

# **2011 SERVICE IMPLEMENTATION PLAN**

**APPROVED BY THE OPERATIONS  
AND ADMINISTRATION COMMITTEE**

**Nov. 18, 2010**





## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY:</b> .....	<b>5</b>
<b>CHAPTER 1: SUMMARY OF PROPOSED 2011 SERVICE CHANGES APPROVED BY THE OPERATIONS AND ADMINISTRATION COMMITTEE</b> .....	<b>11</b>
<b>CHAPTER 2: 2010 SERVICE ANALYSIS</b> .....	<b>13</b>
Link Light Rail .....	13
Sounder Commuter Rail.....	24
ST Express Bus.....	30
<b>CHAPTER 3: PRELIMINARY SERVICE PLAN 2011-2016</b> .....	<b>101</b>
Link Light Rail .....	101
Sounder Commuter Rail.....	103
ST Express Bus.....	103
<b>CHAPTER 4: FINANCIAL PLAN AND RIDERSHIP / REVENUE FORECAST</b> .....	<b>107</b>
Link Light Rail .....	107
Downtown Tunnel Debt Service Assumptions .....	107
Sounder Commuter Rail.....	108
ST Express Bus.....	108
Paratransit .....	108
Projected Ridership and Fare Revenue.....	109
<b>APPENDIX A: TABLES</b> .....	<b>113</b>
Table A-1: Subarea Vehicle Mile Summary – Link Light Rail .....	113
Table A-3: Subarea Platform Hour Summary – ST Express .....	115
Table A-4: Subarea Summary Operating & Maintenance Costs – Link Light Rail .....	116
Table A-5: Subarea Summary Operating & Maintenance Costs – Sounder Commuter Rail.....	117
Table A-6: Subarea Summary Operating & Maintenance Costs – ST Express .....	118
Table A-7: Subarea Summary Operating Costs – Paratransit.....	118
<b>APPENDIX B: FLEET MANAGEMENT</b> .....	<b>120</b>
Table B-1: ST Express Bus Fleet.....	120
Table B-2: Sounder Commuter Rail Fleet.....	121
Table B-3: Link Light Rail Fleet .....	122
<b>APPENDIX C: PUBLIC OUTREACH SUMMARY REPORT</b> .....	<b>123</b>
<b>APPENDIX D: TITLE VI IMPACTS</b> .....	<b>125</b>
<b>APPENDIX E: TRANSIT FACILITY/STOP AND ROUTE PASSENGER DATA</b> .....	<b>139</b>

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## **Executive Summary:**

Each year, Sound Transit prepares an update on the development of its express bus, commuter rail and light rail services. The 2011 Service Implementation Plan, or SIP, describes service changes planned for 2011, together with preliminary service proposals and financial projections for 2012 through 2016. It also includes a detailed report on the status of each bus and rail route and performance objectives for the coming year, including ridership and productivity targets.

With the continued economic recession, tax revenues needed to implement Sound Transit's planned ST2 projects and services have fallen below projections. Forecasts conducted during Fall 2009 showed that projected revenues through 2023 were about 20 percent below projected costs of the program. More recent forecasts show that the shortfall has increased to 25 percent. While there are signs that the economy is beginning to recover, to date this has not resulted in a turnaround of negative revenue trends. Also, while total Sound Transit ridership continues to increase, recent growth rates have been below expectations. Clearly, the recession has affected growth in transportation demand and particularly journey-to-work commuter travel.

As a result, each transit service in Sound Transit's 2011 budget has undergone a thorough review for opportunities to reduce operating costs. The 2011 Service Implementation Plan responded to the challenge with several proposals for Board consideration, including deferring some ST2 bus service expansion and reducing the least productive ST Express services. These changes, together with schedule efficiencies that are being implemented administratively, will reduce bus operating costs by almost \$7.5 million during the first full year following implementation. While no reductions are currently proposed for Sound Transit's rail services, potential future service deferrals, operating efficiencies and other cost-saving measures are being evaluated for Link and Sounder, and are discussed in more detail in Chapter 3 of the SIP.

### **ST Express Bus**

ST Express currently represents Sound Transit's predominant service mode with about 56 percent of all passenger boardings and 52 percent of total operating and maintenance costs. The service is funded by four of Sound Transit's five equity subareas. Significant reductions in bus operating costs would help address the total ST2 program shortfall. While still increasing, ridership growth on ST Express has slowed considerably during the past two years. Between 2007 and 2008, bus ridership increased 17 percent; 2009 ridership was 3 percent higher than 2008, and ridership for the first half of 2010 was up 2 percent. Also, recent growth has not been uniform across the system, with some routes continuing to show consistent ridership increases while others have declined. This contrasts vividly with 2008, when ridership grew significantly on all but a few routes.

#### *Savings from More Efficient Scheduling*

During the past year, the expanded deployment of automatic passenger counters and more sophisticated scheduling software has allowed staff to evaluate bus schedules and ridership at a higher level of detail than before. Working closely with schedule planners at the partner transit agencies, Sound Transit staff identified schedule efficiencies and minor trip cuts that are being implemented to reduce costs. Schedule efficiency actions include reductions in scheduled running times, adjusting layover times at terminals, interlining routes with one another to reduce platform time and re-blocking driver runs to reduce out-of-service "deadhead" miles. The first phase of this initiative was implemented in June 2010, and the second phase began with the October 2010

service change. Further efficiencies are being planned for 2011. Schedule efficiencies are expected to save just under \$1.2 million during the first full year following implementation.

#### *Savings from Lower Cost Service Providers*

Sound Transit contracts with Community Transit, King County Metro and Pierce Transit to operate ST Express service. Each partner agency is assigned to operate a specific group of routes. While all three provide high-quality service, the rates charged by each agency are not uniform. To achieve additional cost savings, the operation of Routes 566 and 577 will be shifted from King County Metro to Pierce Transit in February 2011. This change, which will save approximately \$1.0 million annually, was approved by the Operations and Administration Committee of the Sound Transit Board on November 18, 2010.

#### *ST2 Service Deferrals*

Based on an analysis of the most recent ridership data and the seat capacity available on existing services, Sound Transit staff identified three routes where ST2-funded service enhancements could be deferred: Planned peak period service increases on **Route 513 Everett-Seattle** and **Route 554 Issaquah-Seattle**, and the extension of **Route 566 Auburn-Overlake** from Overlake Transit Center to downtown Redmond. These improvements were previously approved by the Board as part of the 2010 SIP, but under the 2011 SIP they will be deferred. Current ridership data shows that the improvements planned for these routes are not needed at this time. Annual operating cost savings from deferring these improvements total about \$2.8 million. Other ST2 enhancements will be implemented as originally planned, including peak period service increases on Routes 511 Lynnwood-Seattle, Route 522 Woodinville-Seattle and Route 532 Everett-Bellevue.

#### *Reductions to Existing Service (Revised)*

Using guidelines from the Board-approved Sound Transit Service Standards and Performance Measures, staff identified routes with low productivity and developed specific proposals to reduce service levels or restructure service to achieve operating savings. These initial proposals were described in the Draft SIP that was released Oct. 8, 2010. Following public feedback and further collaboration with King County Metro, the original proposals for Routes 540 and 554 were revised and a proposal to reduce service on Route 545 was dropped. The Final SIP includes these ST Express service reductions which will be implemented in June 2011:

- **Route 510 Seattle-Everett:** This route will be combined with Route 511 Lynnwood-Seattle on Sundays and holidays to reduce costs. The combined route will be designated Route 512.
- **Route 513 Seattle-Everett via Eastmont:** The route segment between downtown Everett and Evergreen Way/79th Place SE will be deleted.
- **Route 535 Lynnwood-Bellevue:** Sunday and holiday service will be deleted on this route.
- **Route 540 Kirkland-University District:** Midday and evening service will be deleted, and the University District routing will be revised to loop through the UW campus via 15th Avenue NE, NE 45th Street, Memorial Way, Stevens Way and Grant Lane.
- **Route 554 Issaquah-Seattle:** Midday service will be reduced from every 15 minutes to every 20 minutes, and weekend service will be reduced from every 30 minutes to every 60 minutes before 10:00 a.m. and after 7:00 p.m.
- **Route 560 Bellevue-West Seattle:** The route segment between West Seattle and Burien will be discontinued except during weekday peak periods.
- **Route 599 Lakewood-Tacoma:** This route will be deleted.

Annual cost savings from implementing these service reductions are just under \$3.5 million. The total savings from schedule efficiencies, lower-cost service providers, proposed service deferrals and service reductions are approximately \$7.5 million annually after allowing for reduced fare revenue (for the 2011 budget year, the savings will be less because most of the service changes would start in June). All service changes approved by the Operations & Administration Committee of the Sound Transit Board are listed in Chapter 1. A detailed ST Express route-by-route performance analysis is in Chapter 2.

## **Central Link Light Rail**

Central Link passenger operations began on July 18, 2009 between Westlake Station and Tukwila International Boulevard Station. Service extended southward 1.7 miles to the SeaTac/Airport Station on Dec. 18, 2009. Ridership has increased from 432,272 passenger boardings in August 2009, the first full calendar month of operation, to 694,336 boardings in August 2010, an increase of over 60 percent.

The Central Link startup represents a dramatic increase in transit capacity along the corridor. Service operates seven days a week between 5 a.m. and 1 a.m. (6 a.m. to midnight on Sundays). Two-car trains operate every 7 to 10 minutes most of the day, with 15-minute service provided early in the morning and late at night. During the first six months, ridership growth was modest but a strong upward trend began with the airport extension in December and the startup of the second phase of bus service connections in February 2010. The SeaTac/Airport station quickly became the busiest station on the line outside of downtown Seattle. Weekend ridership has been unexpectedly strong, with the number of boardings on an average weekend day representing about 67 percent of the average weekday boardings. The high weekend use indicates that Central Link has attracted customers who use the service for a variety of transportation purposes including shopping and recreation as well as commuting to work.

In October 2010, King County Metro significantly increased connecting bus service to Central Link with the startup of bus rapid transit along the SR 99 south corridor. “Rapid Ride” Line A service between Federal Way Transit Center and Tukwila International Boulevard Station operates every 15 minutes from approximately 4 a.m. until 10 p.m. every day of the week, with 10-minute service during weekday peak periods. Service operates approximately every 30 minutes after 10 p.m.

As with other new transit modes, the initial two years of Central Link operation are a period of customer trial and acceptance. Ridership during this period tends to be volatile, and generally has a steeper growth curve than more mature services. Sound Transit’s “Service Standards and Performance Measures” recommends that new services operate a minimum of two years before implementing major changes in service levels.

At this time, no changes to service are proposed. However, operating experience has shown that night and weekend ridership levels do not require two-car trains. Beginning Oct. 2, 2010, one-car trains operate after about 8 p.m. and all day Saturdays and Sundays. Two-car trains continue to operate on evenings and weekend days when major events are scheduled, such as Seahawk football games and the annual Torchlight Parade. This change will result in energy and vehicle maintenance staff cost savings and will reduce unnecessary wear and tear on the light rail vehicles.

A detailed evaluation of Central Link’s first year performance is in Chapter 2. Chapter 3 describes preliminary plans for service to South 200th Street and the University of Washington, expected to open later in the decade.

## **Sounder Commuter Rail**

Sounder, with its large proportion of journey-to-work commuters, has been particularly impacted by the economic recession. First Quarter 2010 boardings were down by 6 percent compared with the same period in 2009, but the Second Quarter of 2010 has seen a slight increase in boardings. Staff projects that Sounder ridership will stabilize during 2011 and begin to increase significantly with the startup of service to Lakewood in late 2012. In the meantime, the South Line received additional parking capacity with the opening of the new “Red Lot” near Puyallup Station in October 2010, and long-awaited improvements to parking and bus facilities are currently under construction at the Edmonds Station on the North Line.

No changes to Sounder service levels are proposed for 2011. Chapter 3 outlines plans for the Tacoma-to-Lakewood extension and preliminary plans for ST2-funded service expansion on the South Line during the 2013-2016 timeframe.

## **Tacoma Link**

Tacoma Link ridership declined 8 percent during the first half of 2010 compared with the same period a year earlier. A combination of factors, including fewer special events at the Tacoma Dome and the Tacoma Convention Center, reduced retail activity and less employment in downtown Tacoma contributed towards the decline. Operationally Tacoma Link is virtually unchanged from 2009. Characterized by frequent, highly dependable service, Tacoma Link easily met all of its Second Quarter 2010 service quality scorecard measures for on-time performance, service availability and low rates of customer complaints.

Two key decisions will greatly influence Tacoma Link during 2011. Since service started in 2003, no fare has been charged to ride Tacoma Link trains. This policy was adopted by the Sound Transit Board at that time because it was believed that the cost of collecting fares would exceed the revenue generated. Recent experience with the actual costs of acquiring and maintaining fare collection equipment elsewhere on the Sound Transit system suggests that projected fare revenue could cover fare collection expenses and contribute towards other operating costs. Security staff are already on board most trains and could serve as fare enforcement officers. Passenger surveys indicate that a large proportion of Tacoma Link customers already carry ORCA cards or other transit fare media, which may minimize the ridership loss if fares are charged. The Sound Transit Board, in a separate action, will decide whether to charge fares on Tacoma Link beginning in 2011.

A second major Board decision will provide direction on a proposed new Tacoma Link station. Located halfway between the existing Theater District and Convention Center stations, the new station would be funded by the City of Tacoma and would expand access to Link in the vicinity of 11th and Commerce in the downtown area. A trade off is that the station would result in less frequent service, because the increased dwell time and signal delay would require reducing train frequency from every 10 minutes to every 12 minutes weekdays and Saturdays, and from every 20 minutes to every 24 minutes evenings and Sundays. The Sound Transit Board will decide whether to proceed with the 11th Street station in early 2011. For planning purposes, the SIP assumes that the station will be constructed and opened for service in June 2011.



## **Preliminary Service Plans for 2012 - 2016**

Chapter 3 of the SIP describes preliminary 2012-2016 service plans. These “out year” plans were updated based on the most recent staff work on service reductions and efficiencies and revised capital project schedules. Service levels, ridership and fare revenue estimates shown for 2012-2016 are used to develop the agency’s Long-Range Financial Plan; however, the actual implementation of service changes is still subject to Board approval of the annual SIP.

