	N/A	1	1	-	60	-	30	30	2	1	-	< 15	< 15	30	Very Frequent
26	Discovery Park	Seattle CBD	Gilman Ave W, 22nd Ave W, Thorndyke Av W	33	0.97	0.37	1	-	37%	21%	16%	-	-	-	-	30	30	30	1	-	-	15	30	30	Frequent
27	Eastgate	Bellevue	Newport Wy, S. Bellevue, 112th	241	0.18	0.18	-	-	16%	14%	9%	-	-	-	-	60	-	60	-	-	-	30	30	60	Local
28	Eastgate	Bellevue	Somerset, Factoria, Woodridge	246	0.14	0.08	-	-	6%	5%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
29	Eastgate	Overlake	Phantom Lake	226	0.47	0.42	-	-	38%	23%	5%	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
30	Enumclaw	Auburn	Auburn Wy S, SR 164	186/915	0.49	0.20	-	-	10%	6%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
31	Fairwood	Renton	S Puget Dr, Royal Hills	148	0.56	0.35	-	-	21%	13%	17%	-	-	-	-	30	-	30	-	-	-	30	30	30	Local
32	Federal Way	SeaTac	SR-99	A Line	0.74	0.72	-	-	45%	46%	32%	-	-	-	60	30	30	30	-	-	-	< 15	15	15	Very Frequent
33	Federal Way	Kent	Military Road	183	0.20	0.21	-	-	13%	8%	N/A	-	-	-	60	-	30	30	-	-	-	15	30	30	Frequent
34	Fremont	Seattle CBD	Dexter Ave N	26/28	1.20	0.44	1	-	64%	28%	36%	1	-	1	60	30	30	30	1	-	-	< 15	15	15	Very Frequent
35	Fremont	U. District	N 40th St	31/32	1.12	1.10	1	1	75%	57%	31%	1	1	-	-	30	30	30	1	1	-	< 15	15	30	Very Frequent
36	Fremont	Whittier Hts	8th Av NW, 3rd Av NW	28	1.46	0.47	1	-	63%	29%	9%	1	-	-	-	60	-	60	1	-	-	30	60	60	Local
37	Green River CC	Kent	132nd Ave SE	164	0.89	0.66	1	-	52%	33%	23%	1	-	-	-	30	30	30	1	-	-	15	30	30	Frequent
38	Greenwood	Seattle CBD	Greenwood Ave N	5	1.21	0.49	1	-	47%	37%	54%	-	-	1	-	30	30	30	1	-	1	< 15	15	15	Very Frequent
39	High Point	Seattle CBD	35th Ave SW	21	0.61	0.43	-	-	35%	26%	25%	-	-	-	-	30	30	30	-	-	-	15	15	30	Very Frequent

† Figures rounded for display purposes.

Load Factor*	Peak	Off Peak
1.50	2	2
0.75	1	1

Cost Recovery*	Peak	Off Peak	Night
>= 100%	2	2	2
>= 50%	1	1	1
>= 33%	--	--	1
>= 16%	--	--	30 min
>= 8%	--	--	60 min

* Load Factor and Cost Recovery service level improvements move the preliminary levels of service up one or two levels, e.g. a load factor or cost recovery service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc. A cost recovery >8% warrants 60 min. night service, >16% warrants 30 min.

Above Target
Below Target

King County METRO

CORRIDOR ID NUMBER	Connections BETWEEN	Connections AND	Connections VIA	MAJOR ROUTE	Loads at Preliminary Service Level PEAK	Loads at Preliminary Service Level OFFPEAK	Load-Based Service Level Improvements PEAK	Load-Based Service Level Improvements OFFPEAK	Cost Recovery at Preliminary Service Level PEAK	Cost Recovery at Preliminary Service Level OFFPEAK	Cost Recovery at Preliminary Service Level NIGHT	Cost Recovery-Based Service Level Improvements PEAK	Cost Recovery-Based Service Level Improvements OFFPEAK	Cost Recovery-Based Service Level Improvements NIGHT	Night Service Additions PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	Night Service Additions COST RECOVERY BASIS (8% / 16%)	Night Service Additions CORRIDOR HAS 15 MIN PEAK SERVICE	Night Service Additions ADD WHAT FREQUENCY NIGHT SERVICE?	Service Level Improvements PEAK	Service Level Improvements OFFPEAK	Service Level Improvements NIGHT	Final Target Service Levels and Family PEAK	Final Target Service Levels and Family OFFPEAK	Final Target Service Levels and Family NIGHT	Final Target Service Levels and Family RESULTING SERVICE FAMILY
40	Issaquah	Eastgate	Newport Way	271	0.70	0.66	-	-	22%	22%	8%	-	-	-	-	60	-	60	-	-	-	60	60	60	Hourly
41	Issaquah	Overlake	Sammamish, Bear Creek	269	0.26	N/A	-	-	10%	N/A	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
42	Issaquah	North Bend	Fall City, Snoqualmie	208/209	0.66	0.21	-	-	4%	6%	0%	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
43	Kenmore	Kirkland	Juanita	234	0.57	0.26	-	-	18%	14%	5%	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
44	Kenmore	Shoreline	Lake Forest Park, Aurora Village TC	331	1.54	0.92	2	1	28%	29%	7%	-	-	-	-	30	30	30	2	1	-	15	30	30	Frequent
45	Kenmore	U. District	Lake Forest Park, Lake City	372EX	2.82	0.69	2	-	97%	34%	26%	1	-	-	-	30	30	30	2	-	-	< 15	30	30	Frequent
46	Kenmore	Totem Lake	Finn Hill, Juanita	935	0.48	N/A	-	-	9%	N/A	N/A	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
47	Kennydale	Renton	Edmonds Av NE	909	0.20	0.18	-	-	5%	4%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
48	Kent	Burien	Kent-DM Rd, S. 240th St, 1st Av S	166	0.41	0.68	-	-	11%	23%	15%	-	-	-	-	60	30	30	2	1	-	15	30	30	Frequent
49	Kent	Maple Valley	Kent-Kangley Road	168	1.96	0.94	2	1	41%	38%	16%	-	-	-	60	30	30	30	-	-	-	15	30	30	Frequent
50	Kent	Renton	Kent East Hill	169	0.46	0.85	-	1	17%	33%	23%	-	-	-	60	30	30	30	-	1	-	15	15	30	Very Frequent
51	Kent	Seattle CBD	Tukwila	150	0.86	0.57	1	-	31%	30%	24%	-	-	-	60	30	30	30	1	-	-	< 15	15	30	Very Frequent
52	Kent	Renton	84th Av S, Lind Av SW	153	0.28	N/A	-	-	8%	N/A	N/A	-	-	-	60	-	30	30	-	-	-	15	30	30	Frequent
53	Kirkland	Bellevue	South Kirkland	234/235	1.02	0.52	1	-	36%	27%	9%	-	-	-	-	60	30	30	1	-	-	15	30	30	Frequent
54	Kirkland	Factoria	Overlake, Crossroads, Eastgate	245	1.38	0.84	1	1	44%	38%	14%	-	-	-	-	60	30	30	1	1	-	15	15	30	Very Frequent
55	Lake City	Seattle CBD	NE 125th St, Northgate, I-5	41	1.74	0.70	2	-	91%	44%	31%	1	-	-	60	30	30	30	2	-	-	< 15	15	30	Very Frequent
56	Northgate	U. District	Lake City, Sand Point	75	1.42	0.65	1	-	91%	36%	28%	1	-	-	-	30	30	30	1	-	-	15	30	30	Frequent
57	Lake City	U. District	35th Ave NE	65	1.84	0.50	2	-	104%	30%	18%	2	-	-	-	30	30	30	2	-	-	< 15	30	30	Frequent
58	Laurelhurst	U. District	NE 45th St	25	0.22	0.08	-	-	5%	4%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
59	Madison Park	Seattle CBD	Madison St	11	0.78	0.32	1	-	50%	21%	29%	-	-	-	-	30	30	30	1	-	-	< 15	15	30	Very Frequent
60	Madrona	Seattle CBD	Union St	2	0.96	0.61	1	-	49%	35%	22%	-	-	-	-	30	30	30	1	-	-	< 15	15	30	Very Frequent
61	Magnolia	Seattle CBD	34th Ave W, 28th Ave W	24	0.56	0.44	-	-	29%	22%	15%	-	-	-	-	60	30	30	-	-	-	15	30	30	Frequent
62	Mercer Island	S Mercer Island	Island Crest Way	202/204	0.84	0.24	1	-	21%	12%	N/A	-	-	-	-	-	-	-	1	-	-	30	60	0	Local
63	Mirror Lake	Federal Way	S 312th St	901	0.62	0.35	-	-	13%	14%	13%	-	-	-	-	-	-	60	-	-	-	30	30	60	Local
64	Mount Baker	Seattle CBD	31st Av S, S Jackson St	14	0.96	0.33	1	-	34%	17%	18%	-	-	-	-	30	30	30	1	-	-	< 15	15	30	Very Frequent
65	Mountlake Terrace	Northgate	15th Ave NE, 5th Ave NE	347	1.48	0.86	1	1	44%	36%	14%	-	-	-	-	60	-	60	1	1	-	30	30	60	Local
66	Mt Baker	U. District	23rd Ave E	48	1.29	0.74	1	-	88%	39%	47%	1	-	1	-	30	30	30	1	-	-	< 15	15	15	Very Frequent
67	NE Tacoma	Federal Way	SW 356th St, 9th Ave S	182	0.72	0.46	-	-	29%	17%	0%	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
68	Northgate	U. District	Roosevelt	66EX/67	0.67	0.32	-	-	35%	14%	16%	-	-	-	60	30	30	30	-	-	-	15	15	30	Very Frequent
69	Northgate	Seattle CBD	Green Lake, Wallingford	16	0.90	0.76	1	1	22%	32%	14%	-	-	-	60	60	30	30	1	1	-	< 15	15	30	Very Frequent
70	Northgate	U. District	Roosevelt Way NE, NE 75th St	68	0.64	0.75	-	1	29%	42%	N/A	-	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent
71	Othello Station	SODO	Columbia City Station	50	0.69	0.46	-	-	40%	15%	8%	-	-	-	-	-	-	-	-	1	-	30	30	0	Local
72	Eastgate	Bellevue	Bell-Red Road	226	0.24	0.21	-	-	13%	11%	5%	-	-	-	-	-	-	30	-	-	-	15	15	30	Very Frequent
73	Overlake	Bellevue	Sammamish Viewpoint, Northup Way	249	0.39	0.22	-	-	24%	7%	0%	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
74	Pacific	Auburn	Algona	917	0.32	0.12	-	-	7%	3%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
75	Queen Anne	Seattle CBD	Queen Anne Ave N	2/13	1.10	0.67	1	-	64%	38%	45%	1	-	1	-	30	30	30	1	-	-	< 15	15	15	Very Frequent
76	Queen Anne	Seattle CBD	Taylor Ave N	3/4	0.92	0.61	1	-	63%	36%	38%	1	-	1	-	30	30	30	1	-	-	< 15	15	15	Very Frequent
77	Rainier Beach	Seattle CBD	Rainier Ave	7	1.18	0.96	1	1	64%	70%	54%	1	1	1	-	30	30	30	1	1	1	< 15	< 15	15	Very Frequent
78	Rainier Beach	Seattle Center	MLK Jr Wy, E John St, Denny Way	8	0.73	0.47	-	-	44%	34%	26%	-	-	-	60	30	30	30	-	-	-	15	15	30	Very Frequent

† Figures rounded for display purposes.

Load Factor*	Peak	Off Peak
1.50	2	2
0.75	1	1

Cost Recovery*	Peak	Off Peak	Night
>= 100%	2	2	2
>= 50%	1	1	1
>= 33%	--	--	1
>= 16%	--	--	30 min
>= 8%	--	--	60 min

* Load Factor and Cost Recovery service level improvements move the preliminary levels of service up one or two levels, e.g. a load factor or cost recovery service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc. A cost recovery >8% warrants 60 min. night service, >16% warrants 30 min.

Above Target
Below Target

King County METRO

CORRIDOR ID NUMBER	Connections			MAJOR ROUTE	Loads at Preliminary Service Level		Load-Based Service Level Improvements		Cost Recovery at Preliminary Service Level			Cost Recovery-Based Service Level Improvements			Night Service Additions			Service Level Improvements			Final Target Service Levels and Family		
	BETWEEN	AND	VIA		PEAK	OFFPEAK	PEAK	OFFPEAK	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	PRIMARY CONNECTIONS BETWEEN URBAN CENTERS	COST RECOVERY BASIS (8% / 16%)	CORRIDOR HAS 15 MIN PEAK SERVICE	ADD WHAT FREQUENCY NIGHT SERVICE?	PEAK	OFFPEAK	NIGHT	PEAK	OFFPEAK	NIGHT	RESULTING SERVICE FAMILY
79	Rainier Beach	Capitol Hill	Rainier Ave	9EX	0.79	0.24	1	-	33%	18%	N/A	-	-	-	-	-	30	30	1	-	-	< 15	15	30	Very Frequent
80	Redmond	Eastgate	148th Ave, Crossroads, Bellevue College	221	0.33	0.32	-	-	16%	14%	9%	-	-	-	-	60	-	60	-	-	-	30	30	60	Local
81	Redmond	Totem Lake	Willows Road	930	0.22	N/A	-	-	4%	N/A	N/A	-	-	-	60	-	30	30	-	-	-	15	30	30	Frequent
82	Redmond	Fall City	Duvall, Carnation	224	0.23	0.08	-	-	4%	3%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
83	Renton	Burien	S 154th St	140	0.34	0.46	-	-	15%	24%	9%	-	-	-	60	60	30	30	-	-	-	< 15	15	15	Very Frequent
84	Renton	Seattle CBD	MLK Jr Wy, I-5	101/102	1.78	0.40	2	-	61%	19%	28%	1	-	-	60	30	30	30	2	-	-	< 15	15	30	Very Frequent
85	Renton	Rainier Beach	West Hill, Rainier View	107	0.94	0.44	1	-	39%	17%	12%	-	-	-	-	60	30	30	1	-	-	15	30	30	Frequent
86	Renton	Seattle CBD	Skyway, S. Beacon Hill	106	0.75	0.26	1	-	32%	15%	20%	-	-	-	-	30	30	30	1	-	-	< 15	15	30	Very Frequent
87	Renton	Renton Highlands	NE 4th St, Union Ave NE	105	0.33	0.41	-	-	13%	21%	15%	-	-	-	-	60	30	30	-	-	-	15	30	30	Frequent
88	Renton	Enumclaw	Maple Valley, Black Diamond	143EX/907	0.86	0.12	1	-	16%	2%	N/A	-	-	-	-	-	-	-	1	-	-	30	60	0	Local
89	Renton Highlands	Renton	NE 7th St, Edmonds Av NE	908	0.14	0.11	-	-	6%	3%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
90	Richmond Beach	Northgate	Richmond Bch Rd, 15th Ave NE	348	0.67	0.45	-	-	28%	18%	13%	-	-	-	-	60	-	60	-	-	-	30	30	60	Local
91	S Vashon	N Vashon	Valley Center	118	1.32	0.12	1	-	24%	10%	8%	-	-	-	-	-	-	-	-	-	-	30	60	0	Local
92	Sand Point	U. District	NE 55th St	30	0.27	0.44	-	-	17%	19%	19%	-	-	-	-	30	30	30	-	-	-	15	30	30	Frequent
93	Shoreline	U. District	Jackson Park, 15th Av NE	373EX	1.14	N/A	1	-	44%	N/A	N/A	-	-	-	-	-	-	-	1	-	-	15	30	30	Frequent
94	Shoreline CC	Northgate	N 130th St, Meridian Av N	345	0.34	0.62	-	-	16%	28%	7%	-	-	-	-	-	30	30	-	-	-	15	30	30	Frequent
95	Shoreline CC	Lake City	N 155th St, Jackson Park	330	0.08	0.23	-	-	6%	12%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
96	Shoreline CC	Greenwood	Greenwood Av N	5	1.21	0.49	1	-	47%	37%	13%	-	-	-	-	60	30	30	1	-	-	15	30	30	Frequent
97	Totem Lake	Seattle CBD	Kirkland, SR-520	255	1.32	0.86	1	1	38%	40%	19%	-	-	-	60	30	30	30	1	1	-	< 15	15	30	Very Frequent
98	Woodinville	Kirkland	Kingsgate	236	0.46	0.32	-	-	14%	12%	0%	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
99	Tukwila	Seattle CBD	Pacific Hwy S, 4th Ave S	124	0.52	0.24	-	-	23%	15%	18%	-	-	-	60	30	30	30	-	-	-	15	15	30	Very Frequent
100	Tukwila	Des Moines	McMicken Heights, Sea-Tac	156	0.20	0.32	-	-	8%	14%	6%	-	-	-	60	-	30	30	-	-	-	15	30	30	Frequent
101	Tukwila	Fairwood	S 180th St, Carr Road	906	0.45	0.36	-	-	5%	5%	N/A	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
102	Twin Lakes	Federal Way	SW Campus Dr, 1st Ave S	903	0.75	0.57	1	-	14%	14%	9%	-	-	-	-	60	30	30	1	-	-	15	30	30	Frequent
103	Twin Lakes	Federal Way	S 320th St	187	0.82	0.37	1	-	40%	21%	12%	-	-	-	-	60	-	60	1	-	-	30	60	60	Local
104	U. District	Seattle CBD	Eastlake, Fairview	70/71/72/73	1.15	0.54	1	-	57%	34%	63%	1	-	1	60	30	30	30	1	-	1	< 15	15	15	Very Frequent
105	U. District	Seattle CBD	Broadway	49	0.85	0.59	1	-	50%	45%	80%	-	-	1	60	30	30	30	1	-	1	< 15	15	15	Very Frequent
106	U. District	Bellevue	SR-520	271	1.12	0.63	1	-	42%	22%	16%	-	-	-	60	30	30	30	1	-	-	< 15	15	30	Very Frequent
107	U. District	Seattle CBD	Lakeview	25	0.22	0.15	-	-	5%	7%	N/A	-	-	-	-	-	30	30	-	-	-	15	30	30	Frequent
108	UW Bothell	Redmond	Woodinville, Cottage Lake	931	0.50	0.25	-	-	13%	6%	N/A	-	-	-	-	-	-	-	-	-	-	60	60	0	Hourly
109	UW Bothell/CCC	Kirkland	132nd Ave NE, Lk Wash Inst of Tech	238	0.30	0.32	-	-	9%	10%	5%	-	-	-	-	-	-	-	-	-	-	30	30	0	Local
110	Wedgwood	Cowen Park	View Ridge, NE 65th St	71EX	1.00	0.81	1	1	51%	51%	9%	1	1	-	-	60	-	60	1	1	-	30	30	60	Local
111	West Seattle	Seattle CBD	Fauntleroy, Alaska Junction	C Line	1.68	0.87	2	1	51%	35%	23%	1	-	-	-	30	30	30	2	1	-	< 15	< 15	15	Very Frequent
112	White Center	Seattle CBD	16th Ave SW, SSCC	125	1.48	0.65	1	-	43%	23%	15%	-	-	-	-	60	30	30	1	-	-	15	30	30	Frequent

† Figures rounded for display purposes.

Load Factor*	Peak	Off Peak
1.50	2	2
0.75	1	1

Cost Recovery*	Peak	Off Peak	Night
>= 100%	2	2	2
>= 50%	1	1	1
>= 33%	--	--	1
>= 16%	--	--	30 min
>= 8%	--	--	60 min

* Load Factor and Cost Recovery service level improvements move the preliminary levels of service up one or two levels, e.g. a load factor or cost recovery service level improvement of 2 changes a 30 min. service to <15 or a 60 min. service to 15, etc. A cost recovery >8% warrants 60 min. night service, >16% warrants 30 min.

Above Target	
Below Target	

Using the Guidelines to Plan, Assess and Change Service

Where do we provide service?

Our Transit network is comprised of corridors connecting centers

Centers:

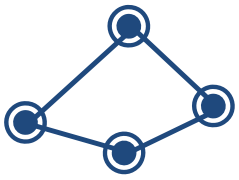
- Transit centers and places where many people work, live or go for services or activities
- 85 centers across King County today

Corridors

112 Metro corridors serve centers

All-Day and Peak Network

These 112 corridors create Metro's all-day transit network. Metro provides additional peak only service to meet demand.



How much service should we provide?

Target corridor service levels are set in two steps:

1. What is the preliminary service level?

Productivity (Jobs & Households)

+

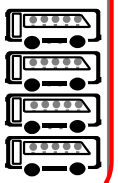
Social Equity (low-income & minority riders)

+

Geographic Value (connections to centers)

Preliminary Service Level

2. Does preliminary service level provide enough buses?

Preliminary Service level	Current Riders	Target
		

How is service performing?