*Note: The service proposals shown below are preliminary. Sound Transit’s three largest partner agencies- Community Transit, King County Metro and Pierce Transit- are planning major bus service revisions in 2012 that may result in additional ST Express service changes not foreseen at this time.*

### **2012**

- Sounder South Line extended from Tacoma to South Tacoma and Lakewood.
- Temporary bus Route 593 discontinued with extension of Sounder service to South Tacoma; trips converted to Route 590 service between Seattle and Tacoma Dome only.

### **2013**

- Potential restructure of Route 560 in conjunction with startup of Metro Rapid Ride Line F (Renton-Burien).
- One additional Sounder round trip added between Lakewood and Seattle.

### **2014**

- Potential restructure of Route 540 in conjunction with opening of HOV direct access ramps at SR 520/108th Avenue NE.

### **2016**

- Two additional round trips added on the Sounder South Line.
- Central Link extended to South 200th, Capitol Hill and the University of Washington.
- ST Express Route 586 (Tacoma-U District) discontinued with opening of U Link.

Additional details are included in Chapter 3.

## **Title VI**

In compliance with Title VI of the Civil Rights Act of 1964, the 2011 Service Implementation Plan includes an impact assessment of the 2011 service changes on minority transit users and communities, low-income populations, and persons with a limited ability to speak, understand, read and write English. The Title VI assessment is located in Appendix D.

## **Accessible Services**

With the start up of Central Link service, Sound Transit has an ADA paratransit obligation under provisions of federal regulations. This service, operated for Sound Transit under contract with King County Metro, provides transportation for eligible persons with disabilities within ¼-mile of the Central Link alignment. The 2011 SIP includes operating results for the first full year of Central Link paratransit service. Projected paratransit operating and maintenance costs are shown in Appendix A-7. Annual trips are estimated to be 69,000.

Sound Transit will continue to plan and implement actions and programs under *United We Ride in Puget Sound*, the Regional Special Needs Transportation Plan. The complete plan is available at: <http://www.soundtransit.org/x1873.xml> or by e-mailing [accessibility@soundtransit.org](mailto:accessibility@soundtransit.org) .

Sound Transit will continue to provide funding for the special needs transportation coordinating coalitions in King, Pierce and Snohomish Counties. The agency will also provide partial funding for a legislatively mandated special needs project in Pierce County.

## **Quick Guide to the 2011 SIP:**

**Chapter 1** summarizes the 2011 service changes and deferrals approved by the Operations and Administration Committee of the Sound Transit Board.

**Chapter 2** includes a description and performance summary of Sounder, Link and each ST Express route, with background information on each proposed 2011 SIP service change.

**Chapter 3** describes preliminary plans for 2012-2016.

**Chapter 4** includes estimates of ridership and fare revenue for all three transit modes through 2016, and a description of the modeling and assumptions used to develop the estimates.

# Chapter 1: Summary of 2011 Service Changes Approved by the Operations & Administration Committee

The following service changes were approved by the Operations and Administration Committee of the Sound Transit Board as part of the 2011 Service Implementation Plan. The Committee approved the 2011 SIP on Nov. 18, 2010. A detailed description of the changes and additional background information is included in Chapter 2.

## ST Express Bus

### **Route 510 Everett-Seattle (June 2011)**

### **Route 511 Ash Way-Seattle (June 2011)**

- On Sundays and on holidays when a Sunday schedule is operated, combine Route 510 and Route 511 into one route, Route 512.
- Route 512 will operate between downtown Seattle and Everett Station using existing Route 510/Route 511 routing and stops, but will not serve Route 510 stops between Everett Station and downtown Everett.
- Route 512 service will operate every 30 minutes all day on Sundays and holidays.

### **Route 513 Everett-Seattle (June 2011)**

- Defer the peak period service improvements previously approved in the 2010 Service Implementation Plan.
- Delete the route segment between Hewitt Avenue at Virginia Avenue and Evergreen Way at 79th Place Southeast. Service will continue to be provided between Evergreen Way at 79th Place Southeast and 6th Avenue South at South Royal Brougham Way in downtown Seattle.

### **Route 535 Lynnwood-Bellevue (June 2011)**

- Delete all service on Sundays and on holidays when a Sunday schedule is operated.

### **Route 540 Kirkland-University District (June 2011)**

- Delete weekday midday service and weekday evening service.
- Revise University District routing to operate as a one-way loop via 15<sup>th</sup> Avenue NE, NE 45<sup>th</sup> Street, Memorial Way, Stevens Way, Grant Lane and 15<sup>th</sup> Avenue NE.

### **Route 554 Issaquah-Seattle (June 2011)**

- Defer the peak period service improvements previously approved in the 2010 Service Implementation Plan.
- Reduce service from every 15 minutes to every 20 minutes between about 9:00 a.m. and 3:00 p.m. on weekdays.
- Reduce service from every 30 minutes to every 60 minutes before 10:00 a.m. and after 7:00 p.m. on weekends and on holidays when a Sunday schedule is operated.

### **Route 560 Bellevue-West Seattle (June 2011)**

- Delete the route segment between Burien Transit Center and West Seattle Junction except weekdays from about 4:20 a.m. to about 9:00 a.m. and from about 3:00 p.m. to 7:00 p.m.
- Maintain existing service levels on the remaining Bellevue-Burien segment of the route.

### **Route 566 Auburn-Overlake**

- Defer the extension of Route 566 from Overlake Transit Center to downtown Redmond previously approved in the 2010 Service Implementation Plan.

### **Route 599 Lakewood-Tacoma Dome (June 2011)**

- Delete all service on this route.

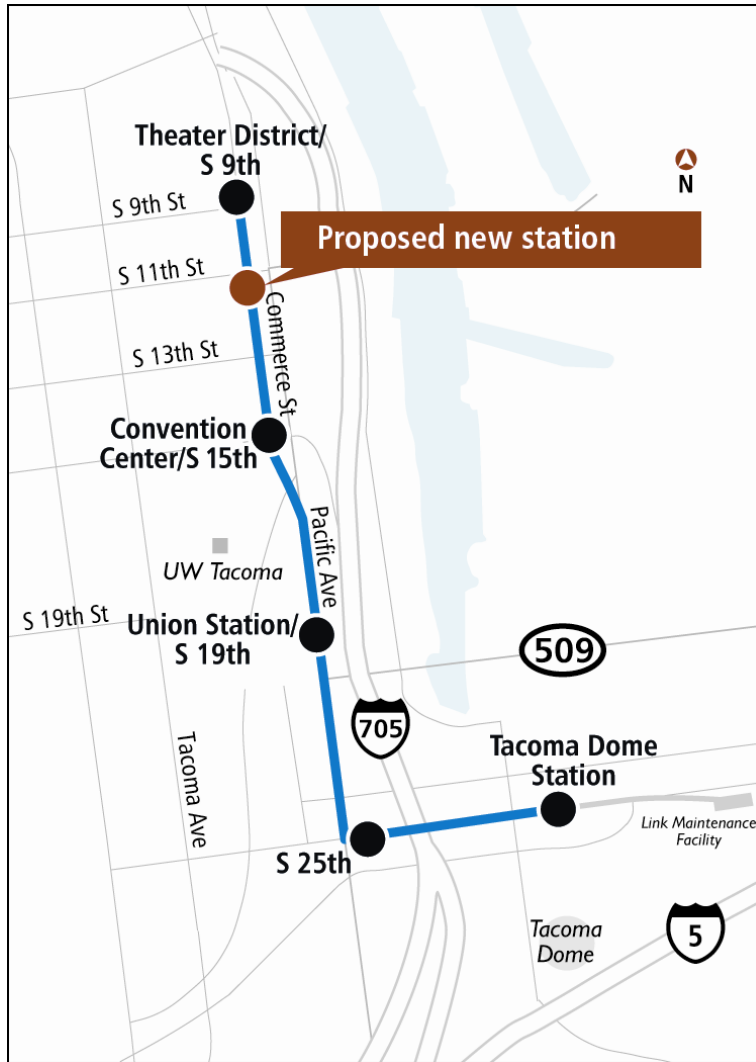
### **Tacoma Link**

- Contingent on the opening of the proposed new station on Commerce Street at South 11<sup>th</sup> Street, reduce weekday and Saturday daytime service from every 10 minutes to every 12 minutes, and reduce early weekday morning, evening and Sunday service from every 20 minutes to every 24 minutes.
- Implement change in June 2011 or when the new station is opened for service.

# Chapter 2: 2010 Service Analysis

## Link Light Rail

### Tacoma Link



#### *Description*

Tacoma Link light rail service began in August 2003 connecting the Tacoma Dome Station with the Theater District Station in downtown Tacoma. There are three intermediate stations at S. 25th Street, Union Station and Convention Center. Service operates from 5:20 a.m. to 10:10 p.m. on weekdays, from 8:00 a.m. to 10:10 p.m. on Saturdays, and from 10:00 a.m. to 6:00 p.m. on Sundays. A maximum of two light rail cars are normally scheduled, with a third car available as a spare (for detailed information on the Tacoma Link fleet, see Table B-3 in the appendix). Service is currently provided free of charge.

Tacoma Link is characterized by dependable service, excellent on-time performance and frequent headways (every 10 minutes during most hours of operation). These characteristics are made possible by semi-exclusive right-of-way, traffic signal priority measures and the route's relatively short length of just 1.6 miles.

Service levels have remained largely unchanged since the 2003 startup except for a February 2008 revision to night and Sunday service. At that time, weeknight service was extended two hours later, to 10:10 p.m., and Sunday service was reduced from every 10 minutes to every 20 minutes with the last Sunday train at 6:00 p.m. instead of 8:00 p.m.

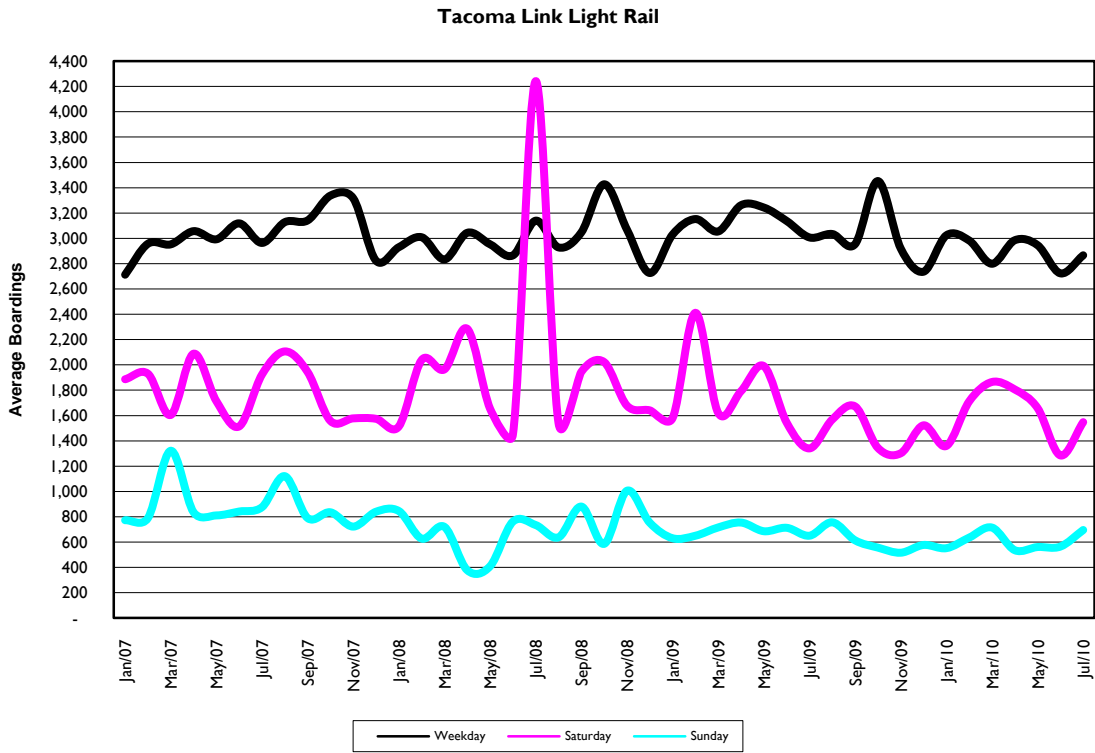
Total boardings declined 8 percent during the first half of 2010 compared with the same period a year earlier. A combination of factors, including fewer special events at the Tacoma Dome and Tacoma Convention Center, reduced retail activity and less employment in downtown Tacoma contributed towards the decline.

***Performance Assessment***

2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,214	1,792	713
Passengers per Trip	16.36	17.62	10.38	14.56
Passengers per Service Hour	99.20	107.12	62.48	86.11
O&M Cost per Passenger	\$4.34	\$4.02	\$6.88	\$5.00

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,884	1,588	555
Passengers per Trip	14.56	15.82	9.12	11.10
Passengers per Service Hour	87.35	94.92	54.72	66.61
O&M Cost per Passenger	\$4.86	\$4.47	\$7.76	\$6.37

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-10%	-11%	-22%
Passengers per Trip	-11%	-10%	-12%	-24%
Passengers per Service Hour	-12%	-11%	-12%	-23%
O&M Cost per Passenger	+12%	+11%	+13%	+27%



The sudden rise in weekend boardings on Tacoma Link in July 2008 is due to the Tall Ships visit over the Independence Day weekend.

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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Spring 2010 Service Change	Weekday Early AM	Weekday AM Peak	Weekday Midday	Weekday PM Peak	Weekday Evening
Daily Boardings	48	592	1,076	842	369
Passengers per Trip	9.63	19.73	14.95	23.40	9.47
Passengers per Service Hour	57.79	118.36	89.67	140.41	58.30
O&M Cost (Budgeted) per Passenger	\$7.34	\$3.59	\$4.73	\$3.02	\$7.28
Performance Rating	1.67	2.00	2.67	1.00	2.00

Spring 2010 Service Change	Saturday Daytime	Saturday Evening	Sunday	Holiday*
Daily Boardings	1,374	392	621	497
Passengers per Trip	11.35	7.69	12.42	9.94
Passengers per Service Hour	68.12	47.07	74.52	59.61
O&M Cost (Budgeted) per Passenger	\$6.23	\$9.02	\$5.70	\$7.12
	2.00	2.33	1.67	2.00

\* Memorial Day is the only holiday during the Spring 2010 service change. Holiday data includes all holidays from Independence Day 2009 to Memorial Day 2010.