Service analysis looks at both routes and corridors:

Route Productivity Rides/ Hr. Pass.Mi/ Mi.

Top 25%		Bottom 25%

Service Reliability

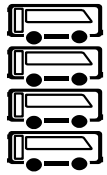
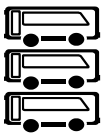
< 5 Minutes late

Overcrowding

Avg. load < 125% seats: regular service
Avg. load < 150% seats: 10 min. service
Standing load <20 min all service

Peak Criteria
Travel time
Ridership

Target Service Comparison

Target	Existing
	 Below

Above | **At** | **Below**

What should we do differently?

Investment Priorities

Invest to:

- Reduce overcrowding
- Improve reliability
- Achieve target service levels
- Become more productive

Reduction Priorities

Reduce service to:

- Meet budget constraints
- Re-invest in investment priorities

Improvements & Restructures

Make improvements and restructures to:

- Match design guidelines
- Meet investment priorities

=

Service Change Proposals

How does Metro determine where to cut service?
By following priorities in the service guidelines

When Metro has to reduce service to fit our budget, we follow service guidelines that set priorities for making cuts or changes. The guidelines also help us make the best use of fewer transit dollars by keeping service where it's needed most: highly productive routes that carry many riders, low-income and minority communities where many people rely on buses, and routes that get people to key destinations across King County.

Priority 1: Cut the lowest-performing service (bottom 25%) that:

1. Duplicates other service.
2. Runs in peak periods only and doesn't carry enough riders or travel faster enough compared to regular all-day service.
3. Is on a corridor where service is above the target service level.
4. Is on a corridor where service is at the target service level.

Priority 2: Restructure a network of routes

We also look for ways to change a group of routes in an area so the network serves the most riders and costs less to operate, and cuts have the least impact on our riders. We might combine routes, delete parts of routes that carry fewer riders, or move buses to different streets.

Priority 3: Cut the next-lowest performing service (above the bottom 25%)

When we must make deeper cuts, we have to take service from routes that are performing better than those in the lowest-performing group. Again, we cut service that:

1. Duplicates other service.
2. Runs in peak periods only.
3. Is on a corridor where service is above the target service level.
4. Is on a corridor where service is at the target service level.

Priority 4: Reduce the lowest performing service (lowest 25%) on corridors that are below their target service levels

Even though service in this category is among the lowest performing in the Metro system, it's not top priority to be cut because we try to meet the target service level in every corridor—although that's not always possible within our available resources.

Transit terms

Service can mean a whole route, part of a route, or a single trip.

Low performing service carries fewer people or carries them for shorter distances to fewer of the places the route goes.

Duplicates other service means a route or part of a route serves the same area or part of a street that another route serves, so another option is available to riders.

Corridor is a transit service area linking major destinations. More than one route can operate on a corridor.

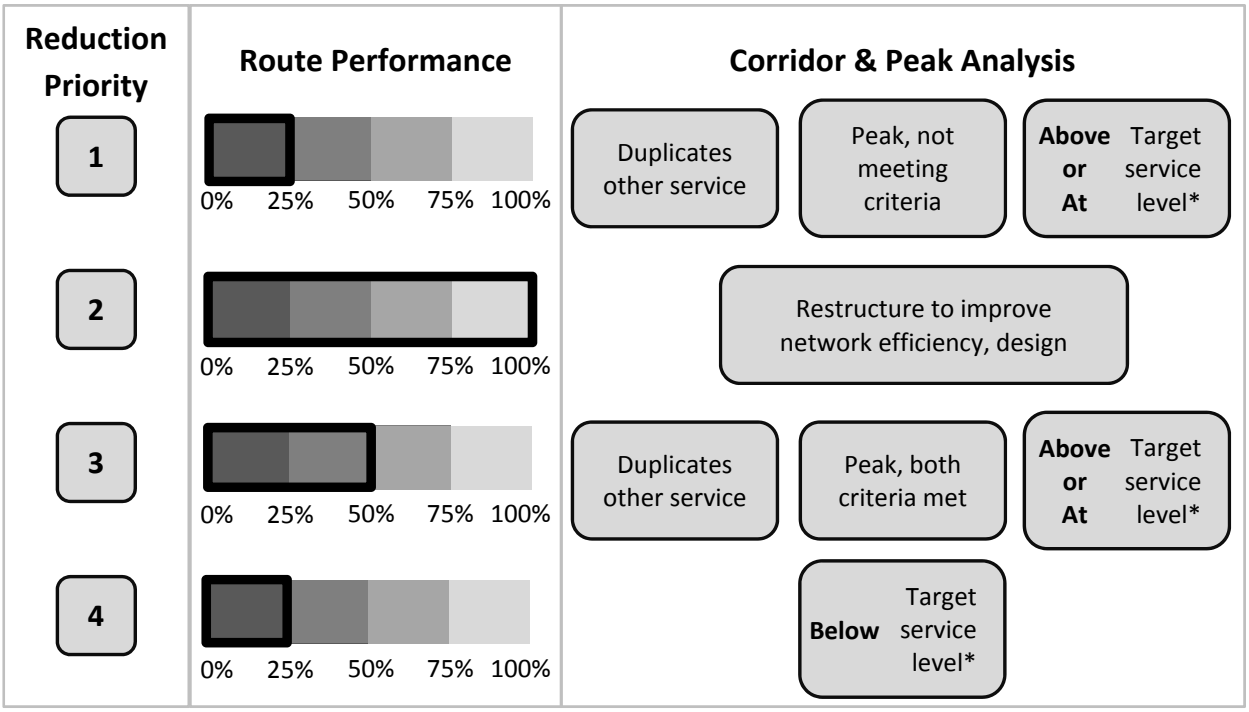
Service level means how often buses come, how many hours a day they run, and how many days of the week they provide service.

Target service level—Metro sets this for each corridor, based on:

- the number of homes, jobs, and colleges nearby
- the number of riders in areas that have many minority or low-income residents
- connections to major destinations
- the number of riders using the service

See an illustration of the process >>

Metro Service Guidelines Methodology for Reducing Service



*Target service level is based on demographics and demand between connections served by transit

5. Social Equity

Introduction

Social equity is a core value of King County government. County policy requires that Metro intentionally consider equity and integrate it into our decisions and policies, our practices, and our methods for engaging communities—creating more opportunities for all county residents. The Regional Transit Task Force also emphasized social equity in the policy direction it recommended in 2010, which is reflected in Metro's strategic plan and service guidelines. Underpinning these policies are federal laws that require nondiscriminatory delivery of transit services.

This section provides information about the meaning of social equity and how the service guidelines help Metro incorporate social equity into transit allocation decisions. It also includes maps showing concentrations of historically disadvantaged populations in King County.

Links to Information

1. King County Title VI Policy: http://bit.ly/sgtf5_1
2. Metro Title VI Program Report: http://bit.ly/sgtf5_2
3. 2014 Determinants of Equity Report: http://bit.ly/sgtf5_3
4. 2014 King County Equity and Social Justice Report: http://1.usa.gov/1BcBI9L
5. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Overview

Regional Transit Task Force (2010). The first Regional Transit Task Force (RTTF) had recommended that one overarching statement of policy direction and the use of guidelines and performance measures should guide all Metro service allocation decisions, including service reductions, service growth, service restoration, and the ongoing maintenance of transit services in response to changes in system demand or route performance.

The Task Force included the principle of social equity in its recommended policy direction (Recommendation 3):

> "The policy guidance for making service reduction and service growth decisions should be based on the following priorities:
>
> 1. Emphasize productivity due to its linkage to economic development, land use, financial sustainability, and environmental sustainability
> 2. Ensure social equity
> 3. Provide geographic value throughout the county."

The Task Force report stated that the intent of this recommended policy framework is to optimize efficiency of transit services; deliver people to employment, activity and residential centers; meet the needs of those that are most dependent on transit; and create a system that is a fair distribution of service throughout the county.

To further clarify the RTTF's intent, the report included the following explanation of "ensure social equity":

> "The task force felt that it is imperative for any future allocation of service to provide transit services to those who have no, or limited, transportation options. They defined Social Equity and Environmental Justice to mean using transit service to address gaps in mobility, and to avoid or mitigate disproportionately high and adverse social, economic or human health impacts for populations that have limited transportation options, including youth, students, elderly, disabled, people of color, those with limited English proficiency, and economically disadvantaged communities. In addition to considering trip origins for people with limited transportation options, consideration should be given to destinations for employment, education, healthcare, social services and other civic engagement activities."

King County Metro Transit Strategic Plan for Public Transportation, 2011-2021. Metro is guided by its Strategic Plan for Public Transportation 2011-2021, adopted by the County Council in July 2011. Metro's strategic plan parallels the countywide strategic plan and also incorporates the recommendations of the Regional Transit Task Force.

Metro incorporated this policy direction in our strategic plan Goal 2: Human Potential: "provide equitable opportunities for people from all areas of King County to access the public transportation system." One of the plan's strategies for achieving this goal is, "Provide travel opportunities for historically disadvantaged populations, such as low-income people, students, youth, seniors, people of color, people with disabilities, and others with limited transportation options."

King County Metro Service Guidelines. Metro's strategic plan also includes the service guidelines recommended by the RTTF. The guidelines incorporate social equity into the management of the transit system.

A central piece of the service guidelines is the analysis of the All-Day and Peak Network, which establishes target service levels for transit corridors throughout King County. Productivity, social equity and geographic value are prioritized in a three-step process.

Metro determines low-income and minority census tracts in each corridor using the most recent and best available census data. Then a social equity score is assigned 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.

Metro assigns social equity points as follows:

Measure	Threshold	Points
Percent of boardings in low-income census tracts	Above system average	5
	Below system average	0
Percent of boardings in minority census tracts	Above system average	5
	Below system average	0

Social equity is also addressed in the next step of this analysis, which is to increase the service level if necessary to serve the actual number of current riders. This step helps Metro make sure that in areas where many people have few transportation options and rely on Metro to get around, a target service level is set that will accommodate them.

A number of laws and policies guide Metro in providing services that promote social equity.

Federal law. Metro follows the requirements and guidance of Title VI of the Civil Rights Act of 1964, the Federal Highway Act of 1973, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. Collectively, these laws prohibit discrimination on the basis of race, color, national origin, sex, age, and disability.

Whenever Metro makes a change of more than 25 percent of service hours within the system or on a route, or shifts a bus stop more than one-half mile, we conduct a Title VI analysis to determine whether the changes have a disparate impact on minority populations or disproportionate burdens on low-income populations. This practice is adopted in Metro's strategic plan.

King County Strategic Plan and Ordinance 16948. At the county level, Metro is guided by the King County Strategic Plan and by Ordinance 16948, concerning equity and social justice. A core element of the countywide strategic plan is the "fair and just" principle. Ordinance 16948 establishes definitions and approaches for implementing this fair and just principle and achieving equitable opportunities for all people and communities in King County.

The ordinance defines "equity" as all people having full and equal access to opportunities that enable them to attain their full potential. "Social justice" means all aspects of justice, including legal, political and economic, and requires the fair distribution of public goods, institutional resources and life opportunities for all people.

Ordinance 16948 also defines 14 determinants of equity—the conditions that lead to a fair and just society. Inequities are created when barriers prevent people from accessing these conditions. The determinant that most directly applies to Metro is #14: transportation that provides everyone with safe, efficient, affordable, convenient and reliable mobility options including public transit, walking, carpooling and biking.

The King County Strategic Plan's "Economic Growth and Built Environment" goal includes this strategy for transportation services: "Meet the transportation needs of low-income and other underserved populations."

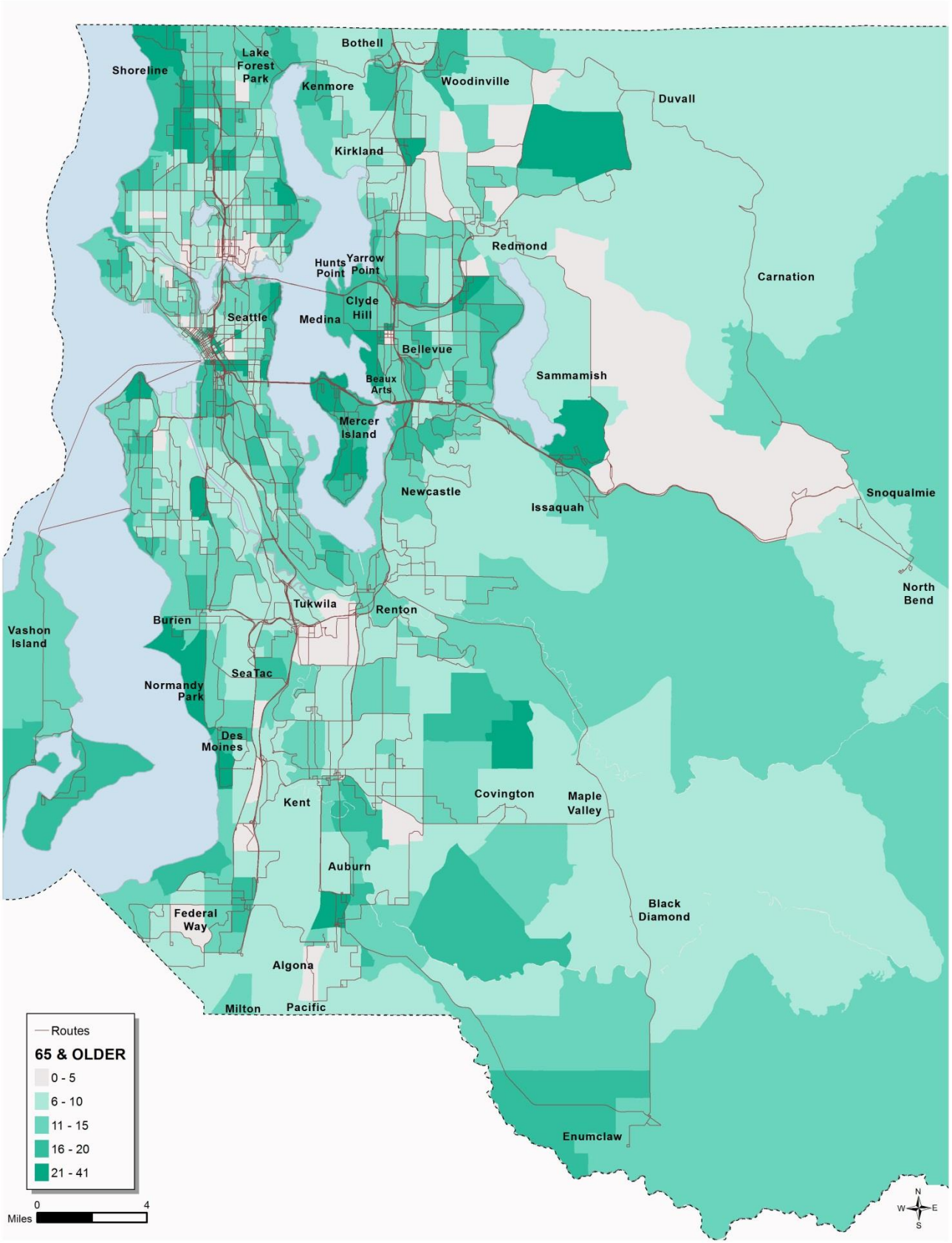
Service planning, community engagement, and analysis of impacts. In addition to applying the service guidelines, Metro service planners routinely use data about low-income and minority populations when developing plans to revise or restructure service. Throughout the service reductions process of 2014, for

example, Metro continuously communicated with riders, local organizations, and elected officials to learn how they could minimize or mitigate the impacts to historically disadvantaged populations, such as low-income and minority groups.

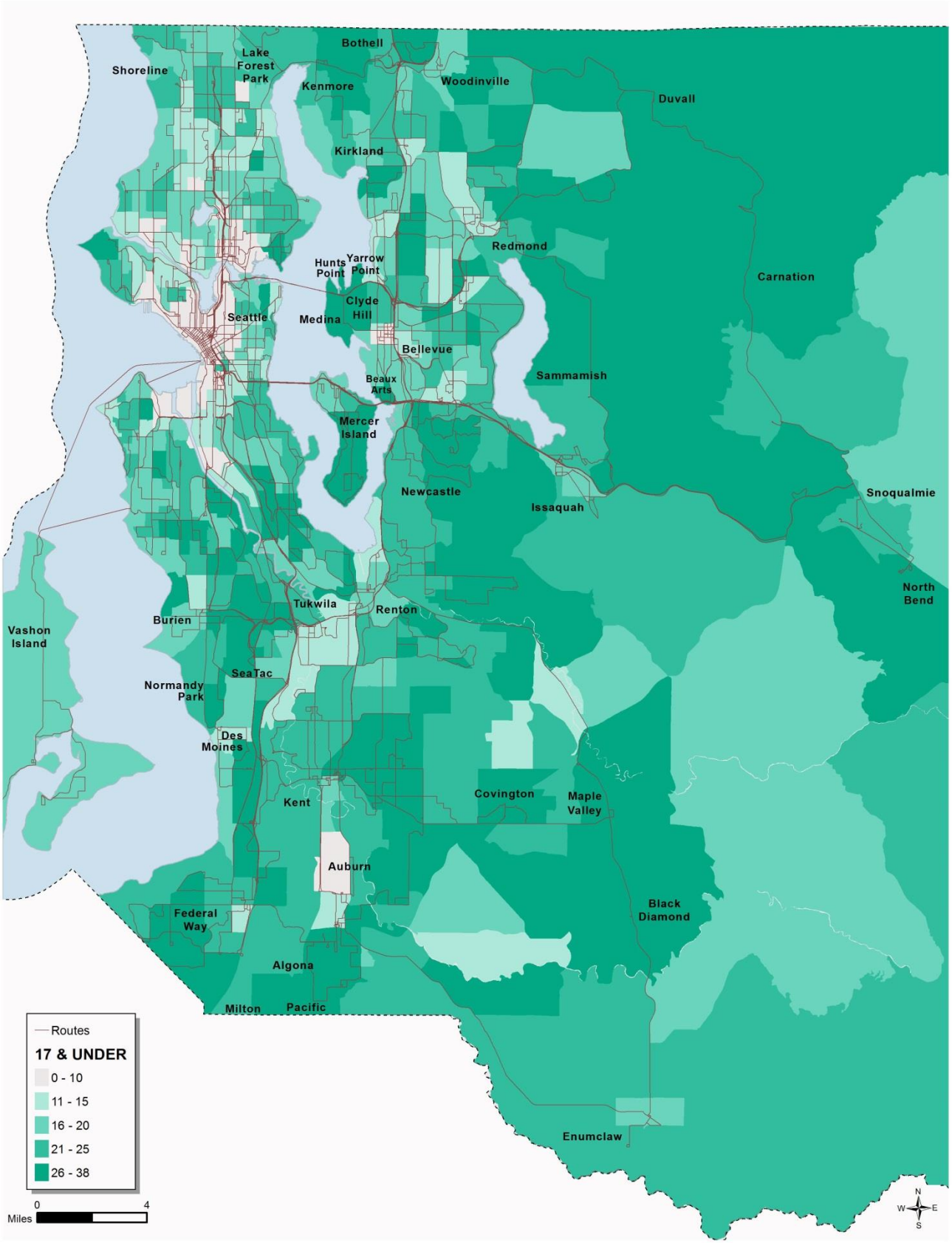
Metro uses a number of outreach methods to provide opportunities for and meaningful engagement of everyone who will be affected by potential changes to Metro service. Engagement tools are designed to reach people who have limited English proficiency, youth, elderly, people with limited access to technology, people with disabilities, and immigrant and refugee populations. These tools include face-to-face meetings, translated materials, language phone lines, and targeted outreach to social service agencies, low-income housing communities and senior centers. This outreach is summarized in a public engagement report when a service change is transmitted to the King County Council.

King County demographics. Maps on the following pages illustrate concentrations of different demographic groups in King County: elderly, youth, foreign-born, non-English speaking, minority, low-income, and households without a car.

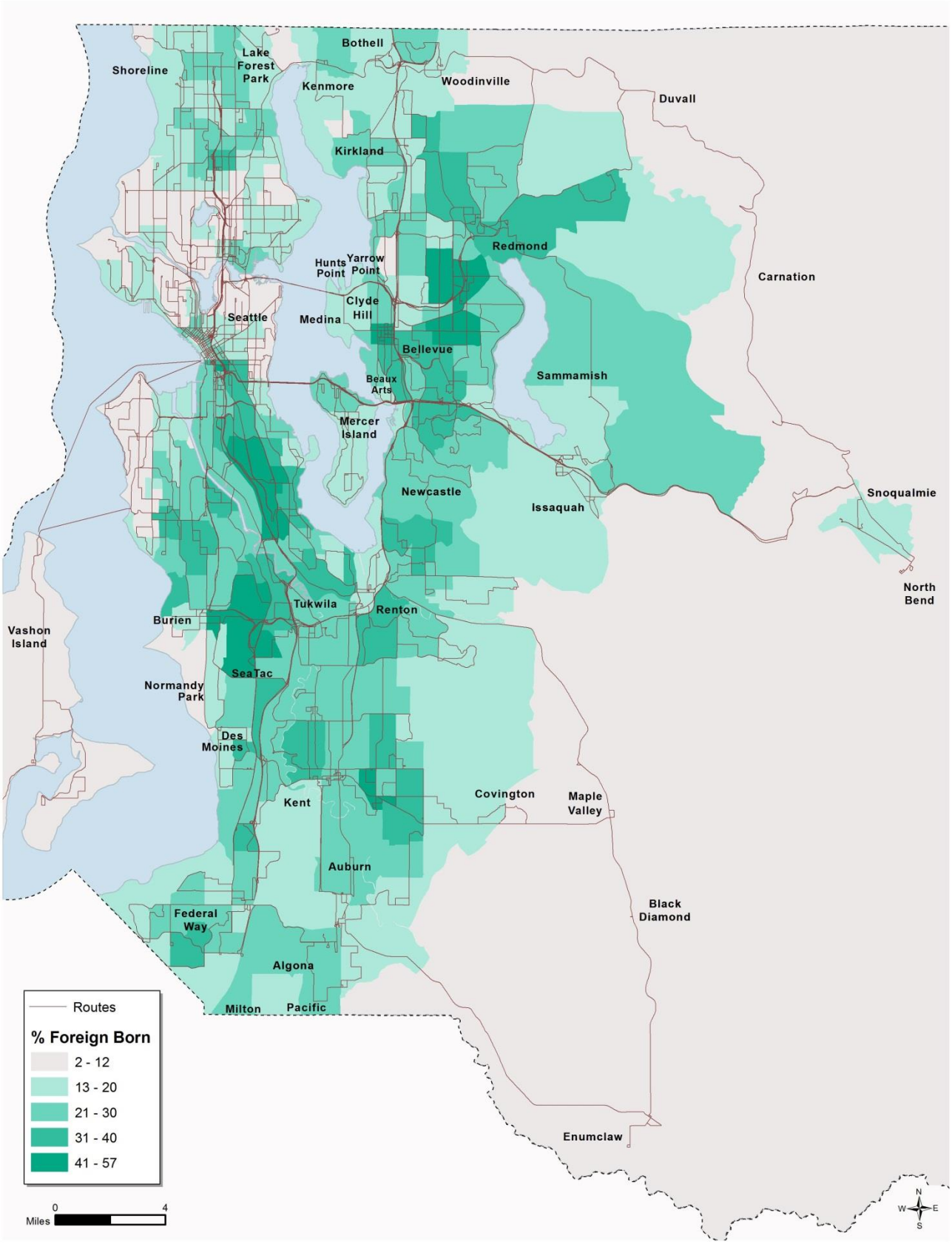
Map: Elderly Population



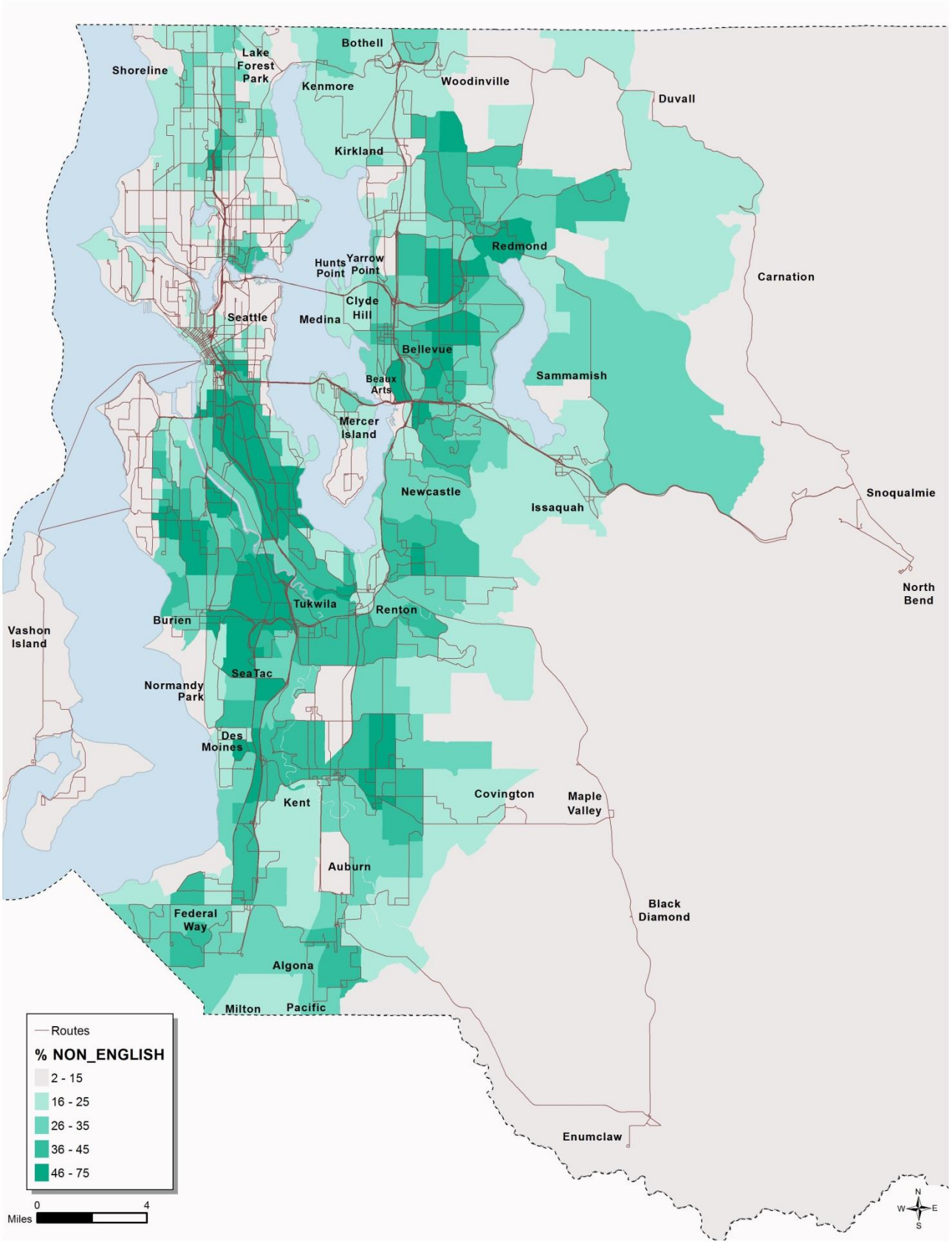
Map: Youth Population



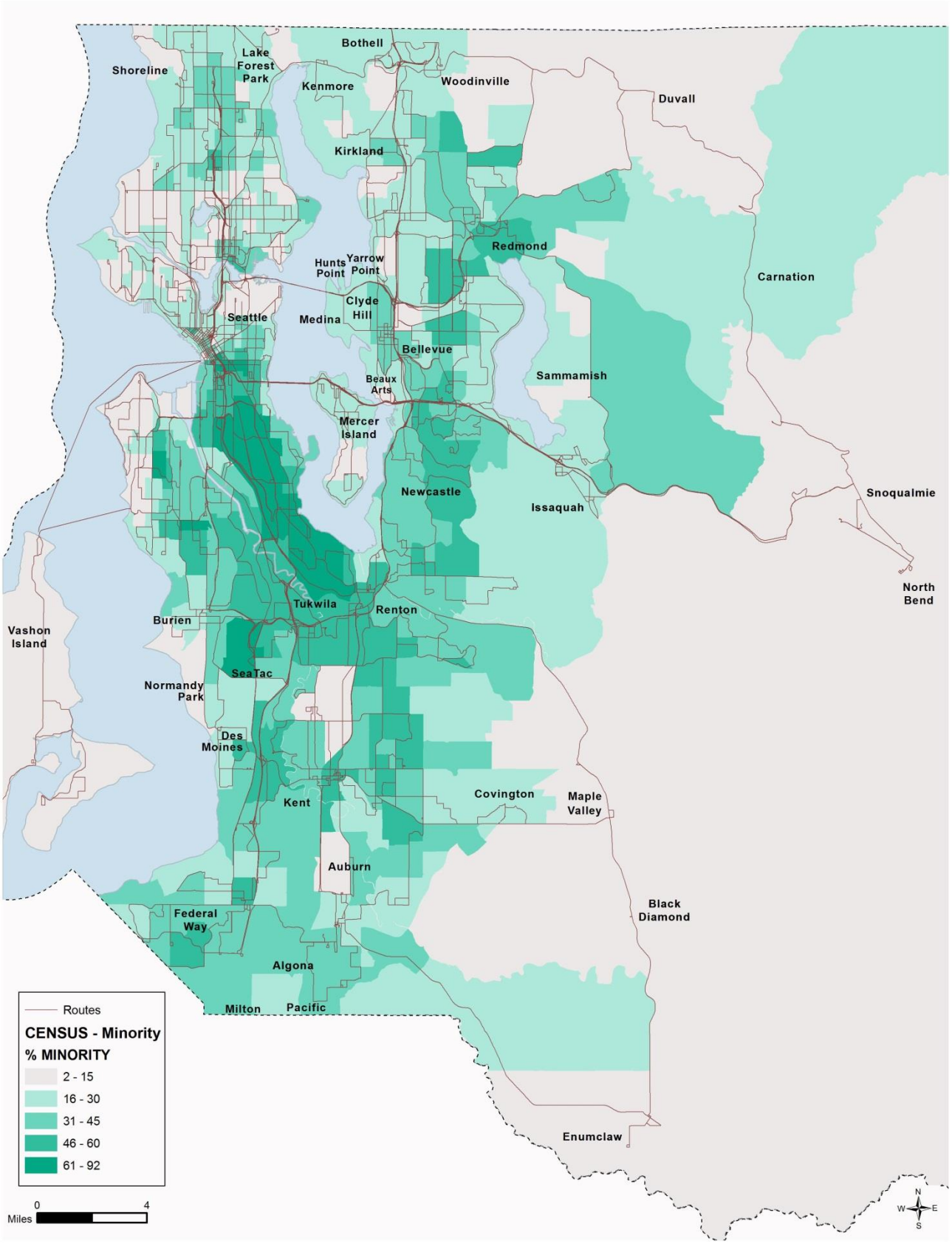
Map: Foreign-Born Population



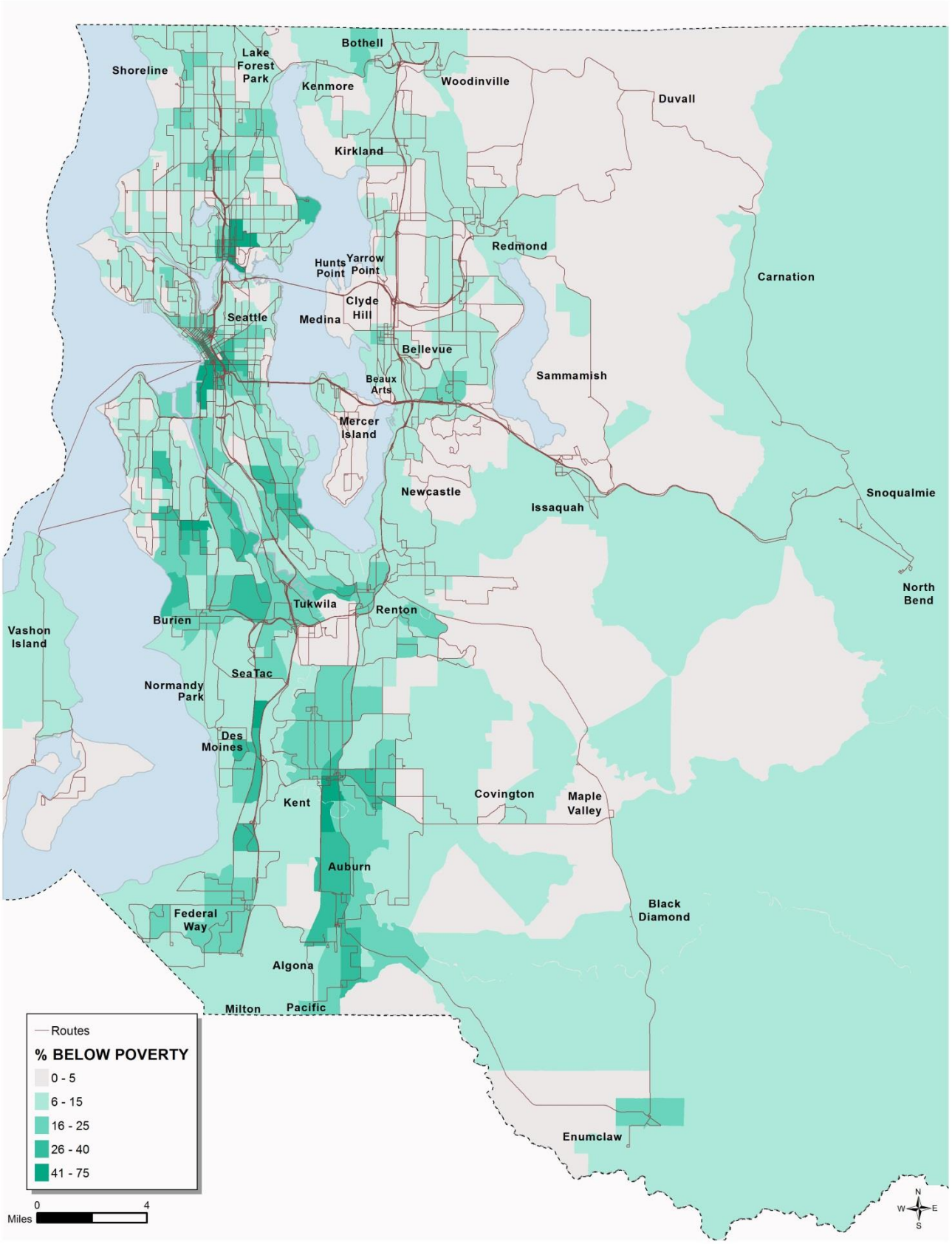
Map: Non-English Speaking Population



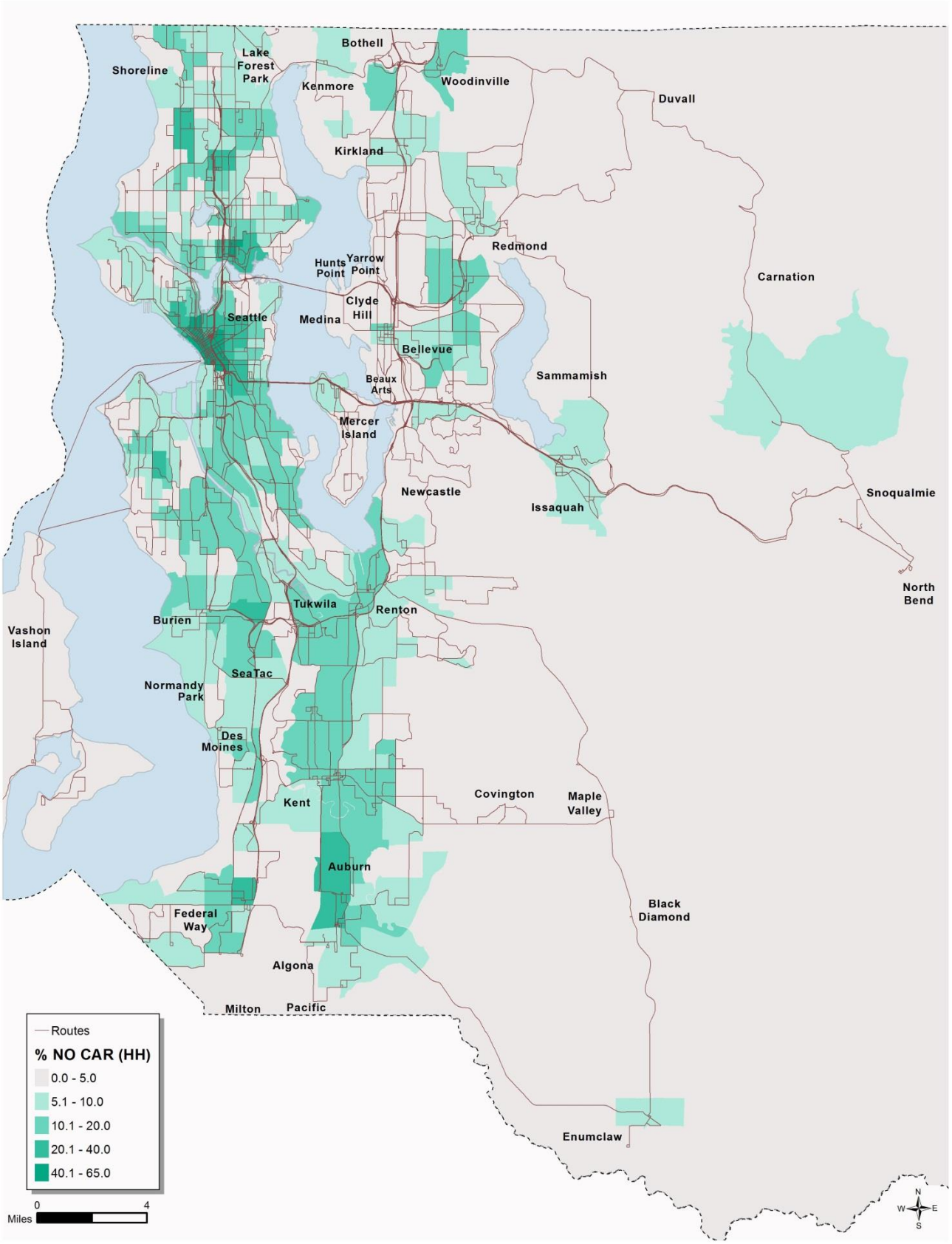
Map: Minority Population



Map: Low-Income Population



Map: Households without a Car



6. Geographic Value

Introduction

The Regional Transit Task Force recommended that Metro's service allocation decisions be based in part on the principle of providing geographic value throughout King County. This principle was included in Metro's adopted strategic plan and service guidelines. The guidelines for geographic value help Metro determine where service should be added or reduced based on a location's density of activity in relation to its surroundings, the services present, and whether or not it is a transit activity center. The guidelines support county and regional growth management goals by focusing on activity centers.

This section explains how geographic value is addressed in the service guidelines and notes potential changes.

Links to Information

1. Park & Ride Utilization Study: http://bit.ly/sgtf6_1
2. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Overview

Regional Transit Task Force (2010). In 2010, the Regional Transit Task Force (RTTF) recommended that the policy guidance for making service reduction and service growth decisions should be based on three principles, one of which is to provide geographic value throughout the county.

To clarify its intent, the RTTF included this explanation of geographic value in its report:

> Service allocation decisions (for both reductions and growth) must be perceived as "fair" throughout the county. To accomplish the appropriate balance, Metro must use a multi-faceted approach to achieve an integrated regional transit system. As such, the distribution of transit services must be influenced by the value delivered to all areas of King County, as represented by the following:
>
> - Balancing Access with Productivity – The public in all corners of the county expects government services to be run as cost efficiently and effectively as possible. Public investments in transit services must be appropriate to the land use, employment densities, housing densities and transit demand in various communities. This will require a variety of service strategies including traditional fixed route and other transit and rideshare products appropriate to the community and the level of ridership demand. Some type of transit service must be available in all communities served by transit today.
> - Tax Equity – There must be some relationship (but not an exact formula) between the tax revenue created in a subarea and the distribution of services. There should also be recognition of all of the revenues (taxes and fares) generated in the various areas of the county.
> - Economic Vitality – Transit investments are critical for economic recovery and future growth of the region. Transit services must get the greatest number of workers to and from job centers and support access to destinations that are essential to countywide economic vitality (such as centers for post-secondary education or major medical centers)."

King County Metro Transit Strategic Plan for Public Transportation, 2011-2021. Immediately after the task force completed its work, Metro began drafting a new 10-year strategic plan that conforms with the task force findings as well as the King County Strategic Plan. Geographic value is addressed in Strategy 2.1.1, "Design and offer a variety of public transportation products and services appropriate to different markets and mobility needs," and in Strategy 2.1.3, "Provide products and services that are designed to provide geographic value in all parts of King County." In the Strategic Plan, a measure of geographic value are the proportion of the population within ¼-mile of a transit stop or a 2-mile drive to a park-and-ride.

King County Metro Service Guidelines. Metro's strategic plan also includes the service guidelines recommended by the RTTF. The guidelines incorporate geographic value into the management of the transit system.

A central piece of the service guidelines is the analysis of the All-Day and Peak Network, which establishes target service levels for transit corridors throughout King County. Productivity, social equity and geographic value are prioritized in a three-step process.