Spring 2010 Service Change	Weekdays 18:00 – 20:00	Weekdays After 20:00	Saturdays 18:00 – 20:00	Saturdays After 20:00
Daily Boardings	273	96	269	123
Passengers per Trip	11.37	6.43	11.20	4.57
Passengers per Service Hour	68.20	41.33	67.22	27.42
O&M Cost (Budgeted) per Passenger	\$6.22	\$10.27	\$6.31	\$15.48
Performance Rating	1.00	3.33	1.67	3.33

Daily Boardings are taken from the Automatic Passenger Count system installed on all Tacoma Link vehicles. This data does not include extended special event service.

Tacoma Link operated 99.85 percent of the scheduled trips during the first quarter of 2010. The goal is to operate 98.50 percent of all scheduled trips as shown in the published timetable during each quarter and calendar year. Tacoma Link exceeds the standard.

Tacoma Link's on-time performance for the first quarter of 2010 was 99.79 percent. The goal is to operate 98.50 percent of all scheduled trips as shown in the published timetable during each quarter and calendar year. Tacoma Link exceeds the standard.

## Service Change Concepts

The City of Tacoma has asked Sound Transit to construct an additional Tacoma Link station on Commerce Street near South 11th Street, and has offered to fund the design, construction and maintenance costs of the new facility. The station, located about halfway between the existing Theater District and Convention Center stations, would expand access to light rail in the downtown core. However, due to limitations of the existing infrastructure, the added station represents a tradeoff between increased accessibility and less frequent service.

The 1.6-mile Tacoma Link alignment is approximately half double track and half single track. Departure times from each terminal are carefully scheduled so that opposing trains meet at Union Station where double track is available for trains to pass. The scheduled travel time between each station is approximately 2 minutes and 15 seconds and is synchronized with the City of Tacoma's 100-second traffic signal timing system along the alignment. The total end-to-end time is approximately 9 minutes and includes less than one minute of turnaround time at each terminal.



Since there is little or no recovery time, employee breaks are provided by assigning a relief operator at Tacoma Dome Station.

Tacoma Link is scheduled very efficiently, making very effective use of the small light rail fleet, partially traffic-separated alignment and limited signal priority. The line compares favorably with peer systems of similar size in terms of ridership, average speed, frequency of service, on-time performance and productivity. However, schedule adjustments are severely constrained by the single-track section and partial mixed-traffic operation. With turnaround time at the terminals limited to one minute or less, even small increases in end-to-end running time will result in the need to reduce the frequency of service.

The installation of an additional station will require increasing the turnaround cycle time from 20 minutes to 24 minutes. Service intervals will lengthen from 10 minutes to 12 minutes when two trains are scheduled and from 20 to 24 minutes when one train is scheduled. This is based on the assumption that the station would add about one minute of running time each way. The additional time consists of deceleration/acceleration time from the station, station dwell time for passenger loading and unloading, and time waiting for the traffic signal at 11th and Commerce. Currently, signals on Commerce Street are arranged so that trains receive a “wave” of green signals once they leave the Theater District and Convention Center stations. Signals currently operate on a 100-second cycle, but with the new station the City of Tacoma will change to a 90-second cycle.

In terms of service offered, the headway changes will reduce the number of weekday trips from 182 to 154. Saturday service will decrease from 172 trips to 142 trips, and Sunday service will be reduced from 50 to 42 trips. While service levels will decrease, there will be no corresponding decrease in vehicle platform hours or operator time, since the same number of trains and operators will provide less service. Vehicle mileage will be reduced, resulting in slightly lower energy and vehicle maintenance costs.

In terms of productivity, the new station will need to generate enough new riders to offset the potential loss of ridership from the decrease in service levels. Sound Transit’s light rail ridership forecasting model is relatively insensitive to station locations when they are located less than one-half mile apart, so is not useful in predicting ridership changes of this scale. More than other factors, the success of the new station will depend on future changes in employment and population in the immediate vicinity of 11th and Commerce.

The Sound Transit Board will decide in a separate action whether to charge fares on Tacoma Link during 2011.

***Service Change Highlights***

- Pending final Board approval, construct a new station on Commerce Street immediately south of South 11th Street in downtown Tacoma with funding from the City of Tacoma.
- Contingent on the opening of the new station, modify service levels from every 10 minutes to every 12 minutes weekdays and Saturday, and from every 20 minutes to every 24 minutes early weekday mornings, weekday evenings and all day on Sundays and holidays.

DRAFT Schedule effective with opening of new station at S. 11<sup>th</sup> Street

Day	From	To	Frequency
<b>Monday-Friday</b>			
Tacoma Dome (Northbound)	5:30 a.m.	6:42 a.m.	24 minutes
	6:42 a.m.	8:06 p.m.	12 minutes
	8:06 p.m.	10:06 p.m.	24 minutes
Theater District (Southbound)	5:19 a.m.	6:55 a.m.	24 minutes
	6:55 a.m.	8:19 p.m.	12 minutes
	8:19 p.m.	10:19 p.m.	24 minutes
<b>Saturday</b>			
Tacoma Dome (Northbound)	7:54 a.m.	9:54 p.m.	12 minutes
Theater District (Southbound)	8:06 a.m.	10:06 p.m.	12 minutes
<b>Sundays and Holidays</b>			
Tacoma Dome (Northbound)	10:20 a.m.	5:56 p.m.	24 minutes
Theater District (Southbound)	10:08 a.m.	6:08 p.m.	24 minutes

## Central Link Light Rail



### *Description*

Central Link passenger operations began on July 18, 2009 between Westlake Station and Tukwila International Boulevard Station, and service was extended southward 1.7 miles to the SeaTac/Airport Station on December 18, 2009. Ridership during August 2009, the first full calendar month of operation, was 432,272 passenger boardings. This increased to 694,336 boardings in August 2010, an increase of over 60 percent.

First year ridership on Central Link followed a pattern similar to that seen in other cities with new light rail systems. Initial ridership levels were higher than expected as many people tried the service for the first time. The “novelty” factor soon wore off and the number of boardings dropped, but started to increase again in the Fall of 2009 when changes to connecting Metro bus service improved access to light rail in Rainier Valley and on Beacon Hill. The elimination of paper transfers on January 1 appeared to have little effect on connecting ridership as many riders switched to the new “ORCA” fare cards. With the opening of SeaTac/Airport Station in late December, followed by the implementation of South King County bus-rail connections in early February, ridership followed a steady upward trend. Weekend ridership has been unexpectedly strong, with the number of boardings on an average weekend day representing about 67 percent of average weekday boardings. During July, Saturday boardings were almost 98 percent of the weekday average, reflecting the strong ridership to Saturday sports events during that month.

Starting at the June 12, 2010 service change, the first southbound train of the day departs from Westlake Station at 5:05 a.m. Monday through Saturday, allowing travelers to reach the airport with ample time to catch 7:00 a.m. flights. This change required a slight reduction in the Downtown Transit Tunnel maintenance “window” to accommodate a pre-5:00 a.m. train movement from the Link Operations & Maintenance Facility to the Pine Street terminus.

The South King County bus-rail service restructuring that took place in February 2010 was not without controversy. Central Link replaced the downtown Seattle-SeaTac Airport segment of Route 194, a popular Metro bus route that carried over 5,000 weekday boardings at its peak. A customer survey conducted in late March indicated that many riders were generally more satisfied with Route 194 than light rail due to the increased number of stops on Central Link, the shorter Route 194 running time and inconvenient transfers required to reach points south of the airport.

The implementation of King County Metro’s “Rapid Ride” bus rapid transit service along the SR 99 corridor will help to address concerns about bus-rail transfers. Starting Oct. 2, 2010, Metro’s Line A provides fast, frequent service at all times between the Tukwila International Boulevard Station and Federal Way Transit Center. Line A will operate every 15 minutes from approximately 4:00 a.m. until 10:00 p.m. every day of the week, with service increasing to every 10 minutes during weekday peak periods. Late night service after 10:00 p.m. will operate every 30 minutes.

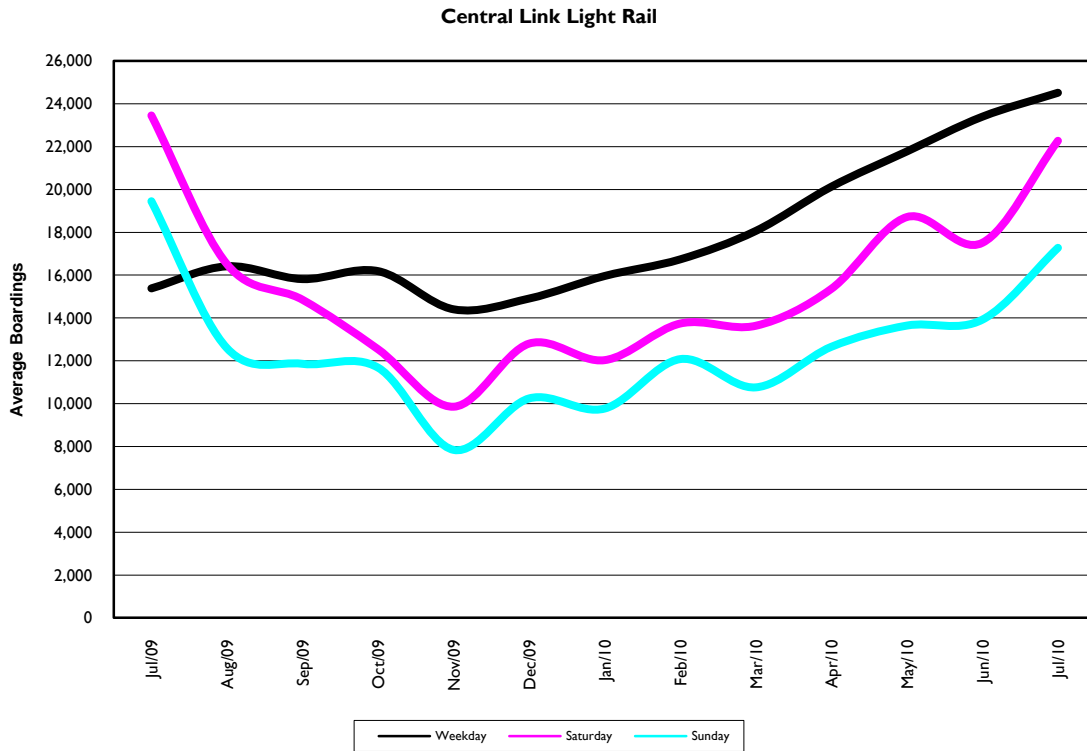
The March 2010 customer survey\* provided a snapshot of other Central Link passenger characteristics:

- About 60 percent of respondents said they used Orca cards, Puget Pass, Flexpass, U Pass or other forms of pre-paid fare media. Only 39 percent purchased tickets at station ticket vending machines.
- About 34 percent of respondents used bus service to access light rail, and nearly as many (31 percent) said they walked. About 10 percent said they drove to a park-and-ride lot and 5 percent said they drove and parked near a Link station.
- When asked how they travelled before light rail service started, 43 percent of respondents said they used a bus, 17 percent said they drove alone, and 7 percent said that they walked. About 7 percent said they did not make the trip before light rail service started.

\*“February 2010 Service Change: Before and After Rider Survey,” conducted for Sound Transit and King County Metro by the Gilmore Research Group.

**Performance Assessment**

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		21,766	17,310	13,437
Passengers per Train Trip	81.06	83.18	80.89	68.33
Passengers per Car Trip	40.53	41.59	40.42	34.17
Passengers per Train Revenue Hour	102.86	105.55	102.62	86.75
Passengers per Car Revenue Hour	51.43	52.78	51.28	43.38
O&M Cost per Passenger	\$6.77	\$6.60	\$6.79	\$8.03



## Service Change Concepts

No service changes are proposed at this time. However, operating experience has shown that night and weekend ridership levels do not require two-car trains. Beginning Oct. 2, 2010, one-car trains began operating after about 8:00 p.m. and all day Saturdays and Sundays. Two-car trains continue to be operated on evenings and weekend days when major events are scheduled, such as Seahawks football games. This change will result in energy and maintenance cost savings and will reduce unnecessary wear and tear on the light rail vehicles.

Detailed ridership information by station is shown in Appendix E. For information on future light rail service extensions, please see Chapter 3.

### *Central Link Frequencies*

Weekday Time Period	Headways (in minutes)
5:00 a.m. – 6:30 a.m.	15
6:30 a.m. – 9:00 a.m.	7 to 8
9:00 a.m. – 3:30 p.m.	10
3:30 p.m. – 6:30 p.m.	7 to 8
6:30 p.m. – 10:00 p.m.	10
10:00 p.m. – 1:00 a.m.	15
Saturday Time Period	Headways (in minutes)
5:00 a.m. – 8:30 a.m.	15
8:30 a.m. – 10:00 p.m.	10
10:00 p.m. – 1:00 a.m.	15
Sunday/Holiday Time Period	Headways (in minutes)
6:00 a.m. – 8:30 a.m.	15
8:30 a.m. – 10:00 p.m.	10
10:00 p.m. – 12:00 mid	15

**Central Link Travel Times based on the June 2010 Schedule (in minutes)**

From: To:	Westlake	International District/Chinatown	Stadium	SODO	Beacon Hill	Mount Baker	Columbia City	Othello	Rainier Beach	Tukwila International Blvd	SeaTac/Airport
Westlake	-	6	8	10	13	15	18	22	25	34	38
International District/Chinatown	8	-	2	4	7	9	12	16	19	28	32
Stadium	10	2	-	2	5	7	10	14	17	26	30
SODO	12	4	2	-	3	5	8	12	15	24	28
Beacon Hill	15	7	5	3	-	2	5	9	12	21	25
Mount Baker	17	9	7	5	2	-	3	7	10	19	23
Columbia City	20	12	10	8	5	3	-	4	7	16	20
Othello	24	16	14	12	9	7	4	-	3	12	16
Rainier Beach	27	19	17	15	12	10	7	3	-	9	13
Tukwila International Blvd	36	28	26	24	21	19	16	12	9	-	4
SeaTac/Airport	38	30	28	26	23	21	18	14	11	2	-