The service guidelines identify 64 transit activity centers that are distributed throughout King County. The activity centers include major destinations and transit attractions, such as large employment sites, significant healthcare institutions and major social service agencies.

These transit activity centers, taken together with the 17 regional growth centers and four manufacturing/ industrial centers designated by the Puget Sound Regional Council, represent 85 activity nodes throughout King County that form the basis for an interconnected transit network throughout King County's urban growth area. Metro identifies primary connections between centers as warranting a higher level of service.

In the service guidelines corridor analysis, corridors receive points based on the connections they provide between centers. If a corridor is a primary connection between regional growth or manufacturing/ industrial centers, it receives five points toward its geographic value score. If a corridor is a primary connection between transit activity centers, it receives five points toward its geographic value score. If a corridor provides a connection between a regional growth or manufacturing/ industrial center and a transit activity center, it receives 10 points toward its geographic value score. The table below includes specific information about the scoring; each corridor can receive a maximum geographic value score of 10 points.

Geographic Value Scoring Criteria

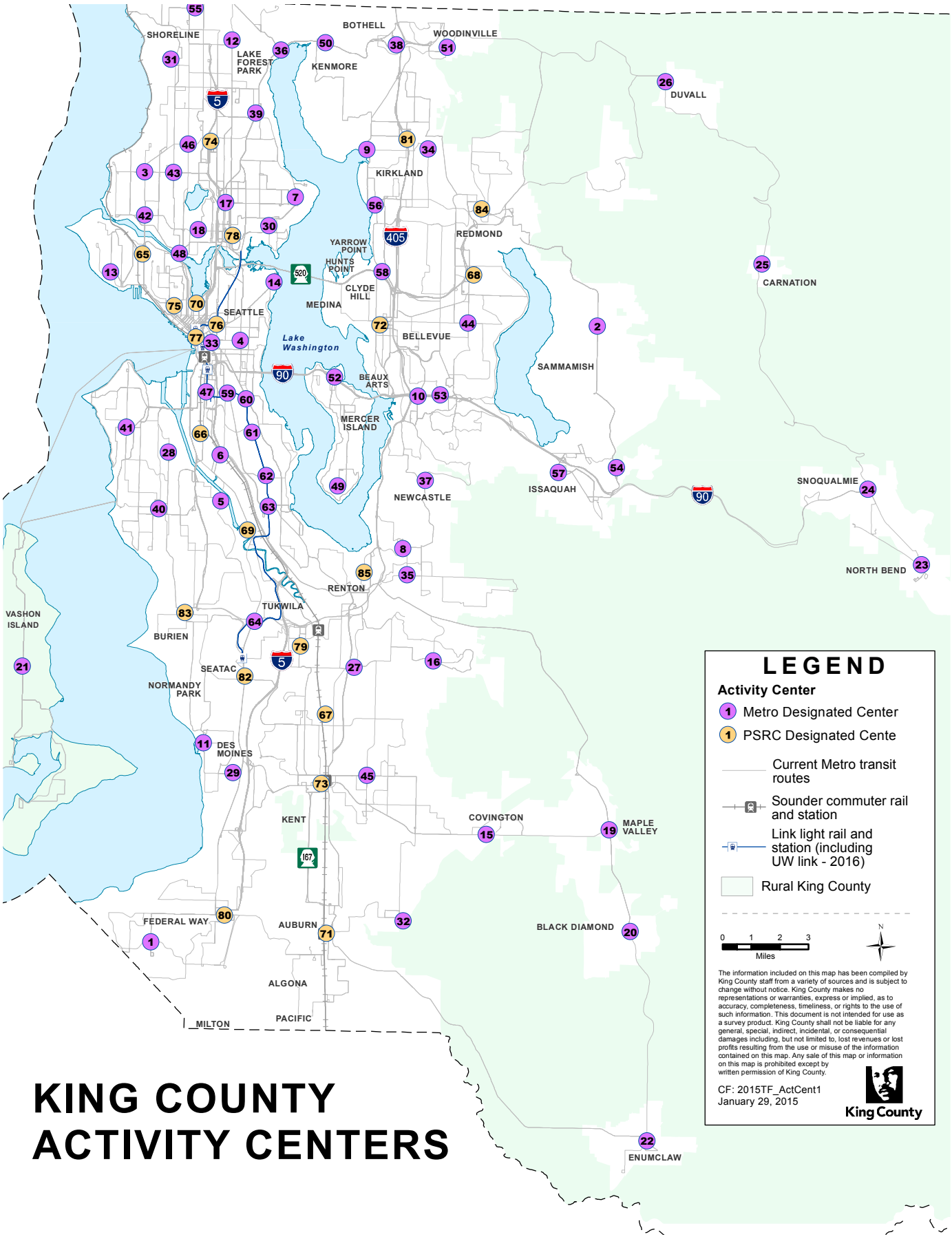
Measure	Threshold	Points
Primary connection between regional growth or manufacturing/ industrial centers	Yes	5
	No	0
Primary connection between transit activity centers	Yes	5
	No	0

The guidelines also incorporate geographic value by classifying routes by market served: Seattle core or non-Seattle core. This classification allows us to compare similar routes when assessing productivity. Routes that serve the Seattle core are expected to perform at a higher level because their market potential is greater than for routes serving other parts of King County. The table below shows the top and bottom 25-percent thresholds for both markets (Seattle Core and Non-Seattle Core) during all three time periods.

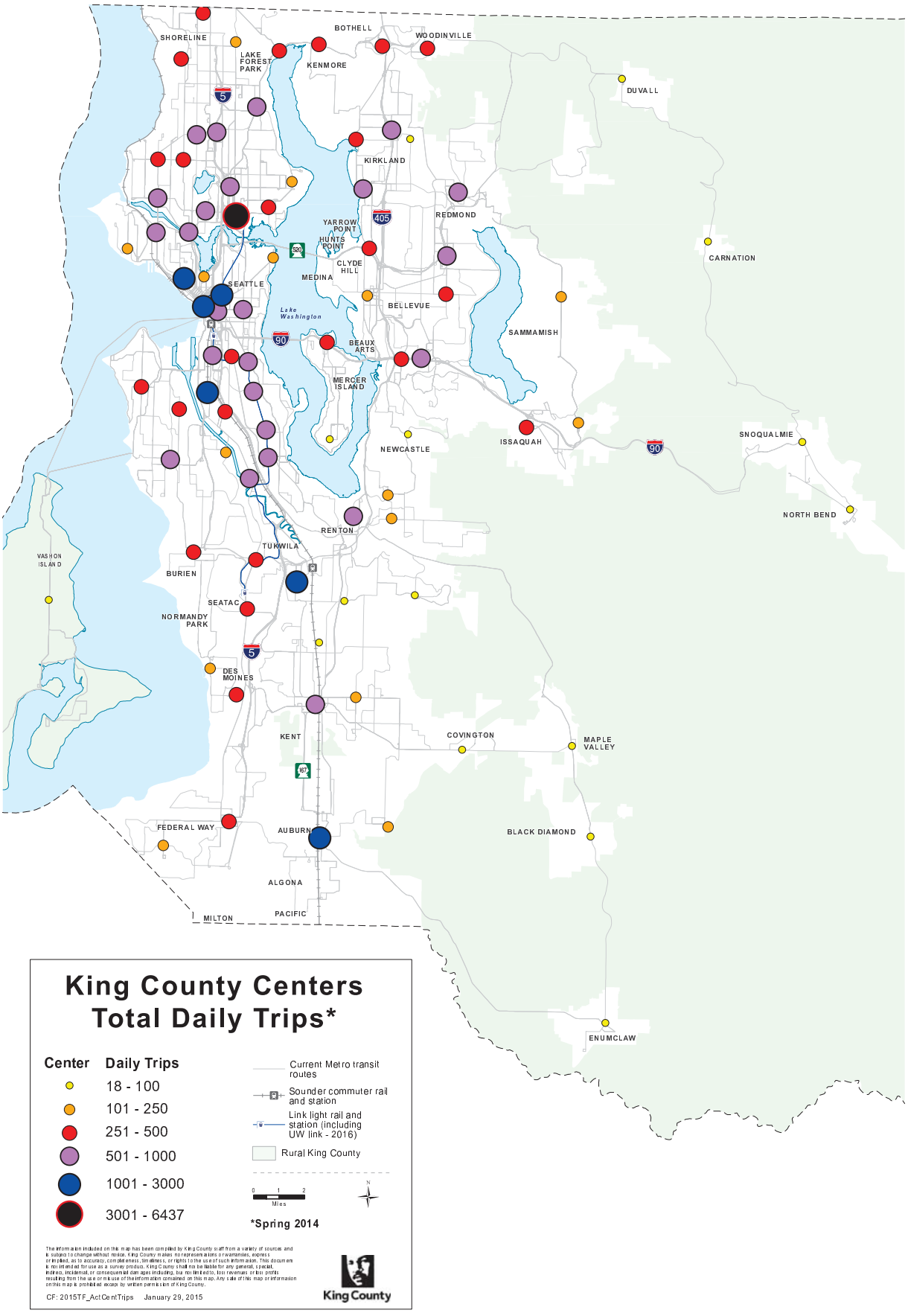
Spring 2014 Route Performance Thresholds						
Routes that Do Not serve the Seattle Core	Peak		Off Peak		Night	
	Rides / Platform Hour	Pass. Miles / Platform Mile	Rides / Platform Hour	Pass. Miles / Platform Mile	Rides / Platform Hour	Pass. Miles / Platform Mile
Top 25%	**25.2**	**8.1**	**24.7**	**8.0**	**18.8**	**6.3**
Bottom 25%	**12.0**	**2.4**	**11.3**	**2.7**	**11.3**	**2.7**
Routes that serve Seattle Core						
Top 25%	**48.2**	**17.1**	**51.1**	**14.9**	**35.1**	**10.2**
Bottom 25%	**24.3**	**10.7**	**33.7**	**9.8**	**20.7**	**5.9**

Service planning, community engagement, and analysis of impacts. In addition to applying the service guidelines, Metro service planners consider centers and primary corridors when they plan revisions or restructures of service. As service reductions were planned in 2014, Metro worked with riders, local groups, and elected officials to minimize or mitigate potential impacts on riders throughout the county. Metro continues to do this throughout its planning processes, conducting outreach in all areas potentially affected by changes being considered.

Map: King County Centers



Map: King County Centers - Total Daily Trips



List of King County Centers

	ID on Map	Center Name	Number of Corridors
Regional Growth Centers	71	Auburn	4
	72	Bellevue Downtown	9
	83	Burien	6
	80	Federal Way	7
	76	First Hill/Capitol Hill	37
	73	Kent	8
	74	Northgate	10
	68	Overlake	7
	84	Redmond	6
	85	Renton	12
	82	SeaTac	6
	77	Seattle CBD	38
	70	South Lake Union	15
	81	Totem Lake	5
	79	Tukwila	5
	78	University District	17
	75	Uptown	16
MICs	65	Ballard/Interbay	9
	66	Duwamish	21
	67	Kent	5
	69	North Tukwila	1
Transit Activity Centers	41	Alaska Junction	3
	55	Aurora Village Transit Center	4
	42	Ballard (Ballard Ave NW/NW Market St)	2
	59	Beacon Hill Station	2
	20	Black Diamond	1
	38	Bothell (UW Bothell/Cascadia Community College)	2
	25	Carnation	0
	4	Central District (23rd Ave E/E Jefferson St)	2
	30	Children's Hospital	2
	61	Columbia City Station	2
	15	Covington (172nd Ave SE/SE 272nd St)	1
	44	Crossroads (156th Ave NE/NE 8th St)	4
	3	Crown Hill (15th Ave NW/NW 85th St)	3
	11	Des Moines (Marine View Dr/S 223rd St)	1
	26	Duvall	1
	53	Eastgate (Bellevue College)	8
	22	Enumclaw	2
	10	Factoria (Factoria Blvd SE/SE Eastgate Wy)	4
	16	Fairwood (140th Ave SE/SE Petrovitsky Rd)	2
	19	Maple Valley (Four Corners, SR-169/Kent-Kangley Rd)	2
	48	Fremont (Fremont Ave N/N 34th St)	4
	6	Georgetown (13th Ave S/S Bailey St)	3
	32	Green River Community College	3
	43	Greenwood (Greenwood Ave N/N 85th St)	3
	33	Harborview Medical Center	3
	29	Highline Community College	2
	54	Issaquah Highlands	1
	57	Issaquah (Issaquah Transit Center)	3
	9	Juanita (98th Ave NE/NE 116th St)	3
	50	Kenmore (Kenmore Park and Ride)	2
	45	Kent East Hill (104th Ave SE/SE 240th St)	3
	56	Kirkland (Kirkland Transit Center)	7

	ID on Map	Center Name	Number of Corridors
Transit Activity Centers	58	Kirkland (South Kirkland Park and Ride)	3
	39	Lake City	5
	36	Lake Forest Park	2
	34	Lake Washington Technical College	1
	14	Madison Park (42nd Ave E/E Madison St)	1
	13	Magnolia (34th Ave W/W McGraw St)	1
	52	Mercer Island	1
	60	Mount Baker Station	5
	37	Newcastle	1
	23	North Bend	1
	12	North City (15th Ave NE/NE 175th St)	2
	46	Oaktree (Aurora Ave N/N 105th St)	2
	62	Othello Station	3
	63	Rainier Beach Station	4
	8	Renton Highlands (NE Sunset Blvd/NE 12th St)	3
	35	Renton Technical College	1
	17	Roosevelt (12th Ave NE/NE 65th St)	5
	2	Sammamish (228th Ave NE/NE 8th St)	1
	7	Sand Point (Sand Point Way/NE 70th St)	2
	31	Shoreline (Shoreline Community College)	4
	24	Snoqualmie	1
	47	SODO (SODO Busway/Lander St)	8
	49	South Mercer Island	1
	5	South Park (14th Ave S/S Cloverdale St)	2
	28	South Seattle Community College	2
	64	Tukwila International Blvd Station	4
	1	Twin Lakes (21st Ave SW/SW 336th St)	2
	27	Valley Medical Center	2
	21	Vashon	1
	18	Wallingford (Wallingford Ave N/N 45th St)	2
	40	Westwood Village	2
	51	Woodinville (Woodinville Park and Ride)	2

* Mixed-use development as defined in the King County Comprehensive Plan: "Mixed-use development combines higher density residential units with retail or office uses in the same building or within an integrated development on the same lot."

* Transit Hub is defined as a location with service provided by at least three all-day routes.

[1] when Sound Transit is included

Criteria for Adding Centers

Service Guidelines Definition of Activity Centers

Centers represent activity nodes throughout King County that form the basis for a countywide transit network. The term "centers," as defined in the strategic plan, refers collectively to regional growth centers, manufacturing/ industrial centers, and transit activity centers. Regional growth centers and manufacturing/industrial centers are designated in the region's Vision 2040 plan. Metro identified transit activity centers beyond the Puget Sound Regional Council (PSRC)-designated centers to support geographic value in the distribution of its transit network throughout King County. Transit activity centers include major destinations and transit attractions such as large employment sites, significant healthcare institutions and major social service agencies. Transit activity centers represent activity nodes throughout King County that form the basis for an interconnected transit network throughout the urban growth area of King County.

Each transit activity center should meet one or more of the following criteria (per the service guidelines, page SG-4):

- Is located in an area of mixed-use development that includes concentrated housing, employment, and commercial activity
- Includes a major regional hospital, medical center or institution of higher education located outside of a designated regional growth centers
- Is located outside other designated regional growth centers at a transit hub served by three or more all-day routes.

The size of transit activity centers varies, but they all represent concentrations of activity in comparison to the surrounding area.

Criteria for Adding Centers (per Service Guidelines, page SG-5)

Regional Growth and Manufacturing/Industrial Centers. Additions to and deletions from the regional growth and manufacturing/industrial centers lists should be based on changes approved by the PSRC and defined in Vision 2040 or subsequent regional plans.

Transit Activity Centers. Additional transit activity centers may be designated in future updates of the service guidelines. Additions to the list of transit activity centers will be nominated by the local jurisdictions and must meet one or more of the above criteria, plus the following additional criteria:

- Pathways through the transit activity center must be located on arterial roadways that are appropriately constructed for transit use.
- Identification of a transit activity center must result in a new primary connection between two or more regional or transit activity centers in the transit network, either on an existing corridor on the All-Day and Peak Network or as an expansion to the network to address an area of projected all-day transit demand. An expansion to the network indicates the existence of a new corridor for analysis.
- Analysis of a new corridor using step-one of the All-Day and Peak Network assessment process must result in an assignment of 30-minute service frequency or better.

- Analysis of a new corridor using step-one of the All-Day and Peak Network assessment process must result in an assignment of 30-minute service frequency or better.

Park-and-Ride Summary Information

A consideration in calculating transit coverage are park-and-ride lots, which extend the coverage of the transit network by providing access to people who may not have a convenient transit connection within walking distance of where they live. Currently, there are more than 25,000 park-and-ride spaces in 130 facilities in King County. They are owned or managed by different agencies and jurisdictions throughout the county (see table below).

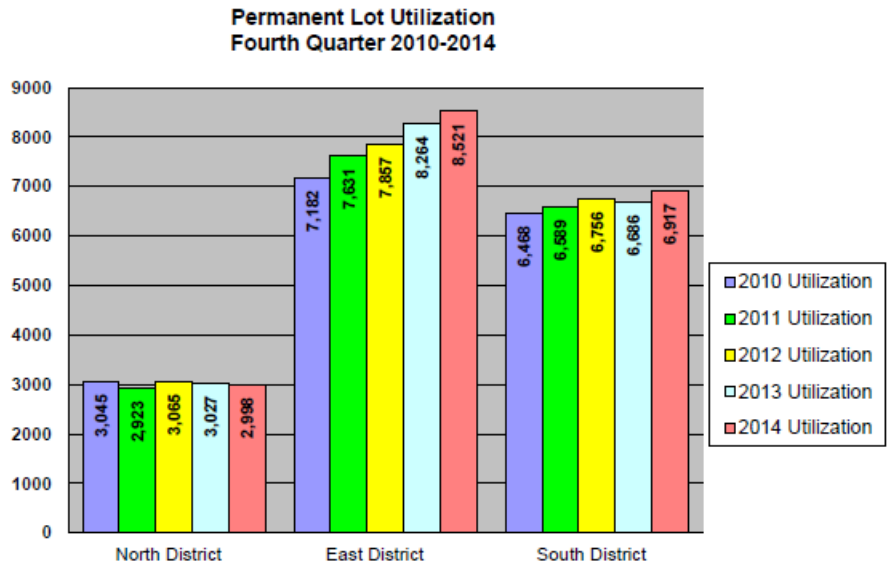
The coverage map later in this section shows park-and-ride locations within King County as well as a two-mile travel shed around those lots. In 2014, 22% of King County residents lived within these travel sheds. As illustrated, the majority of the park-and-ride lots are located along the I-5, I-405, and I-90 corridors with some lots located in the less-dense areas of the County. The map on the following page shows the number of spaces available at park-and-ride lots in King County and the number of spaces that are used on a typical weekday. The data in the map show that many park-and-ride lots are heavily utilized, particularly the larger lots served by very frequent transit routes.

When considering the number of residences within two-miles of a park-and-ride lot and the quarter-mile and half-mile walk-sheds shown earlier, the total transit coverage expands to 87 percent of all King County residents and 92 percent of all jobs.

The following information quantifies the 130 park-and-ride facilities in various ways.