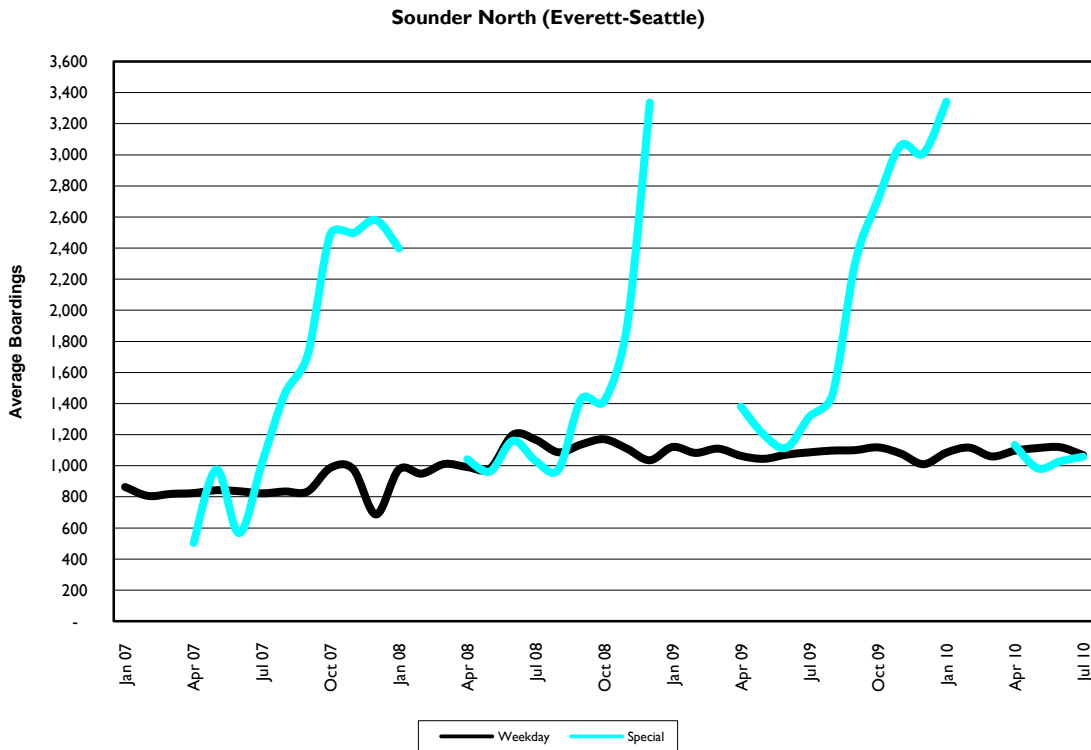


**Performance Assessment**

2nd Quarter 2009	Overall	Weekday	Special Event
Daily Boardings		1,054	1,190
Passengers per Train Trip	143.29	131.53	520.44
Passengers per Car Trip	50.23	46.96	115.65
Passengers per Train Revenue Hour	145.72	133.76	529.26
Passengers per Car Revenue Hour	51.08	46.96	117.61
Purchased Transportation Cost per Boarding	\$19.00	\$20.33	\$8.25

2nd Quarter 2010	Overall	Weekday	Special Event
Daily Boardings		1,110	1,023
Passengers per Train Trip	155.31	139.89	511.50
Passengers per Car Trip	49.59	45.21	127.88
Passengers per Train Revenue Hour	157.95	142.26	520.17
Passengers per Car Revenue Hour	50.43	45.97	130.04
Purchased Transportation Cost per Boarding	\$18.49	\$20.28	\$7.17

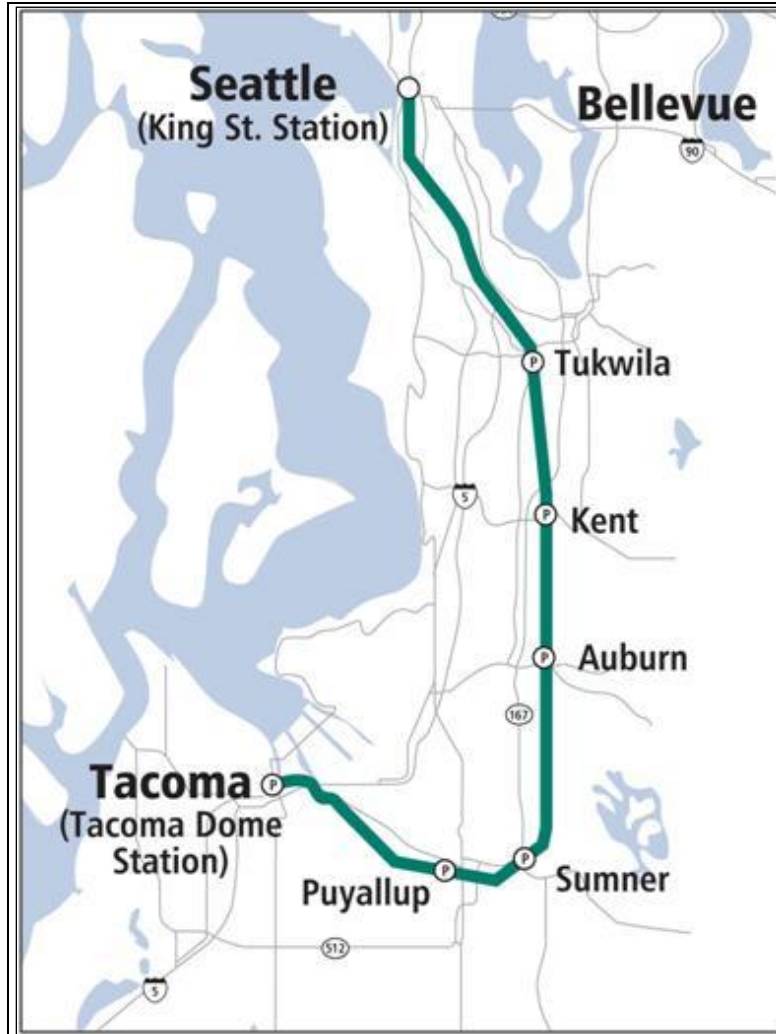
2009-2010 Comparison	Overall	Weekday	Special Event
Daily Boardings		+5%	-14%
Passengers per Train Trip	+8%	+6%	-2%
Passengers per Car Trip	-1%	-4%	+11%
Passengers per Train Revenue Hour	+8%	+6%	-2%
Passengers per Car Revenue Hour	-1%	-2%	+11%
Purchased Transportation Cost per Boarding	-3%	<-1%	-13%



## **Service Change Concepts**

North Line ridership trends have been relatively stable during 2010. Weekday ridership averages about 1,100 boardings. Park-and-ride capacity on the line was increased by 432 stalls in mid-2009 with the opening of the east lot at Everett Station, and improved parking and bus facilities will be completed at Edmonds Station in early 2011. At this time, no service changes are proposed for the North Line. The 2012 Service Implementation Plan will evaluate trip-level productivity for both commuter and special event service.

## Tacoma-Seattle (South Line)



### *Description*

The Sounder South Line began operation in September 2000 with two peak period round trips operating northbound in the morning to Seattle and southbound in the afternoon to Tacoma. Trains use BNSF Railway and Tacoma Rail tracks between Tacoma Dome Station and Seattle, with intermediate station stops at Puyallup, Sumner, Auburn, Kent and Tukwila.

Since 2000, Sound Transit has worked closely with BNSF to gradually ramp up service levels as Sound Transit funded track and signal improvements were constructed along the line. Each new round trip represents a major public investment in both capital and O&M costs. With the start-up of the ninth South Line round trip in June 2009, Sound Transit completed implementation of the full service levels called for in the 1996 Sound Move Plan. Weekday commuter service consists of seven “peak direction” trips operating northbound during the morning commute period from Tacoma to Seattle, and seven corresponding return trips operating during the afternoon commute period from Seattle to Tacoma. In addition, there are two “reverse direction” trips that operate southbound from Seattle to Tacoma in the morning and northbound from Tacoma to Seattle in the afternoon. Weekday ridership on the South Line currently averages about 8,300 boardings. South

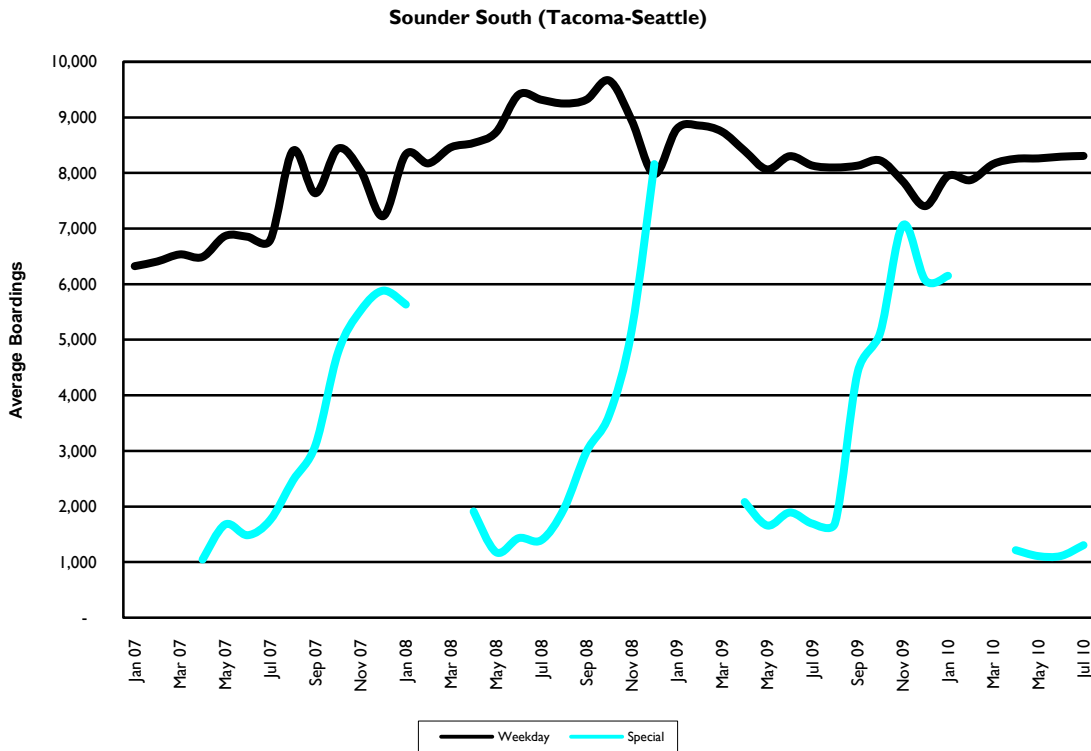
Line trains also serve major sports and entertainment events, including selected Mariner baseball games and Seahawks football games.

**Performance Assessment**

2nd Quarter 2009	Overall	Weekday	Special Event
Daily Boardings		8,261	1,817
Passengers per Train Trip	499.46	495.03	795.00
Passengers per Car Trip	72.15	71.52	113.57
Passengers per Train Revenue Hour	507.93	503.42	808.47
Passengers per Car Revenue Hour	73.37	72.73	115.50
Purchased Transportation Cost per Boarding	\$13.23	\$13.35	\$8.40

2nd Quarter 2010	Overall	Weekday	Special Event
Daily Boardings		8,271	1,126
Passengers per Train Trip	463.40	461.49	562.77
Passengers per Car Trip	66.20	65.93	80.40
Passengers per Train Revenue Hour	471.42	469.48	572.31
Passengers per Car Revenue Hour	67.35	67.07	81.76
Purchased Transportation Cost per Boarding	\$13.85	\$13.90	\$11.41

2009-2010 Comparison	Overall	Weekday	Special Event
Daily Boardings		+<1%	-38%
Passengers per Train Trip	-7%	-7%	-29%
Passengers per Car Trip	-8%	-8%	-29%
Passengers per Train Revenue Hour	-7%	-7%	-29%
Passengers per Car Revenue Hour	-8%	-8%	-29%
Purchased Transportation Cost per Boarding	+5%	+4%	+36%



## **Service Change Concepts**

Unfortunately, the implementation of the full “Sound Move” service levels in June 2009 followed Sounder’s first ridership decline as the region was impacted by the economic recession. Primarily serving journey-to-work commuters, Sounder ridership is influenced by employment levels more than other Sound Transit services. The South Line, representing about 88 percent of total Sounder boardings, reached a ridership peak in the fall of 2008 and then declined as gasoline prices moderated and employment levels dropped in downtown Seattle. Second Quarter 2010 ridership on the South Line was up slightly compared with the same period in 2009, an encouraging sign. Staff predicts that South Line ridership will stabilize during 2011 and begin to increase significantly with the extension of service to South Tacoma and Lakewood in 2012 (see Chapter 3). No changes to South Line service are proposed for 2011.

To address a chronic shortage of parking at Puyallup Station, Sound Transit partnered with the Puyallup Fair to develop a permanent 217-stall parking facility about ½ mile south of the station. The new facility, called the “Red Lot,” is connected to the station by Pierce Transit Route 495, which provides timed connections with Sounder trains. The Red Lot opened for commuters on Oct. 4, 2010.

## ST Express Bus

Many factors have influenced ST Express service during the past year. Despite the economic recession, ridership on ST Express buses increased slightly during the first half of 2010. Year-to-date boardings through June totaled 6.3 million, about a 2 percent increase over the same period in 2009. However, this growth rate is below expectations because of a 5 percent increase in service hours implemented during the first half of the year. The elimination of paper transfers on January 1, 2010, together with a fare increase in June, clearly were factors that negatively affected bus ridership. A major service restructuring in the South Corridor has increased ridership, but thus far has resulted in lower productivity.

For the 2011 agency budget and SIP process, each service provided by Sound Transit has undergone a thorough review for opportunities to reduce operating expenses. Cost reduction initiatives were developed for ST Express that focus on several approaches: Deferring some remaining ST2 service improvements, implementing schedule efficiencies, reducing service levels, and where feasible, transitioning to lower-cost service providers. The 2011 SIP focuses on ST2 service deferrals, schedule efficiencies and service reductions.

### *ST2 Service Deferrals*

With the recent slowdown in ST Express ridership growth, three of the planned ST2 service enhancements are no longer needed and significant economies can be realized by deferring implementation. ST2 service improvements will be deferred on **Route 513 Everett-Seattle**, **Route 554 Issaquah-Seattle**, and **Route 566 Auburn-Overlake**. These enhancements were previously approved by the Board as part of the 2010 SIP, but as part of the 2011 SIP they will be deferred. Based on current passenger loads, ridership trends and customer incentives, staff recommended that ST2 enhancements go ahead on **Route 511 Ash Way-Seattle**, **Route 522 Woodinville-Seattle**, and **Route 532 Everett-Bellevue** as previously approved by the Board.

More detailed information on the deferrals is in the individual route sections of this chapter.

- **Total savings from ST2 service deferrals:** \$2.8 million per year.