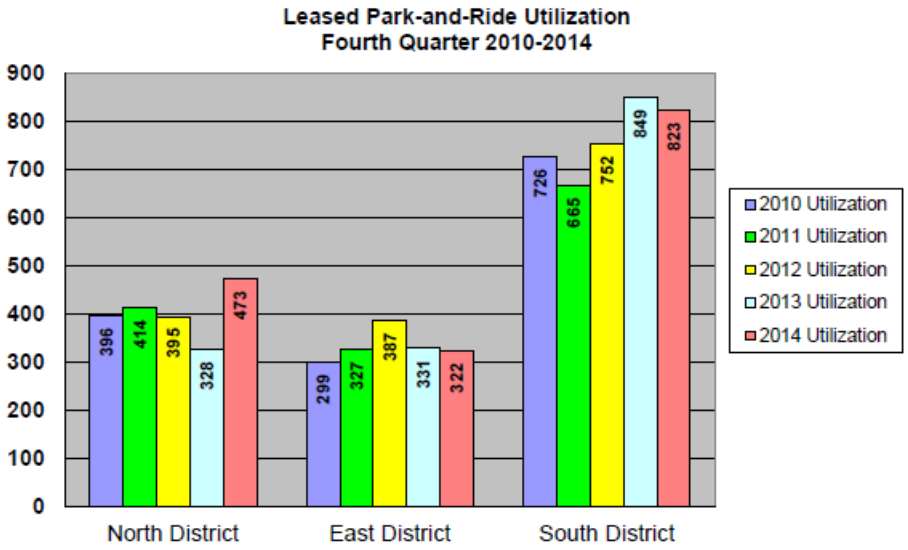
Permanent Lot Utilization (Fourth Quarter, 2014)

FOURTH QUARTER 2014	Capacity	Used	Percentage
North District (13 lots)	3,165	2,998	95%
East District (24 lots)	9,486	8,521	90%
South District (27 lots)	10,244	6,917	68%
TOTAL (64 lots)	**22,895**	**18,436**	**81%**

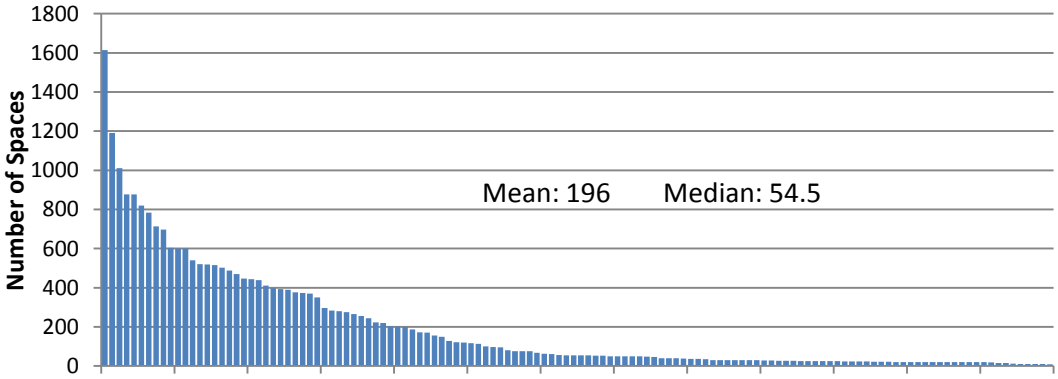


Leased Lot Utilization (Fourth Quarter, 2014)

FOURTH QUARTER 2014	Capacity	Used	Percentage
North District (11 lots)	520	473	91%
East District (23 lots)	760	322	42%
South District (32 lots)	1,314	823	63%
TOTAL (66 lots)	**2,594**	**1,618**	**62%**



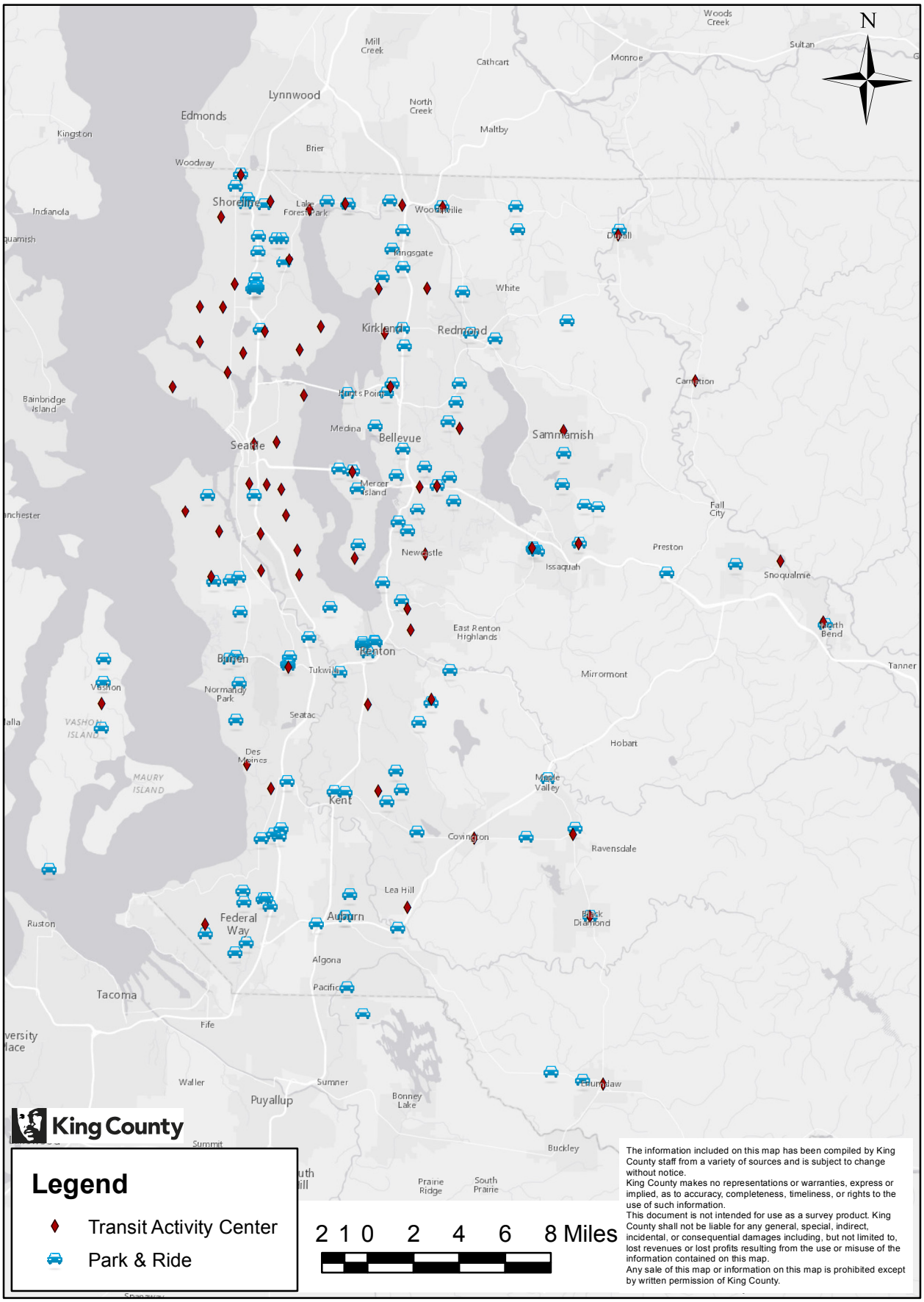
Number of Spaces per Lot



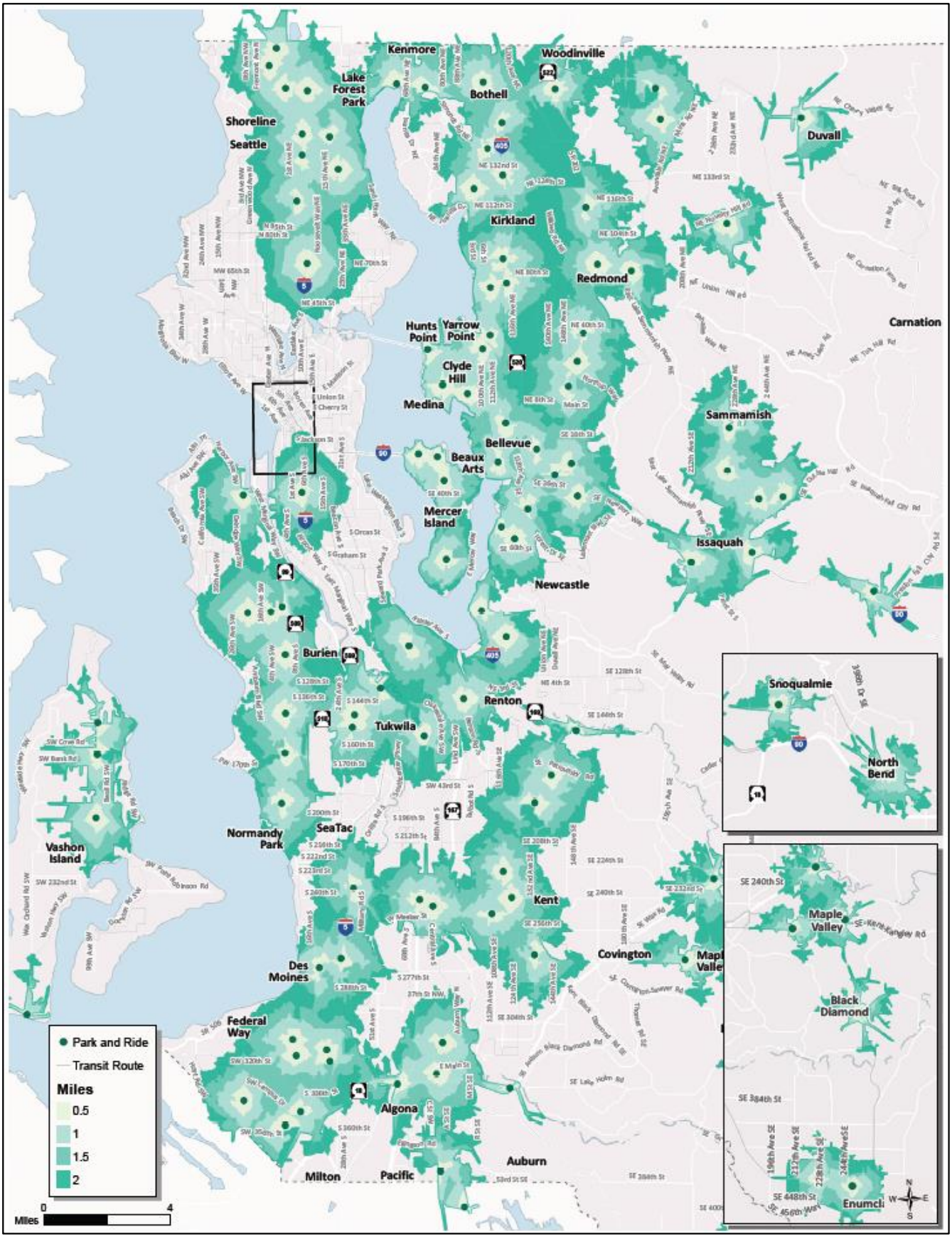
Lot Ownership (Fourth Quarter, 2014)

Owner	Number of Lots
King County Metro	23
Sound Transit	10
Municipalities	5
State of Washington	23
Private	69

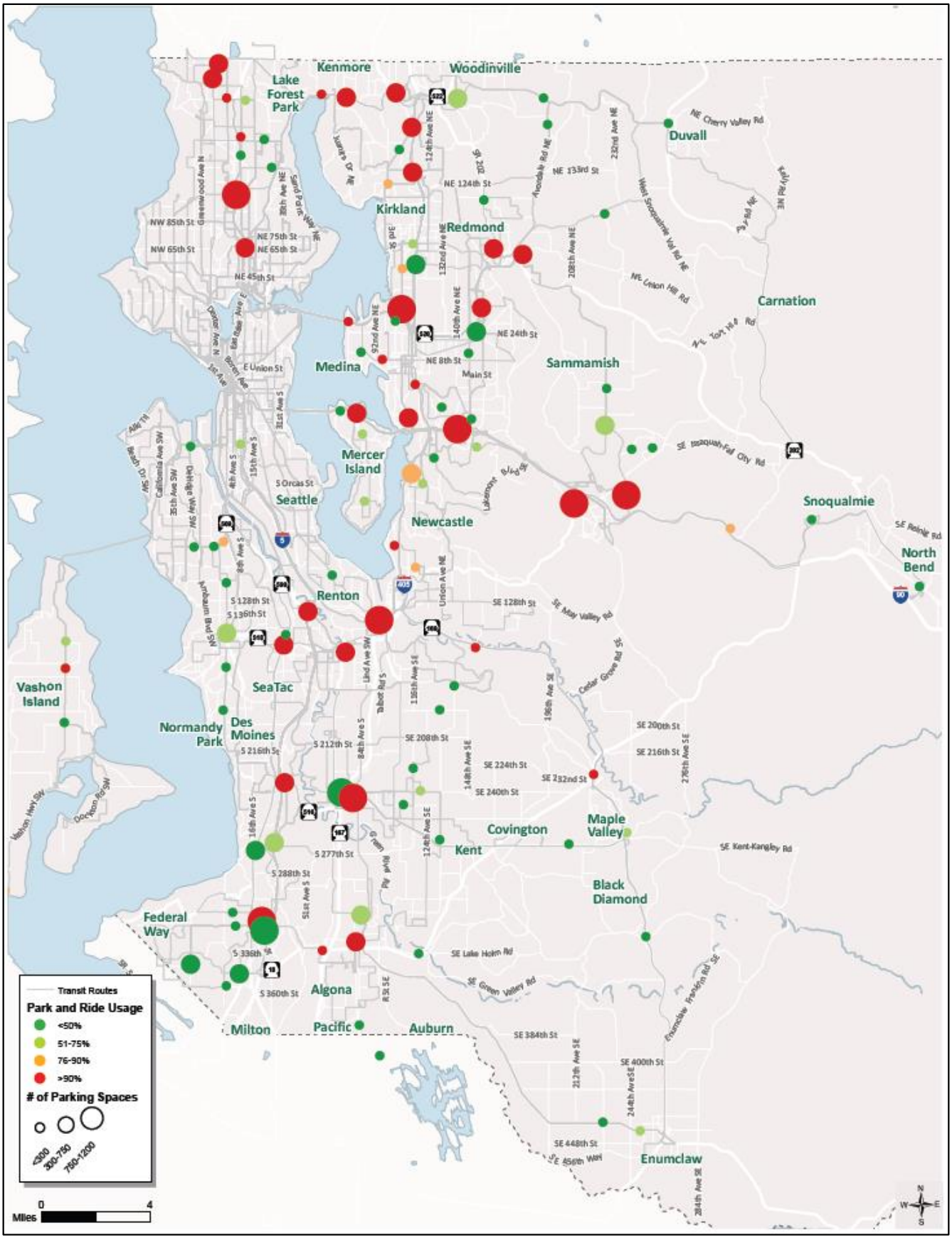
Map: Park-and-Rides and Transit Activity Centers



Map: Park-and-Ride Coverage



Map: Park-and-Ride Utilization



7. Service Types

Introduction

This section introduces the concept of service types, a broad term that classifies service into categories based on chosen criteria. The materials in this section explore how the service guidelines differentiate services from one another, how they evaluate the services, and the impacts this has on priorities for reductions and additions.

Links to Information

1. Best Practices in Transit Service Planning (page 5: Classification Systems): http://bit.ly/sgtf7_1
2. American Public Transportation Association (APTA) Peer Review (page 5: Recommendation re: service types): http://bit.ly/sgtf7_2
3. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Overview

Regional Transit Task Force (2010). In 2010, the RTTF recommended that Metro use performance measures for each service type to learn how it might improve transit system performance, to establish a rationale for policy choices, and to aid in transparency.

Specifically, the RTTF recommended (Recommendation 1):

> **"**Metro should create and adopt a new set of performance measures by service type, and report at least annually on the agency's performance on these measures. The performance measures should incorporate reporting on the key system design factors, and should include comparisons with Metro's peer transit agencies."

The RTTF recommended regular performance reporting at least annually.

The RTTF subgroup on performance measures worked with Metro staff to develop an initial example of metrics for overall system performance and easy-to-understand reporting. The task force recommended that Metro continue developing performance measures using this model. The task force suggested that Metro develop performance measures for all of Metro's operations (e.g., customer service, vehicle maintenance, etc.).

The RTTF report included this explanation of how performance measures should be used to compare the effectiveness of similar types of service:

> "Modifying Metro's current method of compiling and reporting on performance measures will enable Metro managers, King County decision-makers and the public to compare and evaluate the effectiveness of similar service types. The performance measurement system should include the following types of services: fixed route, Dial-A-Ride Transit (DART), Access, vanpool, etc. Reporting on the fixed-route services should be further differentiated by four different "families" of services: Frequent Arterial, Peak Commuter, Local, and Hourly service. Reporting by type, and according to the different families of fixed-route service, is important because the distinctive services provide different functions within the system, and perform very differently. For example, Figure 5 (on the next page) shows how the different families of fixed-route service perform on two commonly used productivity measures."

King County Metro Service Guidelines. Metro incorporated the recommendation to measure performance by service type into the strategic plan and service guidelines.

The service guidelines identify two types of service, based on the market served:

- **Seattle core routes** connect downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District, or Uptown to other areas of Seattle and King County. Examples include routes 11, 26, 70, 150, 177, 214, 219, 271, 304, 355, C Line, D Line, and E Line.
- **Non-Seattle core routes** operate wholly within other areas of Seattle and King County. Examples include routes 50, 128, 168, 221, 245, 331, 347, 903DART, 931DART, A Line, B Line, and F Line.

A full list of routes by market served is provided in the back of this section. Metro evaluates performance by service type and by whether the service operates all-day or during peak-periods. In addition, Metro is currently

following policies updated in 2013 by incorporating alternative services more fully into performance measurement and evaluating these services separately. As noted in the American Public Transportation Association Peer Review of Metro Transit, "Metro could continue to evaluate opportunities to revise the service guidelines to compare service productivity by service type as this enables a more appropriate analysis of service."

The table below shows the frequency and span of the service families defined in the service guidelines. It is important to note that Service Family categorizations are not used in the guidelines as an evaluative tool or to determine priority for investment or reductions. The Service Family types are labels applied to corridors at the end of the corridor analysis; they generically describe levels of service across all times of the day and all days of the week, as indicated below:

Service Family	**Frequency** (minutes)			**Days of service**	**Hours of service**
	Peak	**Off-peak**	**Night**		
Very frequent	15 or more frequent	15 or more frequent	30 or more frequent	7 days	16-20 hours
Frequent	15 or more frequent	30	30	7 days	16-20 hours
Local	30	30 - 60	--*	5-7 days	12-16 hours
Hourly	60 or less frequent	60 or less frequent	--	5 days	8-12 hours
Peak	8 trips/day minimum	--	--	5 days	Peak
Alternative Services	Determined by demand and community collaboration process				

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

Comparison of Crowding Methods

The 2014 Service Guidelines Report identifies routes needing investment to reduce passenger crowding. In the 2014 report, 27 routes were identified as overcrowded, with an estimated need of 22,200 annual hours (page 16 in the Service Guidelines Report). In April 2014, the Alternative Passenger Crowding Measures Report reviewed current and proposed methodologies for calculating investment need to reduce passenger crowding and identified the investment need based on the 2013 Service Guidelines Report.

Per discussions at the Regional Transit Committee meeting on November 19, 2014, Metro conducted additional analysis on the data from the 2014 Service Guidelines Report using area-based crowding measures identified in the Alternative Passenger Crowding Measures Report. Below is a description of the methodology used and a table showing the changes in investment need based on the various area-based measures.

Revised Crowding Analysis Methodology

To conduct the analysis for area-based measures, Metro determined the load threshold for each fleet type for each area-based measure (available in Appendix E of the Alternative Passenger Crowding Measures Report). Based on these fleet based thresholds, Metro identified all trips that experienced crowding due to the area-based thresholds and trips with 20 minute standing loads. When determining whether to recommend adding a trip or assigning a larger coach, Metro considered several factors: when the overcrowding occurred, what (if any) other trips were overcrowded on that route, the frequency of the service, and the assigned fleet.

Below is a table that compares the passenger crowding need as shown in the 2014 Service Guidelines Report and four area-based crowding measures (3 ft^2, 4 ft^2, 5 ft^2, and 6 ft^2).

Estimated Annual Hours Needed Based on Revised Crowding Analysis				
2014 Service Guidelines Report	**3 ft^2** per person	**4 ft^2** per person	**5 ft^2** per person	**6 ft^2** per person
22,200	**15,100**	**16,600**	**19,500**	**23,000**

The area-based thresholds that correspond most closely with the current levels of investment need identified are area-based thresholds of 6 to 7 ft^2 per person for service that is not frequent and 4 ft^2 per person for frequent services. Setting thresholds using a lower number of square feet per person would result in the identification of significantly less crowding than using existing measures.

The next page identifies the route-level need as shown in the 2014 Service Guidelines Report and four area-based crowding measures (3 ft^2, 4 ft^2, 5 ft^2, and 6 ft^2).