### *Schedule Efficiencies*

During the past year, the expanded deployment of automatic passenger counters and more sophisticated scheduling software has allowed staff to evaluate bus schedules and ridership at a higher level of detail than before. Working closely with schedule planners at the partner transit agencies, Sound Transit staff identified schedule efficiencies and minor trip cuts that are being implemented administratively to reduce costs. These actions include reductions in scheduled running times, minimizing layover times at terminals, interlining routes with one another to reduce platform time and blocking driver runs more efficiently. Schedule efficiencies were implemented in June 2010 on Route 540, and were implemented on Routes 522, 545, 574, 586 and 590-594 in October 2010.

- **Total savings from schedule efficiencies:** \$1.2 million per year.

### *Service Reductions*

Using guidelines from the Board-approved “Service Standards and Performance Measures” (described in the next section of this chapter), staff identified routes, route segments and time periods where ridership and productivity was significantly below average for the ST Express system. Specific proposals were developed to reduce or eliminate low-productivity service to achieve operating savings. As a result of public outreach and further collaboration with King

County Metro, the original service changes proposed for Routes 540 and 554 were revised and a proposal to reduce service on Route 545 was dropped. The approved service changes are described in detail in the individual route sections of this chapter, and are summarized for quick reference in the Executive Summary and in Chapter 1.

- **Total estimated savings from ST Express service reductions:** \$3.5 million per year.

The combined savings from schedule efficiencies, shifting to lower-cost service providers, ST2 service deferrals and service reductions total approximately \$7.5 million during the first full year of implementation, after allowing for reductions in fare revenue. The effect these changes have on the total amount of bus service provided is summarized in the table below, which shows bus platform hours projected in the 2011 SIP compared with the 2010 SIP:

**Comparison of Annual Bus Service Platform Hours: 2010 SIP and 2011 SIP**

	2008	2009	2010	2011	2012	2013
<b>2010 SIP</b>	635,753	661,344	695,828	748,407	752,079	748,232
<b>2011 SIP</b>	635,753	657,938	690,193	706,137	698,333	697,593

Projected operations and maintenance costs are shown in Appendix A, Table A-6. With the service deferrals and reductions, the total ST Express bus fleet will total 259 vehicles by the end of 2011, rather than 280 as envisioned in last year’s SIP. See the revised ST Express Fleet Plan in Appendix B, Table B-1.

***Interpreting the Data: ST Express Service Standards & Performance Measures***

The Sound Transit Board approved updated Service Standards and Performance Measures for ST Express in 2010. The standards are used to rate the performance of individual ST express routes and to help determine when remedial actions may be needed. The performance rating process follows two key steps: The first step is to identify how each route performs in terms of ridership and cost effectiveness compared with the system as a whole. The second step is a detailed evaluation of each route that is either not performing up to standard or is performing well above average. Continuous substandard performance for more than two years could result in a number of potential actions including frequency reduction, service span revision, rescheduling, route restructuring, extensive marketing efforts or elimination. Conversely, above average performance could result in increased service levels or a route restructuring to provide more capacity, particularly if ridership shows a continuing upward trend and improvements are affordable.

The key productivity measures used in the Service Standards are passengers per revenue hour, passengers per one-way trip, and purchased transportation cost per boarding. These measures are readily understandable, easy to calculate, and, for the most part, used by other transit systems. The period of time that performance measures are calculated will relate to internal and external reporting requirements. Therefore, the measures are compiled on a monthly and quarterly basis. Comparisons with the previous month, the same month for the previous year, and with a two or three year running average are tallied to identify trends.

Starting with the 2009 Service Implementation Plan, an additional metric was presented for each ST Express route: passenger miles per revenue hour, denoting total average distance carried for all passengers per hour of service operated. This metric, while less common in the transit field, better represents the unique system structure and trip patterns of ST Express. In the SIP, each route is be compared with the ST Express system average for passenger miles per revenue hour. Ranges for this metric are shown below the Board-approved metrics, at the bottom.

For consistency with previous Service Implementation Plans, this year's SIP compares data from the first two quarters of 2010 with the same period a year earlier. The following tables indicate the level of systemwide performance for each ST Express performance measure:

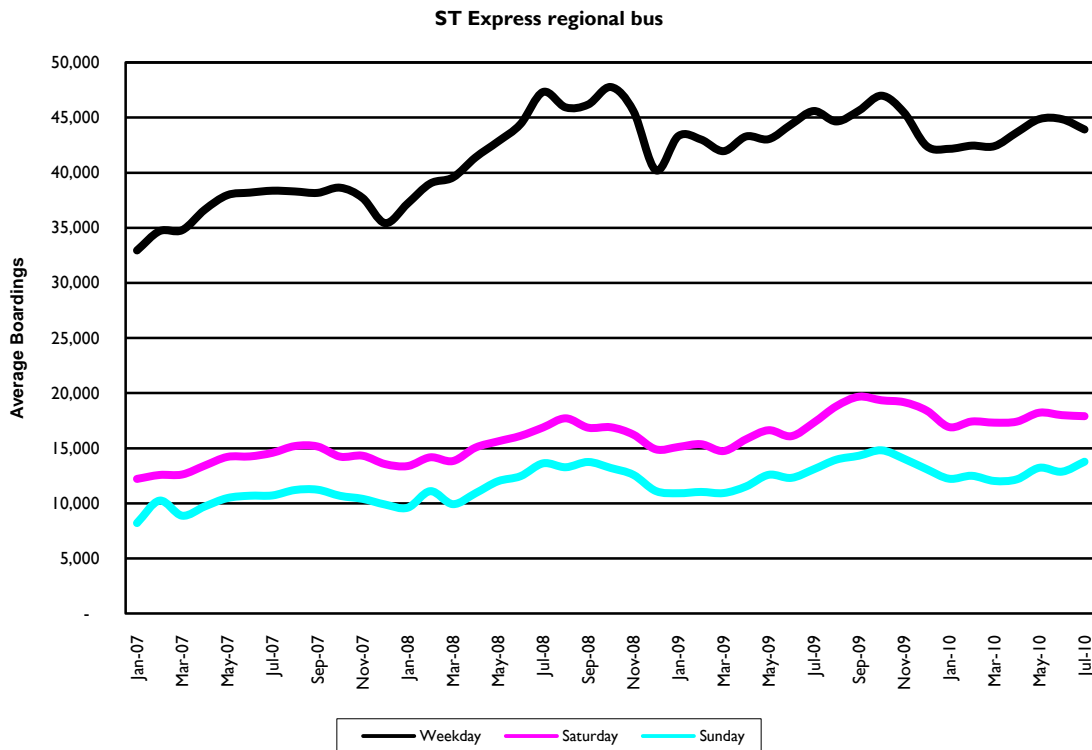


**ST Express- Systemwide Performance 2009-2010**

2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		43,593	16,220	12,221
Passengers per Trip	31.03	32.01	28.24	22.55
Passengers per Revenue Hour	24.31	24.98	22.68	17.95
Purch.Transport. Cost per Brding	\$5.78	\$5.72	\$5.52	\$6.95

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		43,267	17,638	12,681
Passengers per Trip	28.60	29.48	26.68	20.83
Passengers per Revenue Hour	23.12	23.66	22.54	17.47
Purch.Transport. Cost per Brding	\$6.21	\$6.08	\$6.26	\$8.06

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		<-1%	+9%	+4%
Passengers per Trip	-8%	-8%	-6%	-8%
Passengers per Revenue Hour	-5%	-5%	<-1%	-3%
Purch.Transport. Cost per Brding	+7%	+6%	+13%	+16%



The following tables define the ranges for each measure to determine the productivity for each ST Express route. Please note the color coding for each performance rating.

**Performance Rating Categories**

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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Overall Service	Boardings per Trip	Boardings per Revenue Hour	Purchased Transport. Cost per Boarding
Good	> 35.75	> 28.60	< \$4.66
Satisfactory	28.60 – 35.75	23.12 – 28.60	\$4.66 - \$6.21
Marginal	21.45 – 28.60	17.34 – 23.12	\$6.21 - \$7.76
Unsatisfactory	< 21.45	< 17.34	> \$7.76

Weekday Service	Boardings per Trip	Boardings per Revenue Hour	Purchased Transport. Cost per Boarding
Good	> 36.85	> 29.58	< \$4.56
Satisfactory	29.48 – 36.85	23.66 – 29.58	\$4.56 - \$6.08
Marginal	22.11 – 29.48	17.45 – 23.66	\$6.08 - \$7.60
Unsatisfactory	< 22.11	< 17.45	> \$7.60

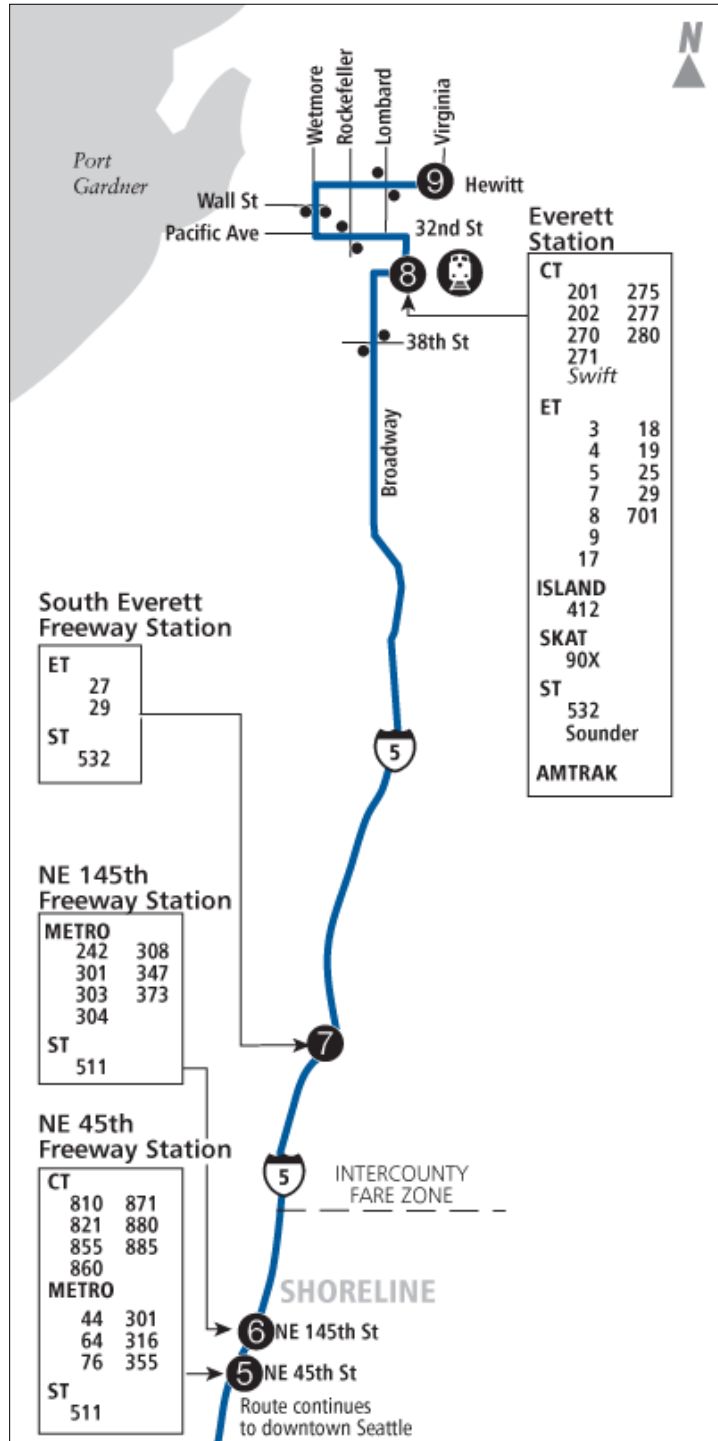
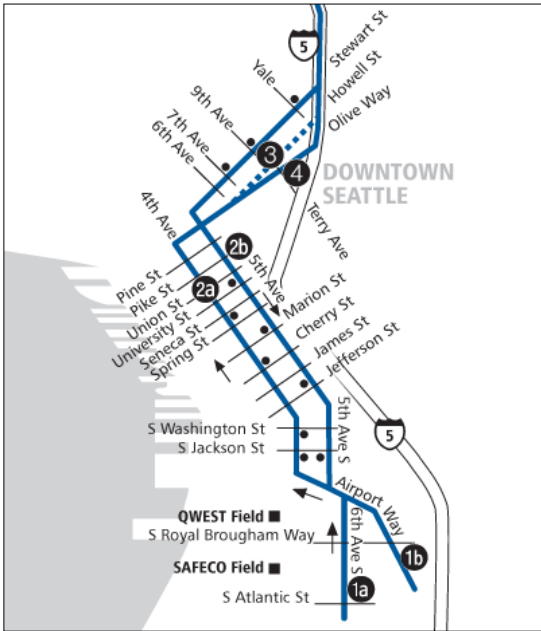
Saturday Service	Boardings per Trip	Boardings per Revenue Hour	Purchased Transport. Cost per Boarding
Good	> 33.35	> 28.18	< \$4.70
Satisfactory	26.68 – 33.35	22.54 – 28.18	\$4.70 - \$6.26
Marginal	20.01 – 26.68	16.91 – 22.54	\$6.26 - \$7.83
Unsatisfactory	< 20.01	< 16.91	> \$7.83

Sunday and Holiday Service	Boardings per Trip	Boardings per Revenue Hour	Purchased Transport. Cost per Boarding
Good	> 26.04	> 21.84	< \$6.05
Satisfactory	20.83 – 26.04	17.47 – 21.84	\$6.05 - \$8.06
Marginal	15.62 – 20.83	13.10 – 17.47	\$8.06 - \$10.08
Unsatisfactory	< 15.62	< 13.10	> \$10.08

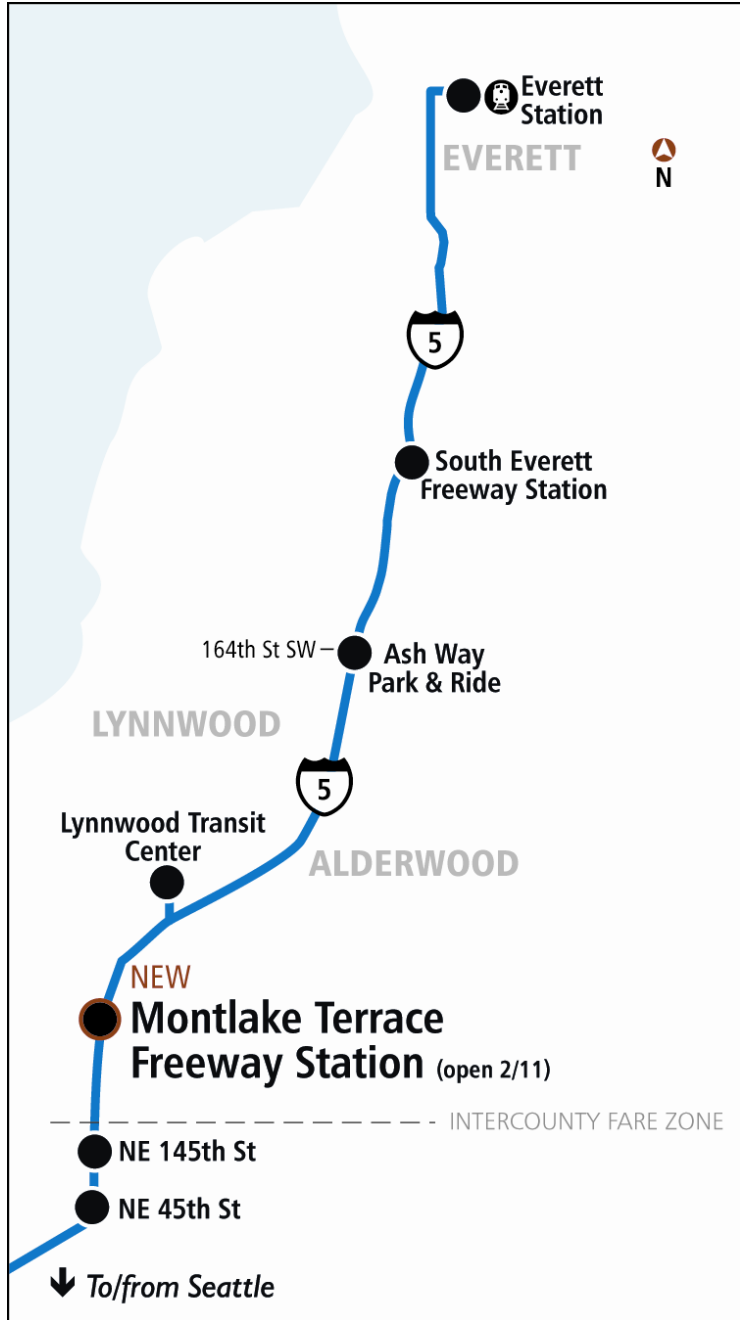
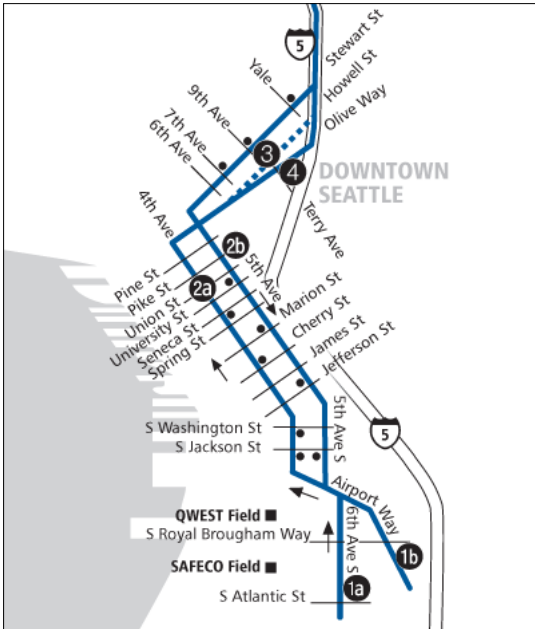
Also, as mentioned above, an additional performance measure will be presented, showing passenger miles per revenue hour for each ST Express route. Below is a table denoting productivity standards for this additional metric.

Overall Service	Passenger Miles per Revenue Hour (Percentage of System Average)
Well Above Average	> 125%
Above Average	100-125%
Below Average	75-100%
Well Below Average	< 75%

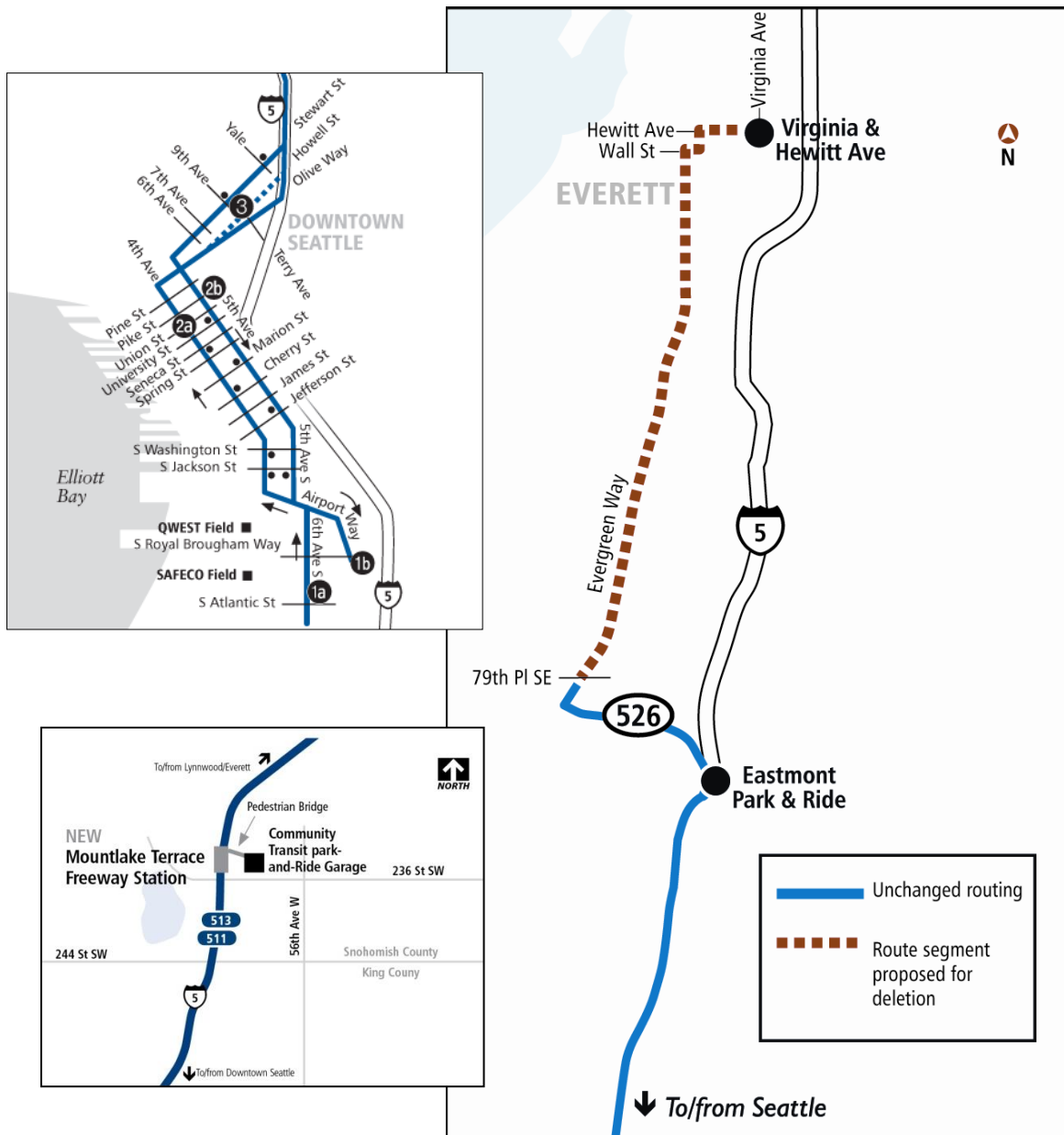
# Route 510/513: Everett – Seattle



Route 510



**NEW Route 512-June 2011**



### Route 513 June 2011 Change

#### Description

Routes 510 and 513 Everett-Seattle Express began operation as peak period-only services in September 1999. Route 510 operates generally along I-5, with stops in downtown Everett, Everett Station, South Everett Park-and-Ride, I-5 at NE 145th Street, and I-5 at NE 45th (the 145th and 45th stops are not served during the peak period in the peak direction). Route 513 is a commuter service that operates only during weekday mornings and afternoons. Like Route 510, it connects downtown Everett with Seattle but makes a number of intermediate stops along Evergreen Way and at the Eastmont Park-and-Ride. While Route 513 has remained a commuter route, Route 510 has expanded from a weekday peak-only service to a major regional route with service all day, seven days a week in both directions. Beginning in September 2006, Route 510 midday and Saturday service improved from every 60 minutes to every 30 minutes, and additional weekday morning peak trips were also added to accommodate overloads. Sunday service was improved from every 60 minutes to every 30 minutes in September 2009.

In September 2008, a major service restructure was implemented with the opening of the new 400-stall South Everett Park-and-Ride Lot. This lot, located in the median of I-5 at 112th Street, is served by Route 510 while Route 513 continues to serve the Eastmont Park-and-Ride, effectively splitting the park-and-ride market between the two facilities. With the September 2008 changes, four additional round trips were added to Route 510 to address passenger overloads, and travel times were reduced by about five minutes each way by using new HOV ramps to access the South Everett Park-and-Ride Lot. The South Everett lot is now filled to capacity and some Route 510 trips continue to be overloaded during peak periods. As a part of the implementation of ST2 hours, three new Route 513 trips were added in June 2009 as an incentive for more commuters to use the Eastmont Park-and-Ride Lot. Route 513 will begin serving the new Mountlake Terrace Freeway Station when it opens in early 2011 and this is expected to increase the route's ridership and productivity.

***Performance Assessment***

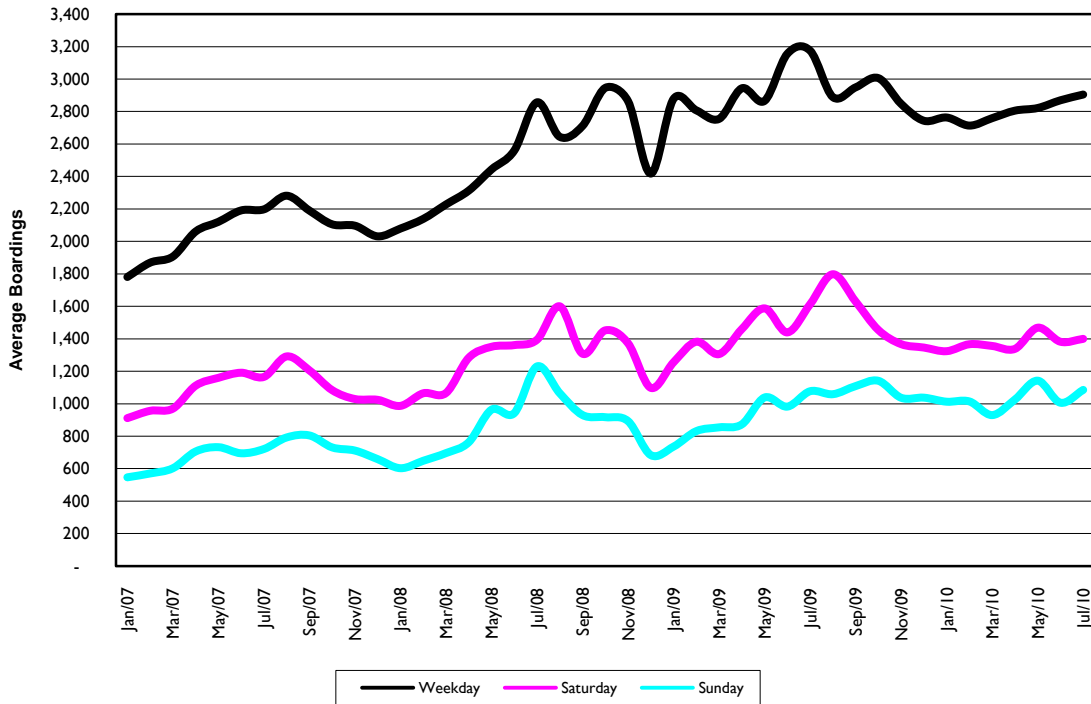
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,193	1,503	975
Passengers per Trip	34.54	36.56	24.92	27.10
Passengers per Revenue Hour	30.13	31.22	23.81	26.35
Purch.Transport. Cost per Brding	\$5.47	\$5.36	\$6.38	\$5.89
Route Assessment	2.00	2.00	2.67	1.67

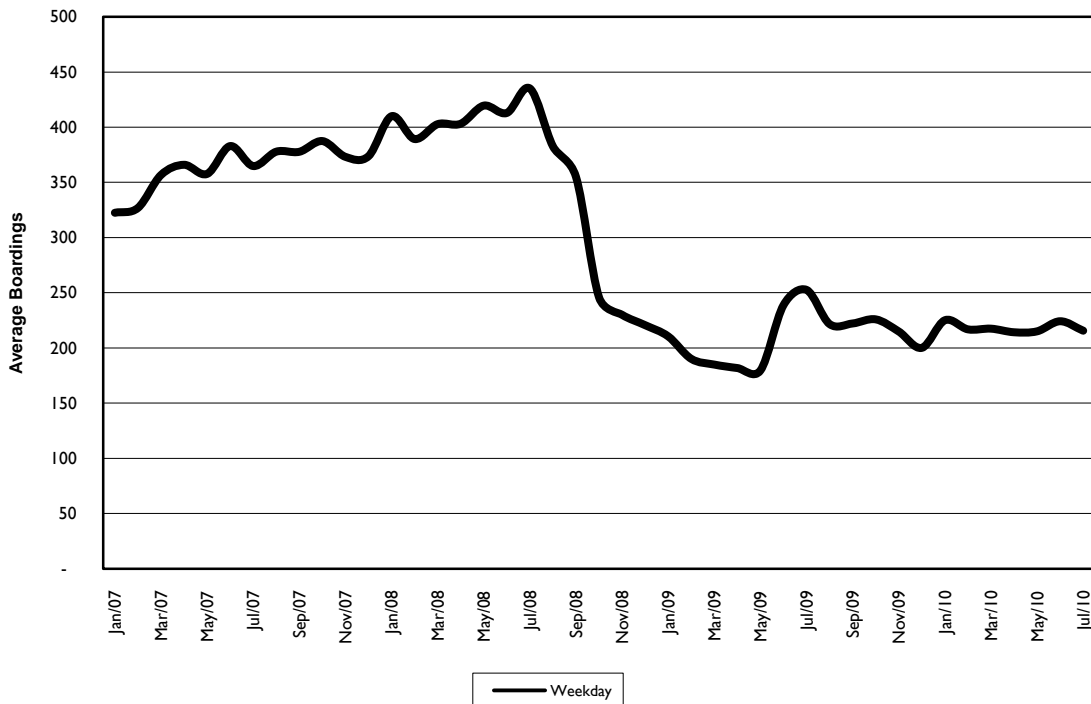
2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,050	1,402	1,070
Passengers per Trip	30.85	33.90	22.98	17.55
Passengers per Revenue Hour	26.99	28.88	22.19	16.94
Purchased Transport. Cost per Brding	\$6.31	\$5.63	\$9.01	\$11.83
Route Assessment	2.33	2.00	3.33	3.33

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-5%	-7%	+10%
Passengers per Trip	-11%	-7%	-8%	-35%
Passengers per Revenue Hour	-10%	-7%	-7%	-36%
Purch.Transport. Cost per Brding	+15%	+5%	+41%	+100%

Route 510 (Everett-Seattle)



Route 513 (Everett-Seattle)



The large drop in Route 513 boardings starting in September 2008 is explained by the opening of the South Everett Park-and-Ride Lot. Many riders switched from using the Eastmont Park-and-Ride Lot to the South Everett lot, which is not served by Route 513. Since that time, Route 513 ridership has made a slow recovery but is still not up to its earlier levels.