Route	Estimated Annual Hours Needed				
	2014 Service Guidelines Report	Area- Based Alternative Measures of Crowding			
		3 ft^2 / person	4 ft^2 / person	5 ft^2 / person	6 ft^2 / person
5	1,300	0	0	0	1,300
8	600	0	0	600	600
15EX	1,100	1,100	1,100	1,100	1,100
16	1,600	600	600	1,100	1,600
18EX	500	500	500	500	500
28	400	400	400	400	400
40	700	0	0	700	700
41	900	0	400	400	900
44	300	0	0	0	300
48	500	0	500	500	500
70	300	300	300	300	300
71EX	400	400	400	400	400
72	100	0	0	100	100
74EX	500	500	500	500	500
76	*0*	*0*	*0*	*400*	*800*
101	1,100	1,100	1,100	1,100	1,100
143EX	1,600	1,600	1,600	1,600	1,600
179	600	600	600	600	600
214	500	500	500	500	500
216	700	700	700	700	700
218	500	500	500	500	500
219	500	500	500	500	500
240	1,700	600	600	1,200	1,200
268	600	600	600	600	600
316	*0*	*0*	*0*	*0*	*500*
372	600	0	600	600	600
C Line	1,400	1,400	1,400	1,400	1,400
D Line	1,600	1,600	1,600	1,600	1,600
E Line	1,600	1,600	1,600	1,600	1,600
Total	**22,200**	**15,100**	**16,600**	**19,500**	**23,000**

Routes by Market Served

Non-Seattle Core Routes

22	240		
50	241		
~~61~~	242		
105	244		
107	245		
110	246		
118	248		
119	249		
128	269		
~~139~~	330		
~~140~~	331		
148	342		
153	345		
154	346		
156	347		
164	348		
166	671		
168	672		
169	901DART		
~~173~~	903DART		
180	906DART		
181	907DART		
182	908DART		
183	~~909DART~~		
186	910DART		
187	913DART		
200	914DART		
201	915DART		
~~203~~	916DART		
204	917DART		
208	~~919DART~~		
~~209~~	~~927DART~~		
~~213~~	930DART		
221	931DART		
224	~~935DART~~		
226			
232			
234			
235			
236			
237			
238			

Seattle Core Routes

1	~~48EX~~	125	303EX
2	49	131	304
3	55	132	~~306EX~~
4	56	143	308
5	57	143EX	309EX
5EX	60	150	311
7	~~62~~	~~152~~	312EX
~~7EX~~	64EX	157	316
8	65	158	355EX
9EX	66EX	159	372EX
10	67	~~161~~	373EX
11	68	167	601EX
12	70	177	673
13	71	178	674
14	71EX	179	675
15EX	72	190	
16	72EX	192	
17EX	73	193EX	
18EX	73EX	197	
~~19~~	74EX	~~202~~	
21	75	~~205~~	
21EX	76	~~210~~	
24	77	~~211EX~~	
25	82	212	
26	83	214	
26EX	84	~~215~~	
27	98	216	
28	99	217	
28EX	101	218	
29	102	219	
30	106	~~243~~	
31	111	~~250~~	
32	113	252	
33	114	255	
36	116EX	257	
37	118EX	~~260~~	
40	119EX	~~265~~	
41	120	268	
43	121	271	
44	122	277	
~~47~~	123	~~280~~	
48	124	301	

Strikethrough indicates route was deleted in September 2014.

King County METRO

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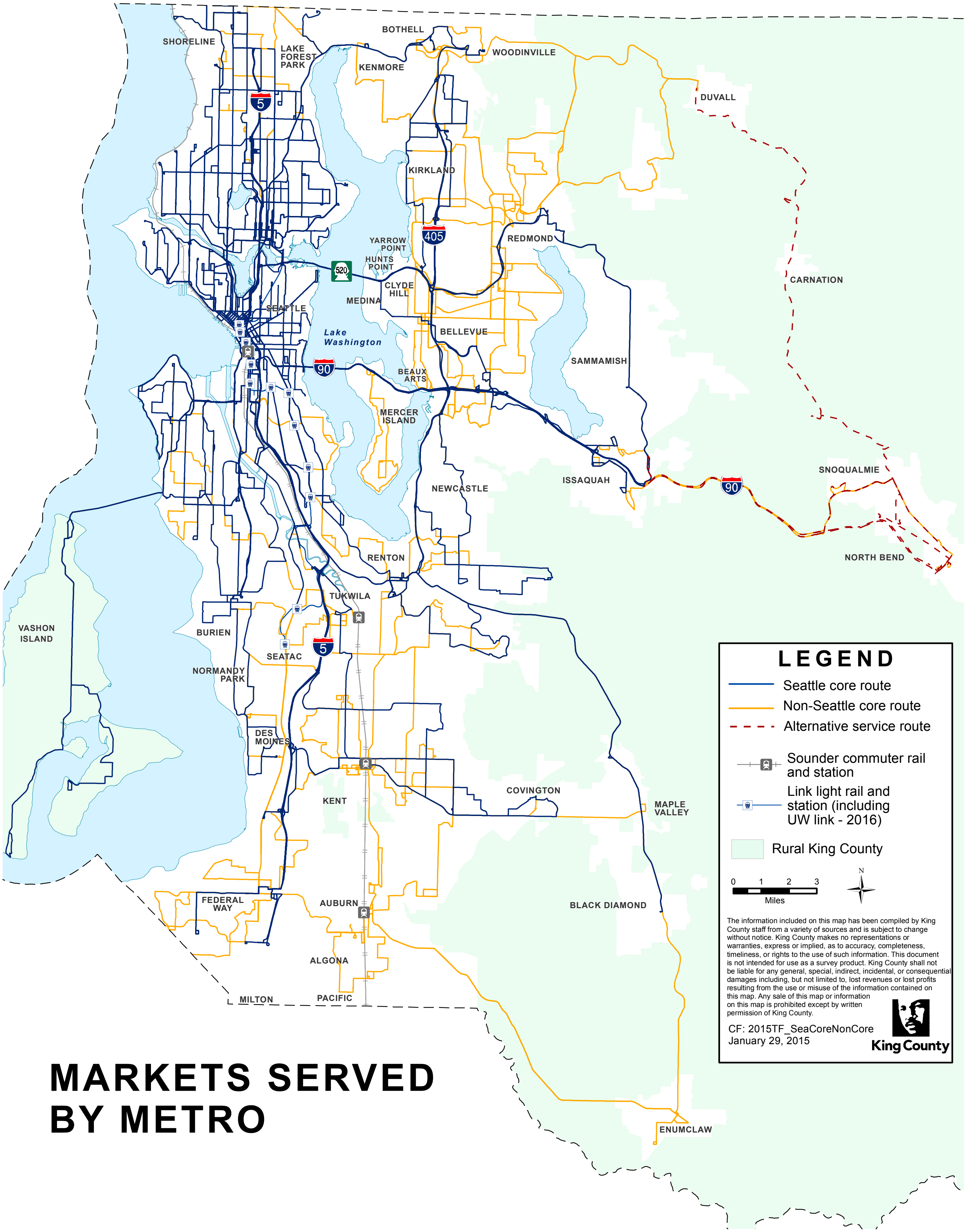


8. Alternative Services

Introduction

"Alternative services" is Metro's term for transportation options tailored to the needs of communities that lack the land use, infrastructure, and density to support traditional fixed-route service. Examples include flexible rideshare options for commuters or a community shuttle service provided through a Metro community partnerhip. Alternative services are intended to address unmet needs in the transit system and to be cost-effective.

This section provides information about Metro's current policies and initiatives relating to the development and deployment of alternative services. Potential new services are also presented.

Links to Information

1. Five Year Implementation Plan for Alternatives to Traditional Transit Service Delivery: http://bit.ly/sgtf8_1
2. Alternative Services Website: http://bit.ly/sgtf8_2
3. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Overview

Metro's alternative services program brings service to parts of King County that don't have the infrastructure, density, or land use to support traditional fixed-route bus service. In such areas, alternative transportation services may be a better match for community transportation needs. They may also be more cost-effective. The King County Council approved $12 million for these services in the 2015-2016 biennium, and Metro is working to provide more of these innovative transportation options in the near future.

Metro offers alternative services in areas where they can help make the public transportation system more efficient, more productive, and more effective at getting people where they want to go — including areas where regular bus service has been discontinued or is not available.

Goals for investing in alternative services

Metro will seek alternative services that…

- More effectively serve markets that are not well served by fixed-route transit.
- Match services to an area's land use and infrastructure characteristics.

Metro will seek opportunities to…

- Collaborate with stakeholders to design a service that meets their needs.
- Partner with communities to deliver and market these services.
- Develop services that can be sustained over time.

Rollout

When the King County Council adopted the 2015-2016 budget, it provided a set of priorities for how Metro will provide alternative services over the next two years. Below is a list of areas where alternative services are being developed or considered, organized by planning priority.

Priority 1: Reduce the impact of service reductions.

Provide alternative services that address transit needs in places where fixed-route bus service has been reduced or eliminated. The following jurisdictions are partnering with Metro now to plan and launch alternative services in 2015. Metro plans to identify additional areas for alternative services in 2015.

- Burien
- Mercer Island
- Snoqualmie/North Bend

Priority 2: Right-size transit services.

Plan and begin offering alternative services in certain communities where fixed-route bus service resources could be reinvested to better serve mobility needs. Metro will partner with local stakeholders to engage the following communities, which are named in the 2013 alternative services plan, in collaborative planning and design processes in 2015. The services designed would debut in 2016, after adoption by the King County Council.

- Vashon Island
- Southeast King County

Priority 3: Complement fixed-route or DART service when Metro revenues are growing.

Use alternative transit services to complement existing bus service if additional revenues become available.

Metro has not yet identified areas where alternative services would be developed under this priority. Metro expects to develop an application process, solicit applications, and plan and begin selected projects late 2016 and 2017.

Approach

Metro uses the service guidelines to identify potential routes that would be good candidates for replacement with alternatives services. Some of these areas have been identified in the five-year plan for alternative service delivery. Other candidate areas are identified through a combination of interest expressed by local jurisdictions, a willingness by those jurisdictions to partner with Metro on alternative service delivery, and a market analysis. Metro then meets with community stakeholders, such as bus riders, local jurisdictions, schools, churches, and employers, to identify existing transportation providers, service gaps, and mobility needs.

Metro or partnering jurisdictions ask current and potential users of the service how and why they use the service, what other transportation options might be available to the community, and what connections to the public transit network they need to maintain.

Metro then proposes two or three alternative service options for each candidate route, based on the following criteria:

- The ability to expand travel options for residents in the community
- How well the option maintains the public's access to "important trips" —for example, to critical medical services
- How well the option addresses Metro's service guidelines related to social equity and geographic value
- Cost-effectiveness

Metro invites the community to propose other alternative service options or modify the ones Metro is proposing. This is an opportunity to bring in other community partners to help provide service. Metro will then choose one or more alternative products for implementation and recommend them for approval. Once an alternative service has been started in an area, Metro will evaluate it annually for future funding.

History

Metro's five-year plan for alternative service delivery, accepted by the King County Council on Sept. 17, 2013, lays out a framework for providing alternatives to fixed-route bus service in less-populated areas. The plan is based on Metro's strategic planning policies and shaped by public feedback. After the County Council accepted the plan, Metro worked collaboratively with community stakeholders and the public on our first demonstration project in the Snoqualmie Valley.

Public involvement

Metro met with stakeholders in early 2012 to develop and refine the five-year plan that was submitted to, and approved by, the King County Council. Metro also invited bus riders to complete an online questionnaire about alternative services. The feedback received will provide valuable insight as Metro discusses options with communities where considering alternative services.

Metro is now working with communities in current alternative service project areas to identify existing transportation providers, service gaps, and local travel needs. They, along with other stakeholders, will help Metro develop options for delivering those services.

Existing Services

Metro has identified a range of potential new alternative services, some of which have not yet been tested. These services may be modified, or new options developed, during the planning and design processes.

Community Shuttle

A route with flexible service areas that is provided through a community partnership.

Key characteristics:

- Metro provides vehicle (6-15 passengers)
- Fixed and flexible service area
- Paid driver
- Community partner provides resources and marketing

Community Hub

A local transportation center, giving people access to transportation resources (e.g., community vans, bikes, and information).

Key characteristics:

- Community partner provides location, transportation info, and scheduling
- Metro provides vehicles for community use
- Flexibility allows regularly scheduled and one-time trips

Flexible Rideshare

Variable ridesharing via promotion of mobile and web-based applications.

Key characteristics:

- Metro-provided or private vehicles
- Responds to unique commuter needs
- May include set pickup points and driver incentives

9. Purchase of Additional Services

Introduction

The law allows private entities and municipalities to negotiate with Metro to provide additional service to particular areas as particular times. Such partnership programs have been an integral part of Metro's service delivery system. Some examples include Transit Now, school district, and special events partnerships. This section provides a brief overview of Metro's implementation of contract service under its Community Mobility Contracts program.

Links to Information

1. Proviso regarding transit service agreement (page 97): http://bit.ly/sgtf9_1
2. Metro Community Mobility Contracts Program: http://bit.ly/sgtf9_2
3. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

Overview

Metro's Community Mobility Contracts program allows cities to purchase transit service above what Metro is currently able to provide given current financial constraints. This program was not intended to be a permanent solution to the region's transit funding challenges, but rather an option for cities to enhance or restore transit service. The program is similar to Metro's existing Service Partnership Program, but allows for a more significant investment that covers the full cost of providing service.

The Community Mobility Contracts program is based on three principles:

- Contracts must reflect the full cost of providing the service.
- Contracts cannot come at the expense of other cities or the regional allocation of service.
- The program is intended as a bridge to keep buses on the street until the state legislature provides a sustainable funding tool for local transportation needs.

How the Community Mobility Contracts Program works

Under this program, any city or group of cities in King County can contract with Metro to avoid planned cuts. The program could also provide enhanced transit services to advance a community's economic, planning and development, and livability goals. Contracted services give cities the flexibility to tailor transit services to unique local transportation needs.

The program is based on a contracted service model. Cities can invest in additional transit hours beyond the countywide level of service provided by Metro. Cities participating in this program will pay the full cost associated with the enhanced level of service.

Cities may consider a contracted services model for several reasons:

- **Preserve service slated for cuts**: Cities can choose to invest in routes that are proposed to be reduced or eliminated.
- **Enhance service on underserved corridors**: Metro's 2013 service review found that more than 500,000 additional hours of bus service are needed annually to meet demand throughout the County. Many of the hours are to needed to adequately serve underserved corridors that connect important employment and educational centers. Cities could choose to invest in meeting this existing demand.
- **Tailored service**: Cities could use this program to develop services tailored to their unique community needs. Cities can contract for enhanced services such as circulators and shuttles.

Metro will offer technical assistance to interested cities to help identify service investments that meet the communities' transit and economic objectives. Once a contract is signed, service would begin at the time of Metro's next quarterly service change, when practical.

10. Metro Background

Introduction

This section contains background reference information about Metro, our organization, fleet, facilities, and some metrics about the services we provide.

Links to Information

1. Metro website: http://metro.kingcounty.gov/
2. Service Guidelines Task Force Website: http://www.kingcounty.gov/sgtaskforce

What is Metro?

King County Metro Transit (Metro) is the largest public transportation agency in Washington state, serving more than 2 million area residents in King County. In 2014, Metro operated a fleet of about 1,415 vehicles within a 2,134 square mile area. Metro's fleet includes standard and articulated clean diesel coaches, electric trolleybuses, and hybrid diesel-electric buses. Metro serves riders who are disabled or who have special needs with accessible fixed route service (all Metro buses have wheelchair lifts or ramps and all routes and trips are accessible), as well as paratransit van service and a taxi scrip program.

One of the 10 largest bus systems in the nation, Metro has over 8,000 bus stops and 130 park-and-ride facilities connecting riders to their destinations on 185 routes. In 2014, Metro's fixed route network had over 120 million boardings and carried passengers over 530 million miles. Metro is recognized as a leader in reducing pollution with its use of hybrid buses, electric trolleybuses, and cleaner fuels. All Metro buses are equipped with bicycle racks.

Metro also operates the largest publicly owned vanpool program in the country. By the end of 2014, Metro had about 1,450 vans serving on an average weekday approximately 6,100 people, eliminating approximately 5,000 vehicle trips a day. It also supports the regional Ridematch program which helps commuters form and sustain new vanpools and carpools in seven counties by matching names in a computer database. The agency provides extensive commute trip reduction services to 480 major employers and sells transit and commuter-van passes to more than 2,000 employers.

Regional Organization

Metro is governed by state and regional policies that impact how the agency provides transit to the region. This includes state, regional, county, and local policies. Metro also works closely with other transit and transportation agencies to provide efficient, integrated travel options throughout the region. Metro is the contract operator of eight of Sound Transit's Express commuter bus services and Link light rail and the City of Seattle's South Lake Union streetcar.

King County Government

Metro delivers transit service as part of many regional transportation services provided by King County under the County's Department of Transportation. Metro has been part of King County since the voter-approved merger of Metro and King County in 1993. Metro performs the "metropolitan public transportation function" as authorized in the Revised Code of Washington 35.58, in alignment with other applicable codes and the financial policies adopted by the Metropolitan King County Council. Metro is required to plan and operate transit services consistent with county, regional, state and federal planning policies, including the Washington State Growth Management Act (GMA). The GMA requires King County to consider population and employment growth targets and land uses when determining the future demand for travel and whether such demand can be met by existing transportation facilities. Metro contributes to the County's compliance with the GMA by focusing transit services in urban growth areas. Metro also works with WSDOT, the state agency responsible for the transportation system, to provide transit to the region.

The Metropolitan King County Council is the legislative branch of county government. It adopts laws, sets policies and holds final approval over the budget. Councilmembers represent geographic districts. Every county citizen, including city residents, has an opportunity to vote for a representative on the County Council.

The Regional Transit Committee (RTC) reviews and makes recommendations to the Metropolitan King County Council on policies for public transportation operated by King County. The RTC is comprised of County councilmembers as well as elected officials from Seattle, Bellevue, and the Suburban Cities Association.

Authorizing Environment

Metro is required to plan and operate transit services that are consistent with state, regional and county planning policies. The list below illustrates the breadth of the laws and policies that influence King County Metro's policies and planning.

- Washington state law
- Federal law and policy
- State and federal grant fund requirements
- State of Washington's Growth Management Act
- Puget Sound Regional Council's Transportation 2040 (metropolitan transportation plan)
- American Public Transit Association (APTA) standards and guidelines
- King County Code
- King County Executive policies and procedures

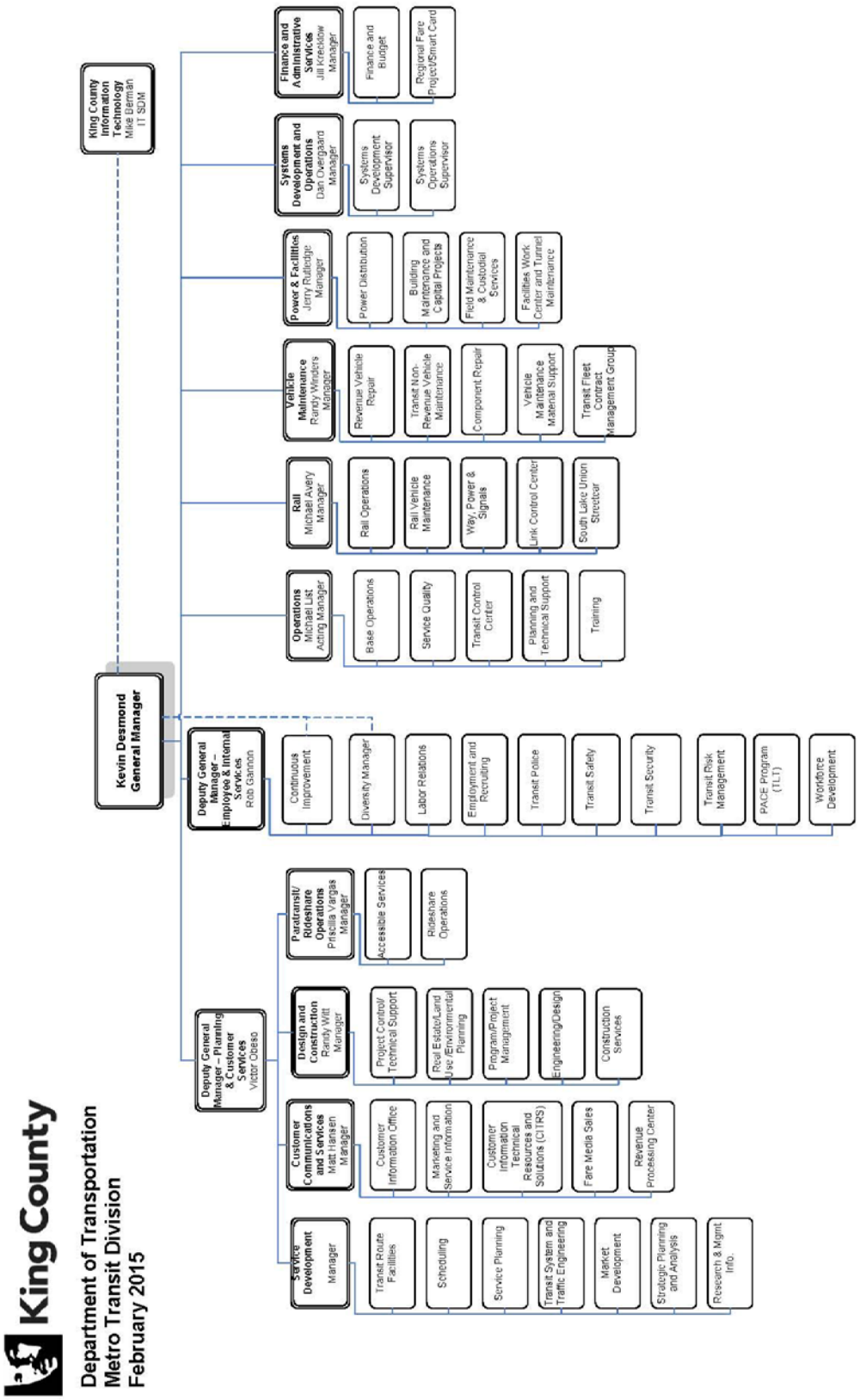
- King County countywide planning policies
- King County Comprehensive Plan
- Comprehensive Plan for Public Transportation (KC Metro)
- Strategic Plan for Public Transportation (KC Metro)
- Transportation Concurrency Management Program
- King County green building ordinance
- King County Climate Plan
- King County Energy Plan
- Sound Move

King County Metro Transit

Metro is organized into the following sections: Operations, Rail, Vehicle Maintenance, Power and Facilities, Human Resources, Service Development, Design and Construction, Customer Communications and Services, Paratransit/Rideshare Operations, Finance and Administrative Services, and Systems Development and Operations. The General Manager oversees the entire Division; an organizational chart is shown on the following page.

Metro also coordinates with other local transit operators in the region. There are seven public transportation agencies in the Puget Sound Region –Metro, Sound Transit, Community Transit, Everett Transit, Pierce Transit, Kitsap Transit, and the Washington State Ferries. In addition, Metro collaborates with the Washington State Department of Transportation, the Puget Sound Regional Council, and various local and regional jurisdictions. Metro coordinates and forms partnerships with these different agencies and jurisdictions in the region to deliver integrated services, construct capital projects and enhance system continuity for the benefit of the region's public transportation users.

Metro Organizational Chart



Products and Services

Metro provides a range of products and services to meet the transit needs of King County residents. This includes fixed-route service, paratransit, alternative services, Vanpools, Rideshare, contracted services, customer information technology, and market development.

Metro operates 185 fixed service routes with varying levels of frequencies, or service families. Service families are very frequent, frequent, local, hourly, and peak service. All of Metro's fixed route service is ADA accessible. There are 27 very frequent routes, 17 frequent routes, 50 local routes, 19 hourly routes, and 72 peak only routes.

RapidRide, Metro's bus rapid transit service, began operation in 2010. RapidRide provides faster, more frequent service along key corridors. Everything about RapidRide—the buses, the stops, the way it operates—is designed to keep people moving quickly throughout the day in these heavily used transit corridors. Buses arrive frequently—at least every 10 minutes during the busiest morning and evening travel hours. Stations have distinctive shelters, seating areas, and customer information. Electronic signs at the stations provide real-time information about when the next bus will arrive. Currently, RapidRide services capture 14 percent of all Metro riders.

Metro's zero-emission trolleybus system is another key service. There are 14 trolley routes on which over 150 trolley buses operate. New battery-equipped trolley vehicles will allow expanded use of the trolley fleet because they can operate off-wire for short distances. Currently, the trolley system carries 16 percent of all Metro riders.

DART, Metro's dial-a-ride service, allows variable routing in some areas within King County. DART service can go off regular routes to pick up and drop off passengers within a defined service area. It operates on a fixed schedule, but one that has more flexibility than regular Metro buses. Annual ridership on DART is approximately 1 million passengers.

Metro provides a range of paratransit services that include Access, Community Access Transportation (CAT), and Taxi Scrip, in addition the fully accessible fixed route network.

Vanpool and Rideshare are also provided as part of Metro's products and services. The Vanpool program is the largest publicly owned vanpool program in the nation, with nearly 1,400 vans on the road. Fares collected through the vanpool program pay for 100 percent of capital and operating costs, and 25 percent of administration costs.

Metro is the primary transit operator in the region and provides contracted services with Sound Transit and the City of Seattle. Metro operates approximately 250,000 annual service hours on 8 Sound Transit express bus routes. 190 Metro employees operate 16.5 miles of Sound Transit Link light rail service in King County. The South Lake Union Streetcar is Metro-operated, with 18 employees and 2.6 miles of streetcar rail.

Metro provides a variety of technologies to improve the customer experience. Metro along with six other transportation agencies (Sound Transit, Pierce Transit, Community Transit, Everett Transit, Kitsap Transit, and Washington State Ferries) offer a regional fare collection program called ORCA that enables customers to use one fare card on multiple systems throughout the four-county Central Puget Sound area. Smart card fare

collection technology allows linked trips between transit, ferries, and rail. ORCA also allows customers to use off-board fare payment on some Metro routes, improving customer convenience and system efficiency. Metro works with regional businesses to provide ORCA cards with reduced transit fare passes to employees. In 2013, there were a total of 74.1 million ORCA taps on Metro services. Nearly two-thirds of all boardings on Metro service are paid using ORCA cards.

Metro provides several other services to improve the customer experience. Metro's new Trip Planner app, transit signal priority (TSP), and real-time information signs all work to improve customer satisfaction. The app and real-time information signs allow customers to know when the next bus will arrive at a stop. TSP improves transit travel times and on-time arrival.

Metro also provides market development services to expand transit ridership. This includes service partnerships, business services, and community programs. Transit Now Direct Financial and Speed and Reliability partnerships with 13 public and private partners have enabled Metro to add over 85,000 annual hours of service on 33 routes.

Employer, school, and Commute Trip Reduction programs are part of the business services that Metro provides. These services help to attract ridership to transit and vanpool, and reduce drive alone travel. Currently, there are over 1,900 active business accounts. These accounts bring in $125 million in regional ORCA revenue or 65% of all regional ORCA revenue. In 2014, regional ORCA Passport revenue accounted for $92 million and 50 million boardings: increases of 9% and 8% compared to 2013.

The U-Pass Program, a regional ORCA Passport product that provides the University of Washington staff, faculty, and students a reduced transit pass, brings in 29% of the regional ORCA Passport revenue. The U-PASS has been so successful that today fewer cars arrive to campus each day compared to 1991, while the student, faculty, and staff populations have grown.

Service Area and Delivery

Metro provides transit service to a large, diverse service area including dense urban neighborhoods and small rural communities. King County is the most populous county in Washington with just over 2 million residents, substantially more people than the next largest county, Pierce, which has just over 800,000 residents. More than 1.3 million jobs are in King County.

King County also has a large land area, with more than 2,100 square miles. However, much of King County is undeveloped, with nearly 83 percent of the population and more than 93 percent of the jobs located in the county's 39 incorporated cities.

Metro also serves a broad range of customers. Based on the 2013 Rider/Nonrider Survey, Metro customers are 49 percent female and have an average age of 43. Many of Metro's customers are choice riders and are not dependent on transit for transportation. Nearly 90 percent of regular customers own a vehicle and although the median income of customers is nearly $65,000, 27 percent of riders earn more than $100,000 annually. More than 60 percent of riders are employed, 10 percent are students, and 13 percent are retired. Metro customers ride transit not only to save money but for ease of commuting and to protect the environment.

Capital and Fleet Infrastructure

Metro invests in and operates a number of capital and fleet infrastructure to support service delivery to the region. This includes coaches, vehicles, and passenger and operating assets. Metro strives to maintain a strong focus on environmental stewardship by encouraging a "Green Fleet" and green buildings consistent with Metro's Strategic Plan.

Metro's building and real property assets include both passenger and operating assets:

- **Passenger assets**
  - 130 park and rides – 64 permanent, 66 leased; including 14 garages
  - 15 transit centers
  - More than 8,000 stops, 1,670 with shelters
  - Downtown Seattle Transit Tunnel
- **Operating assets**
  - 7 bus maintenance facilities
  - 1 bus overhaul/rebuild facility (Component Supply Center)
  - 6 operations facilities
  - 1 communications control building (Transit Control Center)
  - 1 training facility with training track
  - 2 facilities maintenance buildings
  - 1 power distribution building
  - 1 information distribution building
  - 1 revenue processing facility
  - 1 non-revenue vehicle maintenance facility
  - 1 transit police facility (main and auxiliary locations)
  - Approximately 70 miles of overhead trolley wire and 36 active substations

Park and Rides

Park-and-ride lots within King County are built, owned and maintained by many different agencies. Metro provides transit service to park-and-ride lots owned by the County, WSDOT, Sound Transit, cities, and private owners. As of the fourth quarter of 2014 there were 130 park-and -ride facilities operating within the King County Metro Transit service area. Roughly half of these facilities are permanent facilities that are publicly owned or operated under a long-term lease with a private owner. The other half are leased lots where Metro leases parking spaces from churches, public jurisdictions, or shared private parking lots. Park and Ride facilities are well suited for collecting people in lower-density areas and connecting them to the transit network in a single location.

While the total number of facilities is approximately evenly split, because of the size difference between permanent and leased facilities, permanent facilities provide almost 90 percent of the more than 25,500 total parking spaces. Compared to leased lots, most permanent facilities also tend to be more highly utilized. Two-thirds of the 64 permanent facilities average utilization rates of 80 percent or higher while only one-fifth of the leased lots average utilization rates 80 percent or higher.

Transit Centers

Transit Centers support multiple routes coming together to enable transfers between services and modes. They also provide pedestrian amenities such as bike lockers and racks, bus shelters, route terminals, and bus layover areas. Metro currently serves 15 transit centers, which include:

- Aurora Village Transit Center
- Bellevue Transit Center
- Burien Transit Center
- Kirkland Transit Center
- Northgate Transit Center
- Redmond Transit Center
- Renton Transit Center
- Auburn Commuter Rail Station
- Federal Way Transit Center
- Issaquah Transit Center
- Kent Station Transit Center
- Mt. Baker Transit Center
- Overlake Transit Center
- Totem Lake Transit Center
- Tukwila International Boulevard Station

Passenger Shelters and Bus Stops

King County Metro owns thousands of shelters and facilities to provide refuge to its passengers. As of 2014, Metro maintained over 8,000 bus stops with 1,670 stops with shelters. Bus stops with passenger shelters provide a covered space with features like public art and scheduling information for passengers to wait for the bus and make transfers. Some RapidRide stations include additional features such as real time arrival signs and off-board fare payment equipment.

Transit Bases and Support Facilities

Metro's seven bus bases are located throughout King County. The number of buses assigned to each base varies depending on the capacity of a given base. Metro's bases vary in the number of coaches they can support from roughly 125 buses to about 270 buses.

Bases also provide for bus maintenance and repair. The types of services include preventative maintenance, repair, inspection, fueling, interior and exterior washing, and minor paint and body work. To support maintenance and repair work, bases are equipped with maintenance bays, inspection bays, brake bays, bus parts storage areas, and fuel and wash facilities. Larger bases also have paint, upholstery, body work and tire shops. Atlantic Base, which operates and maintains Metro's fleet of electric trolley buses, has overhead wire and an electronics shop. Vehicle Maintenance staff perform routine preventive and repair maintenance 24 hours per day, seven days per week.

It is critical that Metro maintain its bases and support facilities in a state of good repair. Metro uses a variety of tools to maintain a state of good repair including Enterprise Asset Management, condition assessments, systematic programming and planning via the Transit Asset Management Program (TAMP). TAMP provides a coordinated process to plan the replacement or refurbishment of transit facilities. The main focus of Metro's capital program is to maintain existing infrastructure.

In addition to bases, Metro owns or maintains several support facilities, usually located near bases. These facilities provide additional training facilities, vehicle storage, trolley power operations, and other critical services for Metro operations. In addition to these facilities, Metro also operates 36 traction power substations and approximately 70 miles of wire for trolley bus service throughout King County.

Trolley Infrastructure

The Metro electric trolley system is comprised of overhead wire, electric substations to provide power to the wire, switches which enable trolley buses to connection from one set of overhead wire to another, and poles to support the overhead infrastructure. Currently, there are approximately 70 miles of overhead wire and 36 substations.

Downtown Seattle Transit Tunnel

Metro operates the Downtown Seattle Transit Tunnel (DSTT), a 1.3 mile transit-only facility with five stations. Four stations are served by bus and Link light rail, while Convention Place Station is served by buses only. Joint bus-rail operations began in the DSTT in 2009 with the start of Central Link light rail service. The DSTT is one of few facilities in the world with joint bus-rail operations. DSTT operating hours are 5 a.m. to 1 a.m. Monday to Saturday, and 6 a.m. to midnight on Sundays.

SODO Busway

Metro utilizes and maintains elements of the state-owned SODO busway. Metro operates service on this busway between South Spokane Street and Royal Brougham Way in south Seattle. This facility runs parallel to the Link light rail line through the South Downtown area (SODO) and connects to the south end of the DSTT.

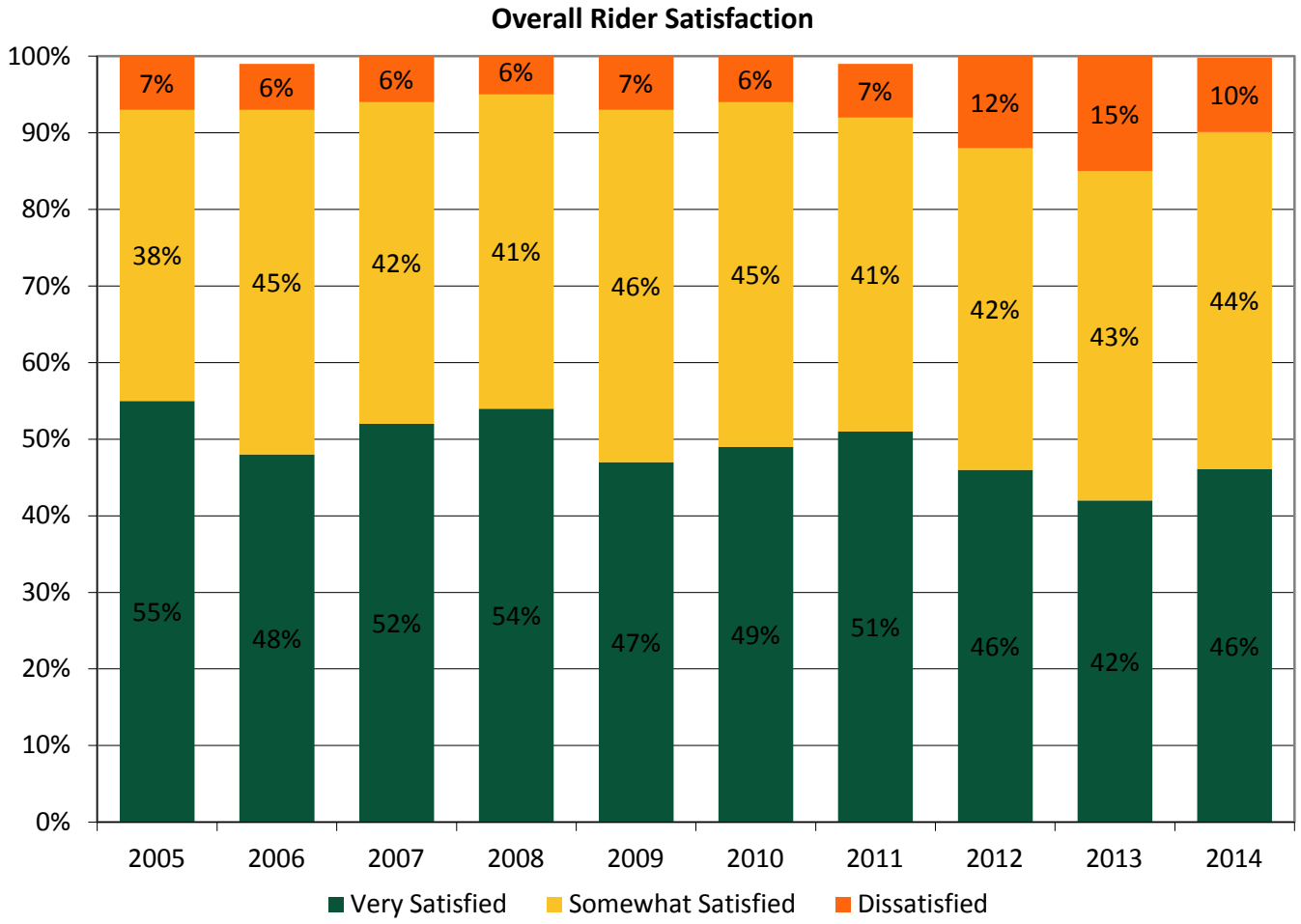
Technology

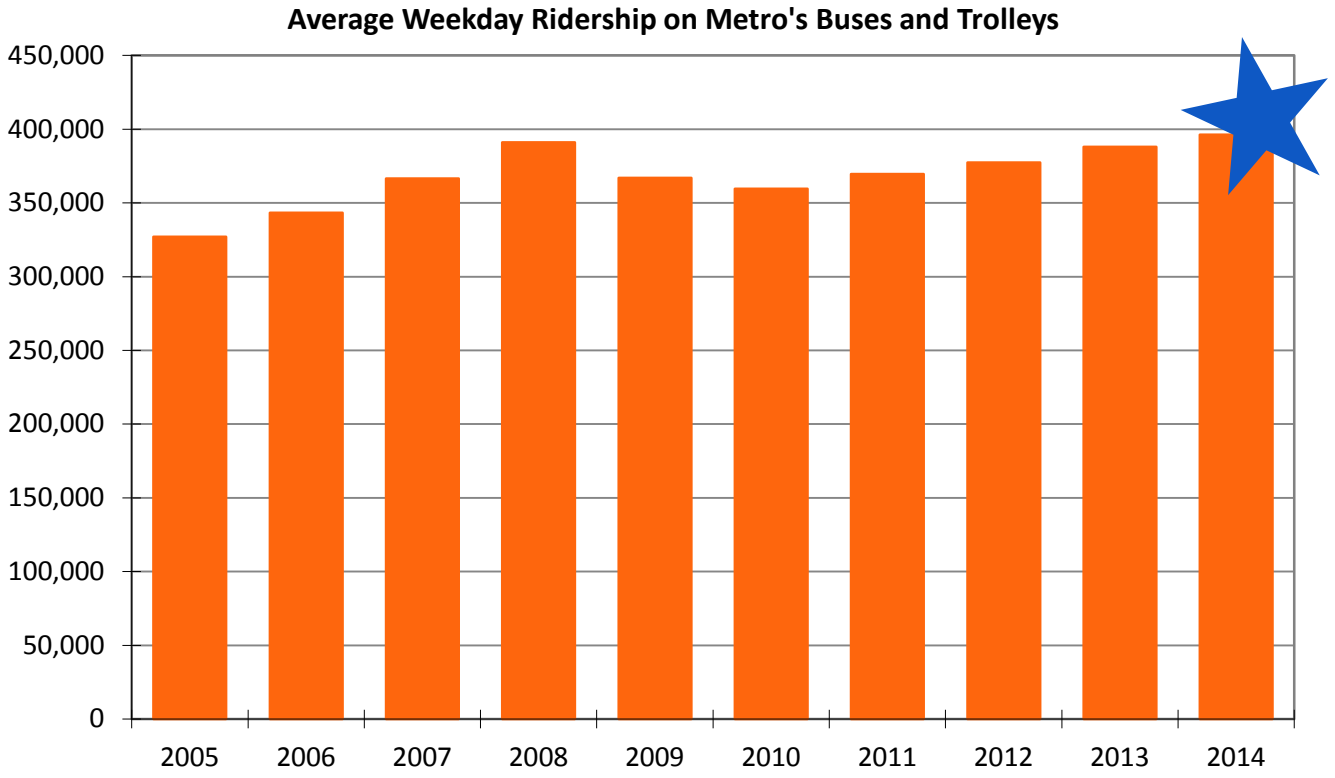
Metro owns a variety of technology capital assets that support transit service. This includes technology and programs to operate the agency, such as human resources tools and office software to transit signal priority (TSP) systems and ORCA card readers. TSP helps improve transit travel times and reliability. Metro works with local jurisdictions to integrate TSP at intersections along busy corridors. Local jurisdictions also own and manage TSP locations additional to those owned by Metro.