***Passenger Activity by Time Period***

Route 510 Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Northbound						
Pass/Trip	No service	30.26	31.30	45.50	38.53	19.26
Pass/ Rev Hr		29.15	28.75	35.42	34.92	19.93
Southbound						
Pass/Trip	41.36	56.90	32.11	37.79	28.61	18.77
Pass/ Rev Hr	40.24	46.01	27.49	32.09	26.68	18.16

Route 510 Weekday	Southbound via Express Lanes	Northbound via Express Lanes
Pass/Trip	51.36	46.78
Pass/ Rev Hr	44.38	36.96

Route 513 Weekday	AM Peak Southbound	PM Peak Northbound
Pass/Trip	21.99	24.94
Pass/ Rev Hr	16.77	16.56



## **Service Change Concepts**

### ***Route 510***

As noted in the Description section above, Sunday service on Route 510 was doubled from every 60 minutes to every 30 minutes in September 2009. While Sunday ridership has increased, it has not expanded proportionately to the higher level of service and only serves about 17 passengers per trip, compared with almost 23 passengers per trip on Saturdays and 33 passengers per trip on weekdays. As a result, Sunday productivity is rated as “Marginal” based on Sound Transit’s Service Standards. The outlook for growth of Sunday ridership is limited by the recent decision by Community Transit to drop its Sunday service, depriving the route of CT connections at Everett Station. The action approved in the 2011 SIP will combine Route 510 with Route 511 on Sundays (and on holidays when a Sunday schedule is operated). The combined route, designated Route 512, will operate every 30 minutes throughout the day and into the evening, with the last trip leaving downtown Seattle about 11:30 p.m. Unlike Route 510, Route 512 will start and end at Everett Station and will not serve downtown Everett; however, Everett Transit provides frequent connecting service between these points on Sundays. With this change, passengers boarding in Everett will experience a 10-minute longer one-way travel time, due to the additional stops at Ash Way, Lynnwood Transit Center and Mountlake Terrace; however, with the recent CT service reductions the connection between Everett and Lynnwood may be useful to some customers who otherwise have no reasonable public transit options between these points on Sundays.

While high-capacity articulated coaches would be assigned to all Route 512 trips, the combined ridership of Routes 510 and 511 may exceed the number of seats available on Sundays when major events are scheduled in Seattle. Standees should be expected on these days.

### ***Route 513***

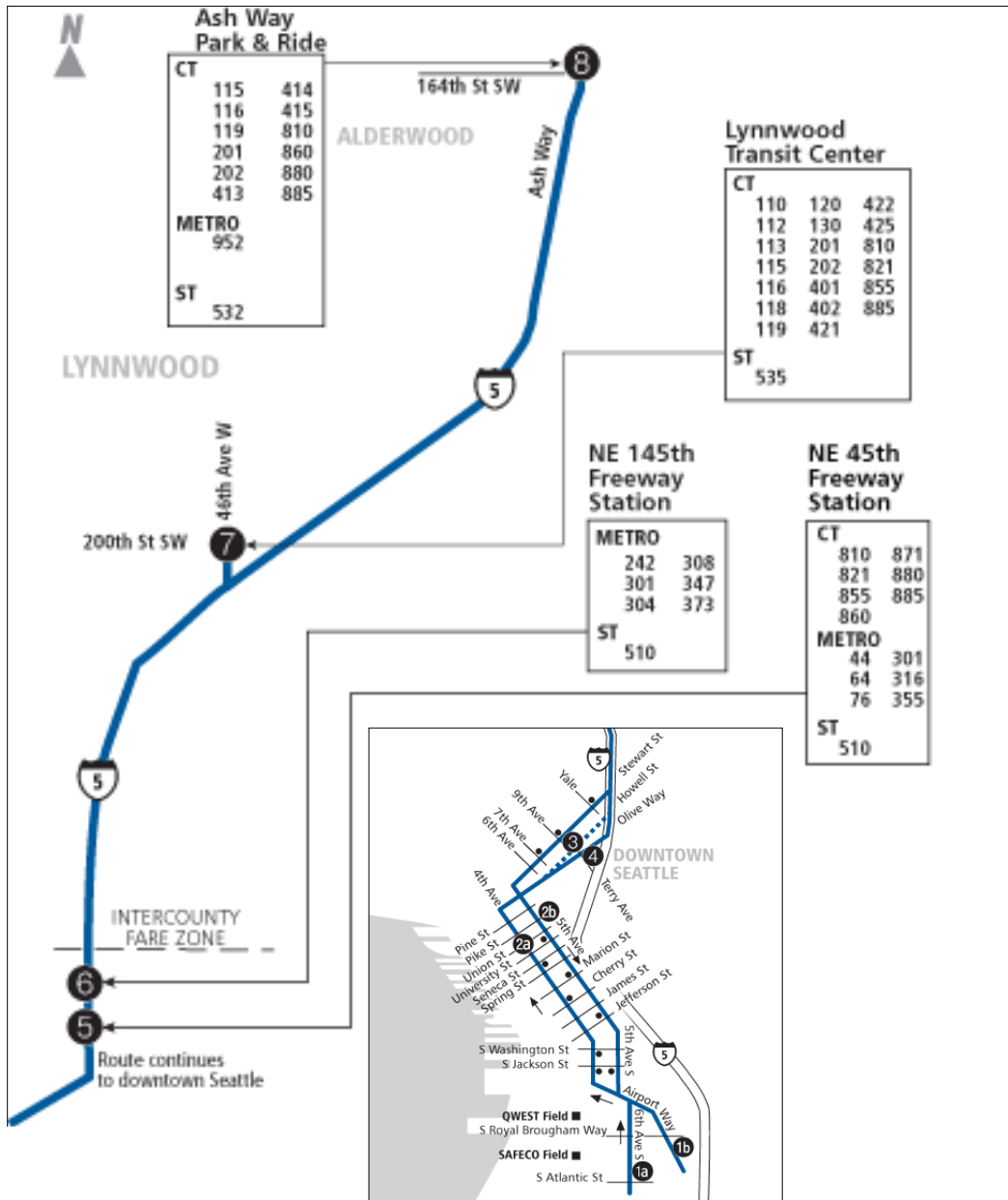
Route 513 is a long-established Seattle commuter route that provides local pick-up and distribution along Rucker Avenue and Evergreen Way in Everett. Route 513 has six morning trips into Seattle and five afternoon trips to Everett. A total of about 43 passengers board at the seven stops along these streets during the morning peak period, and a comparable number of passengers alight in the home-bound direction during the afternoon peak. None of the stops meet Sound Transit’s minimum daily usage criteria of 25 daily boardings as called for in the Service Standards, but this is because the route was inherited from Community Transit in 1999 and not designed by Sound Transit as a totally new regional express service.

In addition to Sound Transit Route 513, Rucker Avenue and Evergreen Way are served by Everett Transit Routes 7 and 9. To reduce duplication of service and achieve cost savings, the segment of Route 513 between the current terminal at Hewitt Avenue at Virginia Avenue and Evergreen Way at 79th Place SE will be deleted. Connections will be scheduled with Routes 7 and 9 at a sheltered bus stop at the new Evergreen Way terminal. Route 513 service levels will remain unchanged, and the route will continue to serve the Eastmont Park-and-Ride Lot, the heaviest passenger stop on the route. Schedule information on Everett Transit Routes 7 and 9 connecting trips will be included in Sound Transit’s service guide to facilitate customer transfers.

### ***Service Change Highlights***

- Combine Route 510 and Route 511 into one route (designated 512) on Sundays and on holidays when a Sunday schedule is operated. Operate Route 512 every 30 minutes during all hours of operation.
- Delete the segment of Route 513 between Hewitt Avenue at Virginia Avenue and Evergreen Way at 79th Place SE, and provide a same-stop transfer connection with ET Routes 7 and 9 at Evergreen Way at 79th Place SE.
- Implement both changes with the June 2011 service change

## Route 511: Ash Way – Seattle



**Route 511**

### Description

Route 511 Ash Way/Lynnwood-Seattle Express began operation as a peak period-only service in September 1999. It operates generally along the I-5 corridor, with intermediate stops at Lynnwood Transit Center, I-5 at NE 145th Street, and I-5 at NE 45th St. (the 145th Street and 45th Street stops are not served during peak periods in the peak direction). The first major service change occurred in September 2003, when service was expanded to operate all day, seven days a week in both directions. Midday and weekend daytime service was improved from hourly to every 30 minutes during 2004. In September 2006, trips were added during selected times at the shoulder of the peak period to accommodate overloads. In September 2008, one southbound trip

was added to meet a 5:30 start time in downtown Seattle. Weekday midday service was improved from every 30 minutes to every 15 minutes starting in September 2009. Route 511 will begin serving the new Mountlake Terrace Freeway Station when it opens in early 2011.

**Performance Assessment**

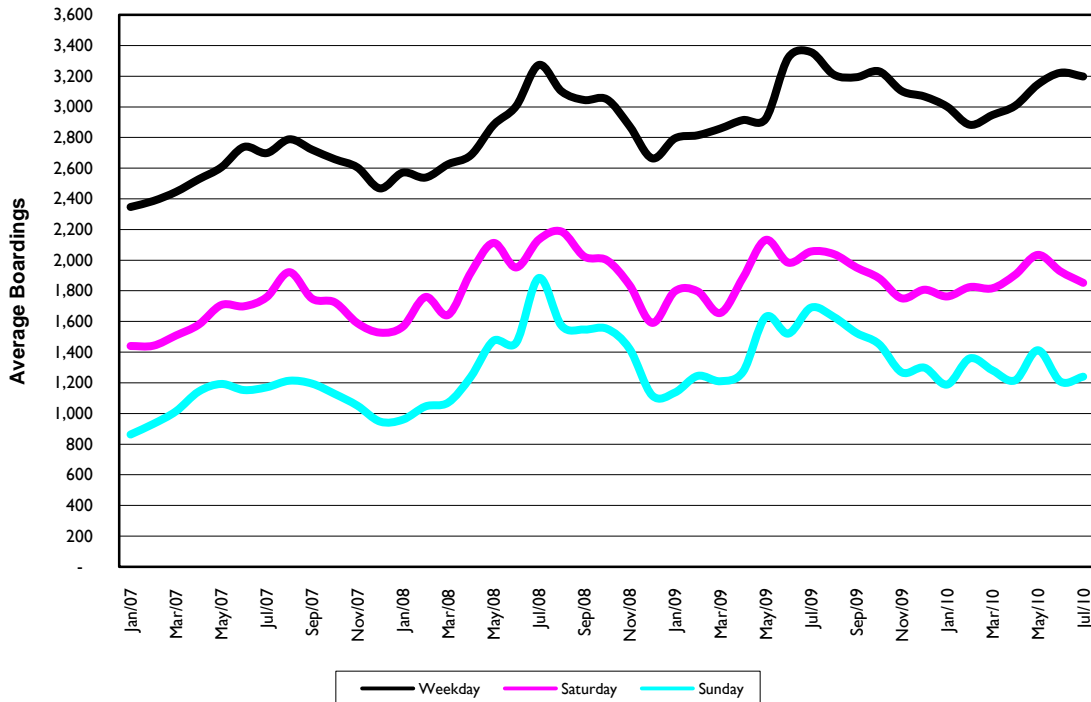
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,056	2,009	1,496
Passengers per Trip	38.45	41.69	33.49	24.94
Passengers per Revenue Hour	47.52	50.59	43.75	32.58
Purch.Transport. Cost per Brding	\$3.81	\$3.64	\$3.94	\$5.27
oute Assessment	1.33	1.00	1.33	1.67

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,124	1,960	1,298
Passengers per Trip	31.04	32.23	32.18	21.33
Passengers per Revenue Hour	37.91	39.15	40.14	26.58
Purch.Transport. Cost per Brding	\$5.02	\$4.61	\$5.67	\$8.59
Route Assessment	1.67	1.67	1.67	2.00

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+2%	-2%	-13%
Passengers per Trip	-19%	-23%	-4%	-15%
Passengers per Revenue Hour	-20%	-23%	-8%	-18%
Purch.Transport. Cost per Brding	+32%	+27%	+44%	+63%

**Route 511 (Ash Way-Seattle)**



***Additional Data Pertinent to Route***

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Northbound						
Pass/Trip	No service	31.56	28.50	49.74	34.88	23.38
Pass/ Rev Hr		38.42	33.23	53.30	42.35	32.62
Southbound						
Pass/Trip	47.59	54.14	27.79	38.50	17.89	19.88
Pass/ Rev Hr	69.65	64.23	34.55	45.89	24.12	27.74

Weekday	Southbound via Express Lanes	Northbound via Express Lanes
Pass/Trip	52.84	50.33
Pass/ Rev Hr	66.66	56.21