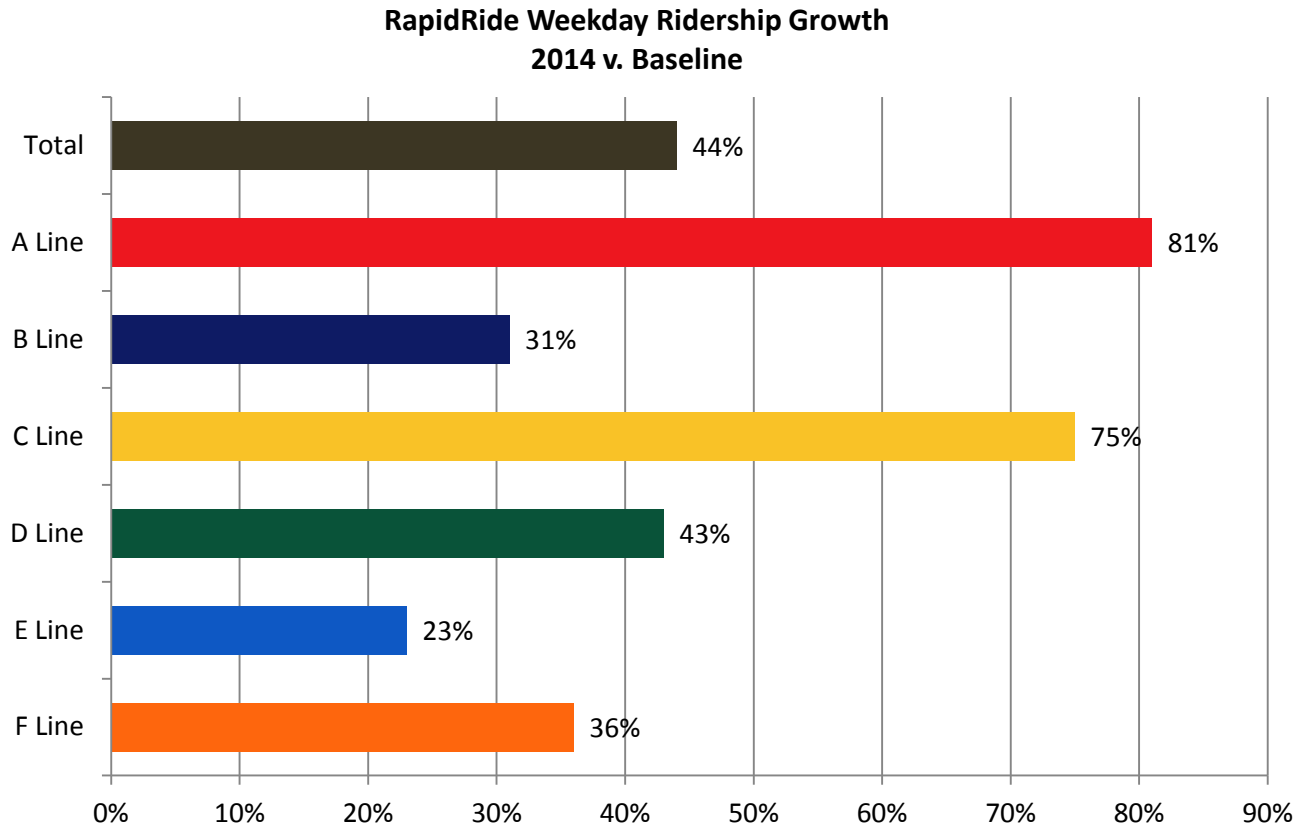
Other technologies that support Metro operations include the OneBusAway app, maintained by a third party. The OneBusAway app allows customers to access real time arrival information for their route from their smartphone. This is complemented with real time arrival information signs that are located at Metro RapidRide stations and some bus stops in downtown Seattle.

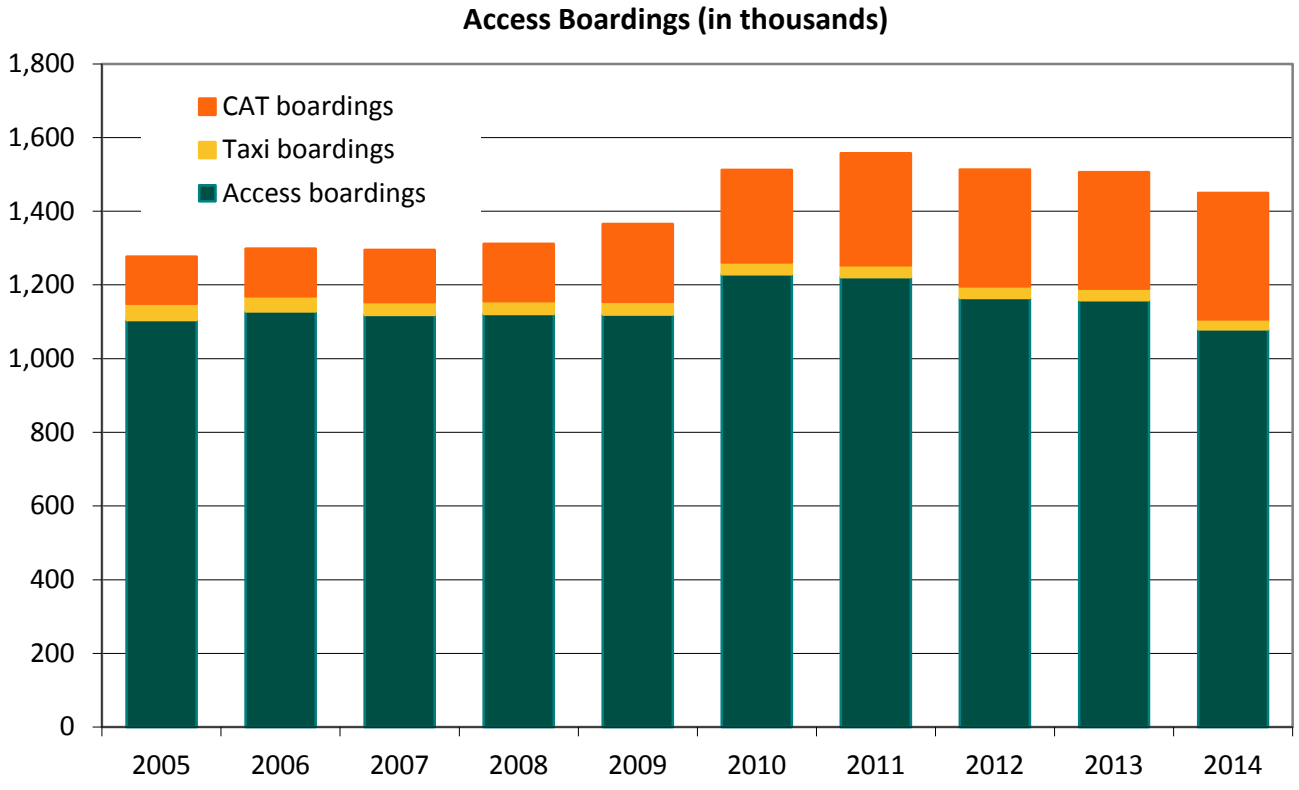
2014 Annual Performance

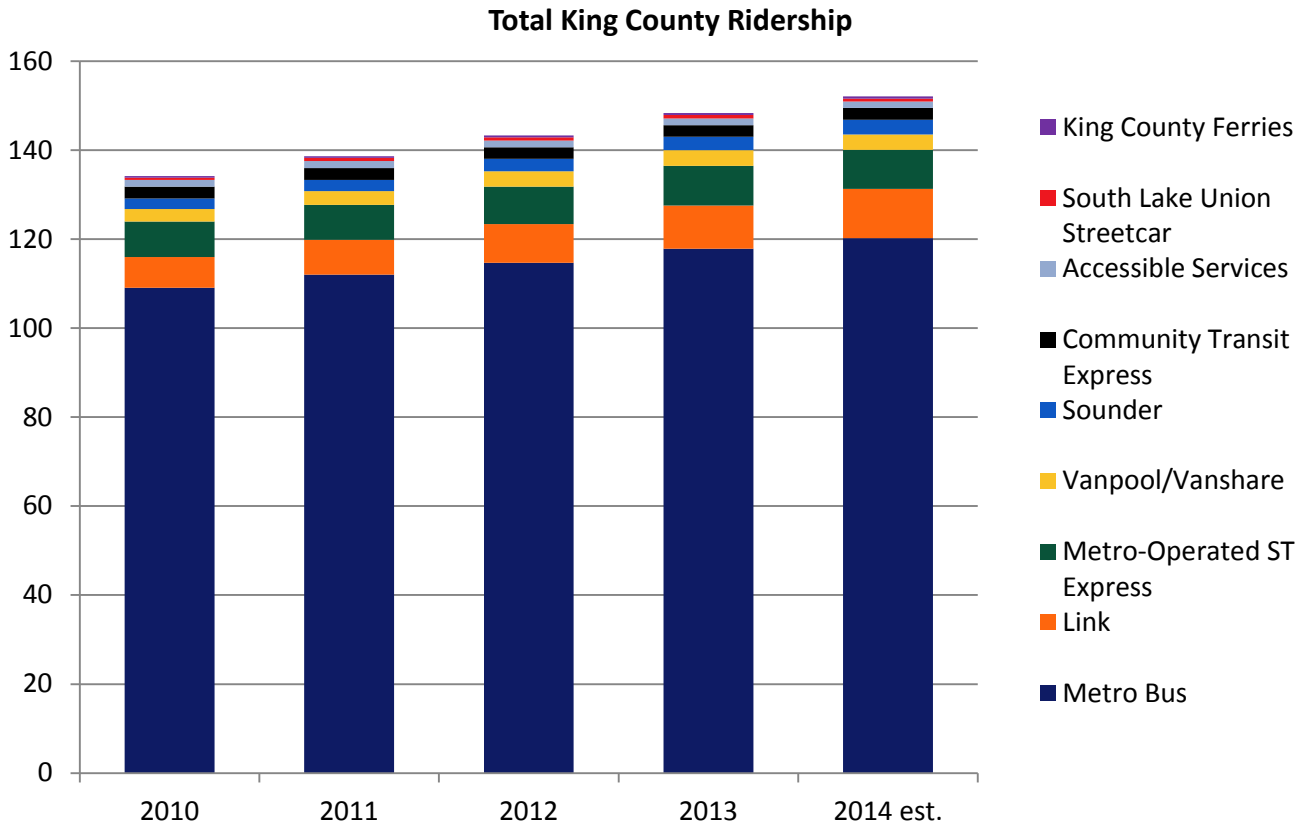
Metro assesses its performance using a variety of tools and methods on a regular basis. Some performance measures are monitored monthly and some are annual measures. Metro also completes an annual Strategic Plan Progress Report, which provides information about Metro's performance as it aligns with the eight Strategic Plan goals. Below are several charts that summarize Metro's 2014 year-end performance.




Average Weekday Ridership on Metro's Buses and Trolleys
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014


RapidRide Weekday Ridership Growth
2014 v. Baseline
Total
44%
A Line
81%
B Line
31%
C Line
75%
D Line
43%
E Line
23%
F Line
36%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%


Access Boardings (in thousands)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
CAT boardings
Taxi boardings
Access boardings
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014


Total King County Ridership
160
140
120
100
80
60
40
20
0
2010
2011
2012
2013
2014 est.
King County Ferries
South Lake Union Streetcar
Accessible Services
Community Transit Express
Sounder
Vanpool/Vanshare
Metro-Operated ST Express
Link
Metro Bus

Glossary of Terms

Products and Services

Fixed-Route Service: Scheduled transit routes in which trips are required to follow the same fixed routing on every trip.

Dial-a-ride (DART) Service: Scheduled transit routes in which individual trips may deviate from the fixed route to pick up or drop off a passenger closer to their origin or destination. DART routes may only deviate into pre-specified "DART areas." All current DART routes include a fixed route portion in which passengers can access service from regular bus stops.

Paratransit (ACCESS) Service: Van-operated service which has no fixed route or schedule and which provides trips to customers who have difficulty using Metro's fixed-route or DART service. Passengers must apply to use Access service in advance of making a trip.

The Anatomy of a Transit Trip

Origin: The location where a passenger begins their trip.

Destination: The location where a passenger ends their trip.

Boarding: A single passenger getting on a transit vehicle. Also referred to as an "on."

Alighting: A single passenger getting off a transit vehicle. Also referred to as an "off."

Ride: A single passenger using a single transit vehicle for a segment of their trip.

Trip: A single passenger movement from their origin to their destination. A trip may include several rides.

Transfer: Occurs when a passenger alights one transit vehicle and boards another in order to reach their destination.

> **Example of a Transit Trip:** A transit customer boards a bus in Wedgwood and rides to Stevens Way on the University of Washington campus where they alight, walk to NE Pacific Street, and transfer to another bus destined for downtown Bellevue (their final destination).
>
> "**Origin**" in Wedgwood and "**destination**" in downtown Bellevue.
>
> One "**Trip**" (Wedgwood to Bellevue)
>
> Two "**boardings**" (Wedgwood and NE Pacific Street)
>
> Two "**alightings**" (Stevens Way and Bellevue)
>
> Two "**rides**" (Between Wedgwood and Stevens Way and between NE Pacific Street and Bellevue)
>
> One "**transfer**" (in the University District)

Service Planning

Headway: The amount of time between consecutive vehicle trips in the same direction of travel. Headway is usually expressed in minutes. On routes with uneven headways (i.e. variation in times between buses), this measure is expressed as an "average headway."

> If Route A departs at: 5:00, 5:30, 6:00, then between 5:00 and 6:00, the headway of route A is 30 minutes and the frequency of route A is 2 buses/hour or 1 bus every 30 minutes.

Frequency: The number of vehicle trips in the same direction of travel within a specified time period. Frequency is usually expressed as the number of trips per hour. Frequency is also sometimes expressed in minutes, when referring to a single trip within a specified time period.

> If Route B departs at: 6:00, 6:15, 6:30, 6:45, and 7:00, then between 6:00 and 7:00, the average headway of route A is 15 minutes and the frequency of route B is 4 buses/ hour.

Span of Service: The length of time each day in which the route operates. Span of service can be expressed generally in terms of hours per day, or more specifically by stating the time of the first and last trips of the day. For example, route A has a span of service of 18 hours between the first trip at 5:00 AM and the last trip at 11:00 PM.

Layover/Recovery Time: The scheduled time spent at a route's terminal between consecutive trips by a single bus. Example: A bus is scheduled to arrive at its terminal at 2:15 PM and is scheduled to leave its terminal at 2:30 PM. The "layover" or "recovery" time for this bus would be 15 minutes. "Layover" or "recovery" time is necessary to allow bus drivers a break and provide a time cushion in event the preceding trip is delayed.

Deadhead Time: The scheduled time spent driving to and from the base or between trips on different routes. Passengers may be conveyed on deadheading trips but in general this is considered to be a time when a bus is not collecting fare revenue

Inbound/Outbound: Every bus trip is classified as an "inbound" or an "outbound" trip depending upon the direction the bus is heading. A trip is classified as an "inbound" trip if it is headed toward the route's major market orientation. "Outbound" trips are trips heading away from the route's major market orientation.

Service Guidelines

Routes: Routes are the actual services provided. Service within a single corridor might be provided by multiple bus routes. For example, the corridor from Fremont to downtown Seattle via Dexter Avenue North is served by two different bus routes, 26 and 28, and both of these routes extend beyond Fremont. Some routes also cover multiple corridors. For example, Route 271 serves three distinct travel markets: Issaquah-Eastgate, Eastgate-Bellevue, and Bellevue-University District. The service guidelines evaluate routes for productivity and service quality.

Seattle Core Routes: Route productivity is analyzed in the peak, off-peak, and night periods based on the market the route serves. Seattle core routes serve downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District, or Uptown.

Non-Seattle Core Routes: Route productivity is analyzed in the peak, off-peak, and night periods based on the market the route serves. Non-Seattle core routes service other areas of Seattle and King County.

Passenger Crowding: Overcrowding is defined as a trip that on average has 25 to 50 percent more riders than seats (depending on service frequency) or has people standing for longer than 20 minutes. When service is chronically very crowded, it is poor quality and has a negative impact on riders. The passenger load thresholds are set so that we accept standing passengers on many of our services, but take action where crowding is at an unacceptable level and where it occurs regularly.

Schedule Reliability: Schedule reliability is measured as the percent of trips that arrive between 1 minute early and 5 minutes late. Routes that are on time less than 80 percent of the time (65 percent for weekday PM peak) are candidates for investment of service hours. This threshold allows for variations in travel time, congestion, and ridership. In our 2014 report, we used reliability data from June 2013 – May 2014. We use a longer time period for this analysis when possible to ensure that schedule reliability needs are not understated by using data from just the four-month spring period.

High Productivity Routes: Route productivity is assessed using two measures: rides per platform hour or passenger miles per platform mile. High-productivity routes are defined as those that perform in the top 25 percent of comparable routes on one or both measures in at least one time period. Investing in high-productivity routes in areas where there is latent demand for transit will result in higher ridership.

Alternative Services: Metro has identified a range of potential new alternative services, some of which have not yet been tested. These services may be modified, or new options developed, during the planning and design processes. Some of the current alternative services include: Community Shuttles, Community Hubs, and Flexible Rideshare. The Alternative Services program brings service to parts of King County that don't have the infrastructure, density, or land use to support traditional fixed-route bus service. In such areas, alternative transportation services may be a better match for community transportation needs. We'll offer alternative services in areas where they can help make the public transportation system more efficient, more productive, and more effective at getting people where they want to go — including areas where regular bus service has been discontinued or is not available.

Corridor: Corridors are major transit pathways that connect regional growth, manufacturing/industrial, and activity centers; park-and-rides and transit hubs; and major destinations throughout King County. The 2014 Service Guidelines Report uses the corridor analysis to evaluate and set target service levels for the 112 corridors of the All-Day and Peak Network.

Target Service Level: Each corridor in the All-Day and Peak Network is assigned a target service level based on productivity, social equity, and geographic value. The All-Day and Peak Network analysis compares the target service levels to existing service to determine whether a corridor is below, at, or above the target levels.

Rides Per Platform Hour: total ridership divided by the total hours a bus travels from the time it leaves its base until it returns.

Passenger Miles Per Platform Mile: total miles traveled by all passengers divided by the total miles the bus operates from its base until it returns.

Performance Management

Revenue Hours: The number of hours buses are operating scheduled trips for a given route. Layover and deadhead time are not considered revenue hours.

Platform Hours: The total number of hours buses are on the road for a given route, including revenue time, layover time and deadhead time.

Annual Platform Hours: The number of platform hours operated during a calendar year for a given route. For example, if a route operates 10 platform hours of service each day of the year, there are 3,650 (= 10 * 365) annual platform hours on the route.

Passenger Load: The number of passengers on the bus. Passenger load is sometimes expressed as a ratio comparing the load and the number of seats provided, or load factor. Load is measured at points along each route. Planning staff is interested in the maximum passenger load and where along the route it occurs. A maximum passenger load ratio above 1.0 indicates that sometime in the bus trip at least one passenger is standing. Metro considers a trip to be 'overcrowded' if the average load factor exceeds 1.25 or 1.5, meaning that it is acceptable for some passengers to stand. Metro is considering measuring passenger load relative to the floor area of buses instead of the number of seats.

Capital Facilities

Transit Center: A facility where numerous bus routes converge to provide a convenient and safe location for transferring. Bus schedules are often coordinated at transit centers to minimize transfer times between certain routes.

Park and Ride: A facility where transit passengers may park their automobile and catch a bus, vanpool or carpool to reach their final destination. Sometimes co-located with transit centers to provide many route options; such as the Northgate Transit Center and park-and-ride lots.

Freeway Station: Bus stops located along a limited access freeway. Examples include the Montlake and NE 45th/I-5 Freeway Stations.

Bases: a building where buses are stored and maintained. Bases include parking, fuel storage, cleaning and maintenance facilities. Metro has seven bases located throughout King County.

Stops: a designated place where buses stop for passengers to board or alight from a bus.

Shelters: a covered structure at a bus stop providing protection against the weather for people waiting for a bus. They can have lighting, route information, real-time information, or other passenger amenities.

Fleet

Trolley bus: An electrically powered bus with trolley poles that connect to an overhead wire system suspended above the roadway. The overhead wire transmits power through the system. Metro will be implementing new low-floor electric trolleybuses in 2015.

Diesel bus: A diesel powered bus. Power is generated by the diesel engine carried on board the vehicle.

Hybrid bus: A diesel-electric powered bus. A diesel-electric engine carried on board the vehicle generates power. This bus has higher fuel economy than a standard diesel bus.

Articulated bus: A 60-foot long bus, which consists of a front and rear section, connected by an accordion-like fabric. Metro articulated buses have seats for 48 to 64 passengers.

Standard bus: A 40-foot long single body bus. Metro standard buses have seats for 34 to 44 passengers.

Small bus: A 30-foot long single body bus. The small buses are slightly narrower than typical buses and have significantly better maneuverability than standard or articulated buses. Metro small buses have seats for 30 passengers. The new small buses will be 35-feet long and low floor and have 30 seats.

DART vehicle: A vehicle similar to a large passenger van. These vehicles are used exclusively on DART routes, and have seats for about 20 passengers. DART is subcontracted service.

Low-floor bus: A vehicle that has no stairs at the doorways. This provides much easier access to all riders, especially those with mobility difficulties, and can help to reduce the time for riders to get on and off the bus, thereby reducing the time at stops. Because the wheel wells take up space within the passenger compartment, low-floor buses tend to have fewer seats.