**Service Change Concepts (Early 2011)**

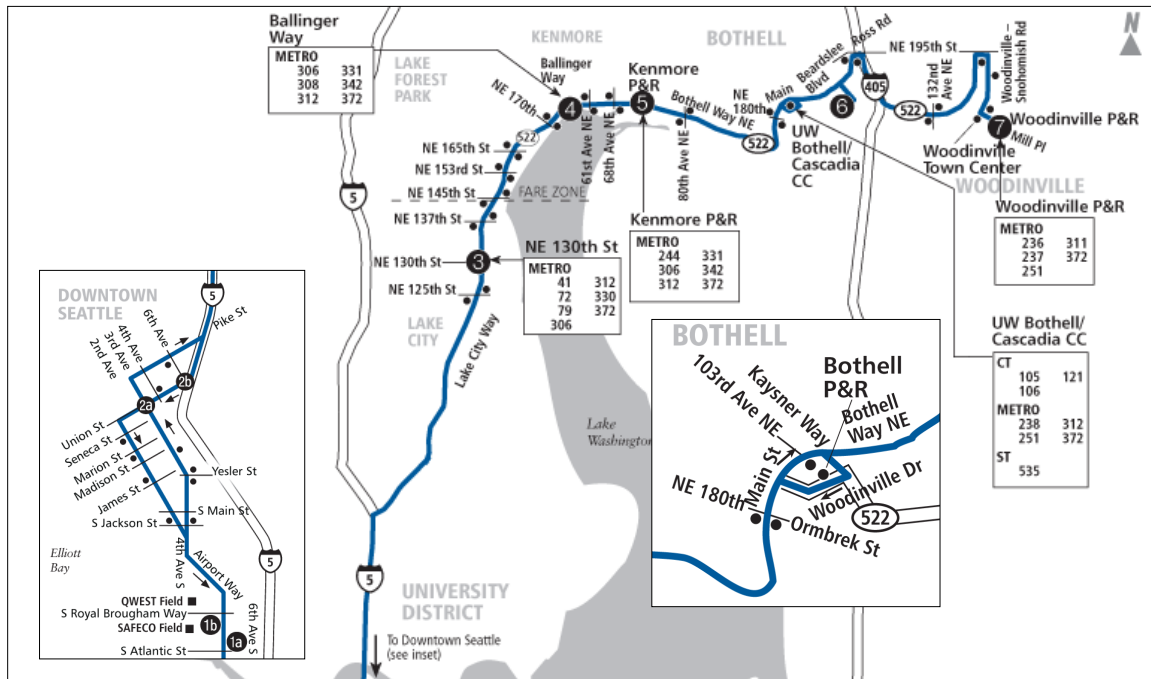
Route 511 is one of Sound Transit’s most productive routes, and ridership levels have remained stable or increased slightly during the first half of 2010. The 511 is the core regional route connecting South Snohomish County with downtown Seattle, and makes multiple connections with Community Transit local service at Ash Way Park-and-Ride and Lynnwood Transit Center. As part of the first phase of ST2-funded improvements, Sound Transit increased weekday midday service on Route 511 from every 30 minutes to every 15 minutes in September 2009. The 15-minute frequency will be expanded into the peak periods on weekdays starting in early 2011. In addition, a stop will be added in both directions at the new Mountlake Terrace Freeway Station, adjacent to Community Transit’s 1,000-stall Mountlake Terrace Park-and-Ride garage at I-5 and SW 236th Street. The added travel time with this new stop will be minimal, and the freeway station provides additional connections to local buses as well as increased park-and-ride access.

As noted in the Route 510 section, the approved 2011 SIP includes combining Route 511 with Route 510 on Sundays and on holidays when a Sunday schedule is operated. While this would not affect Route 511 service levels or coverage, it may result in standing load conditions on Sundays when major events are scheduled in Seattle.

***Service Change Highlights***

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Combine Route 510 with Route 511 on Sundays and on holidays when a Sunday schedule is operated, as described in the Route 510 section. The combined Sunday route will be designed Route 512 and will begin operation in June 2011.</li> <li>• The peak period service improvements approved by the Board in the 2010 SIP will be implemented as planned in early 2011 with the opening of the Mountlake Terrace Freeway Station.</li> </ul> |
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## Route 522: Woodinville – Seattle



**Route 522**

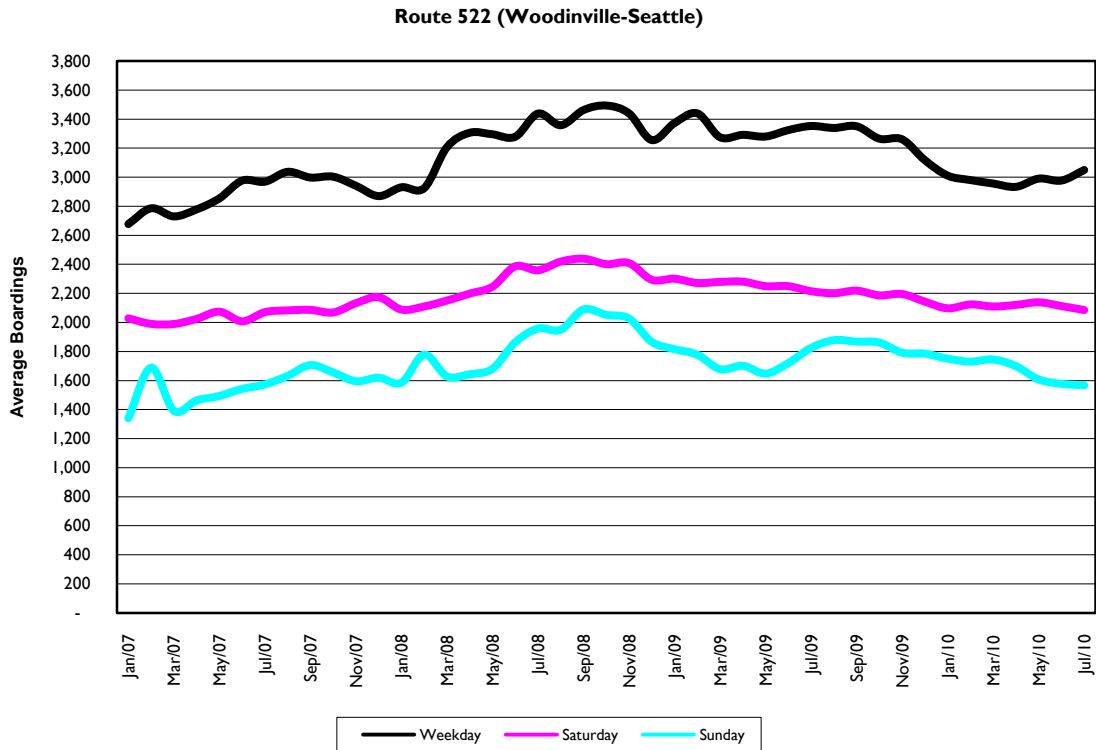
### Description

The Woodinville to Seattle Express began service in September 2002. It operates along the SR-522 and I-5 corridors, with key intermediate stops at UW-Bothell/Cascadia Community College, Kenmore Park-and-Ride, Lake Forest Park, and the Lake City area of Seattle. Service operates all day, seven days a week in both directions. Routing has remained unchanged since start-up, but three additional peak period round trips were added in September 2008 to address overcrowded conditions. Starting with the October 2010 service change, Route 522 was interlined with Route 545 at a common Seattle terminal in the SODO area. This change improved schedule efficiency and will save approximately \$116,000 per year in operating costs.

### Performance Assessment

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,299	2,260	1,684
Passengers per Trip	35.31	37.06	34.24	25.51
Passengers per Revenue Hour	24.53	25.73	23.73	17.87
Purch.Transport. Cost per Brding	\$5.23	\$5.14	\$4.88	\$6.48
Route Assessment	2.00	2.00	2.00	2.33
2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,967	2,125	1,625
Passengers per Trip	31.59	32.60	32.20	24.62
Passengers per Revenue Hour	22.22	22.89	22.79	17.48
Purch.Transport. Cost per Brding	\$5.94	\$5.91	\$5.32	\$6.94
Route Assessment	2.33	2.33	2.00	2.00

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-10%	-6%	-4%
Passengers per Trip	-11%	-12%	-6%	-3%
Passengers per Revenue Hour	-9%	-11%	-4%	-2%
Purch.Transport. Cost per Brding	+14%	+15%	+9%	+7%



***Additional Data Pertinent to Route***

The following table looks at each direction by time period. Trip level information is from the Automatic Passenger Count (APC) information for the Spring 2010 service change and includes boardings within the Ride Free Area.

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Northbound						
Pass/Trip	No service	24.79	31.01	44.90	36.86	26.69
Pass/ Rev Hr		22.33	26.25	35.03	34.20	26.25
Southbound						
Pass/Trip	36.92	42.28	31.19	30.55	20.86	11.61
Pass/ Rev Hr	40.65	39.68	26.10	21.31	20.80	12.01

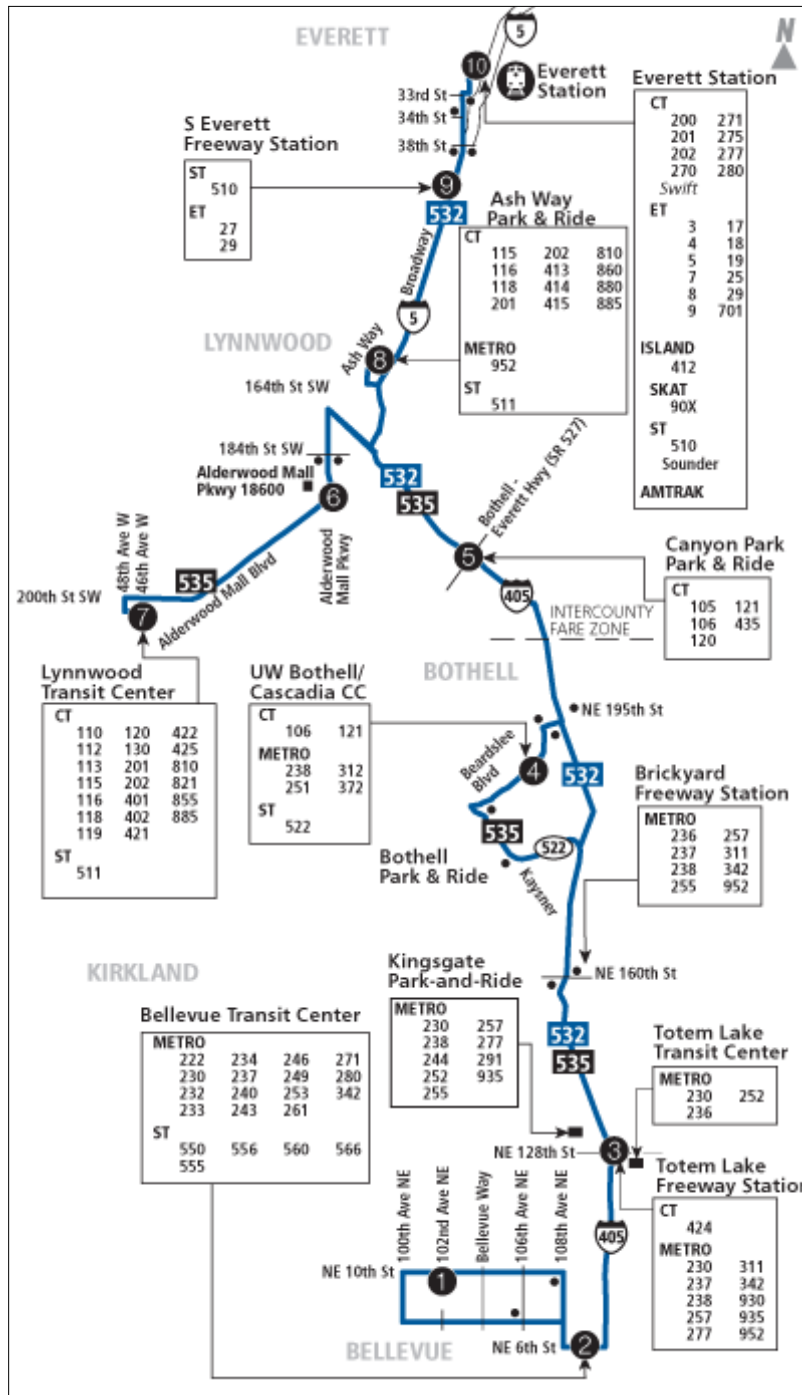
**Service Change Concepts (February 2011)**

Both Sound Transit and King County Metro provide express bus service along the SR 522 corridor. Sound Transit’s Route 522 operates all day, seven days a week in both directions, while King County Metro Routes 306 and 312 operate only during weekday peak periods, southbound in the morning and northbound in the afternoon. The ST and Metro services are similar and many peak period commuters use them interchangeably. The new ST2-funded trips being implemented in February 2011 will be coordinated with Metro schedules to avoid duplication and over-capacity. Traffic congestion on the corridor is expected to increase with the implementation of tolls on the SR 520 bridge in 2011.

***Service Change Highlights***

- The ST2 peak period service improvements approved by the Board in the 2010 SIP will be implemented in February 2011 as originally planned.

## Route 532: Everett – Bellevue



Routes 532 and 535

### Description

The Everett to Bellevue Express operates along the I-5 and I-405 corridors. Service began in September 1999 as two routes, 530 and 532. Many changes to stops and service levels have taken place over the years as clear ridership patterns developed and new transit facilities were completed.



The former Route 530 operated between Everett Mall and downtown Bellevue with nine intermediate stops along the I-5 and I-405 corridors. The 530 was unique in that it operated only during the midday and in the off-peak direction during rush hours, with no weekend service. Route 532 was similar to Route 530, except that it operated peak period/peak direction only and made three fewer stops between Everett Mall and Bellevue, bypassing the Bothell Park-and-Ride, UW-Bothell/Cascadia Community College and Houghton Park-and-Ride. In September 2006, a major restructure was implemented that eliminated Route 530; Route 532 was continued, but the Everett Mall stop was replaced by an extension to downtown Everett and Route 532 service was expanded to operate in both directions during peak hours. Sound Transit's new Canyon Park Freeway Station opened in June 2007, followed by the new Totem Lake Freeway Station in November 2007 (replacing the old Kingsgate stop). These facilities increased average speed and improved on-time performance.

The most recent Route 532 change occurred in September 2008, when the route was modified to serve the new South Everett Freeway Station, located in the median of I-5 at 112th Street in South Everett. This change reduced travel time between Everett and Bellevue by about 5 minutes. At the same time, the segment of Route 532 between downtown Everett and Everett Station was discontinued and additional peak period/peak directional trips were added to address overcrowding.

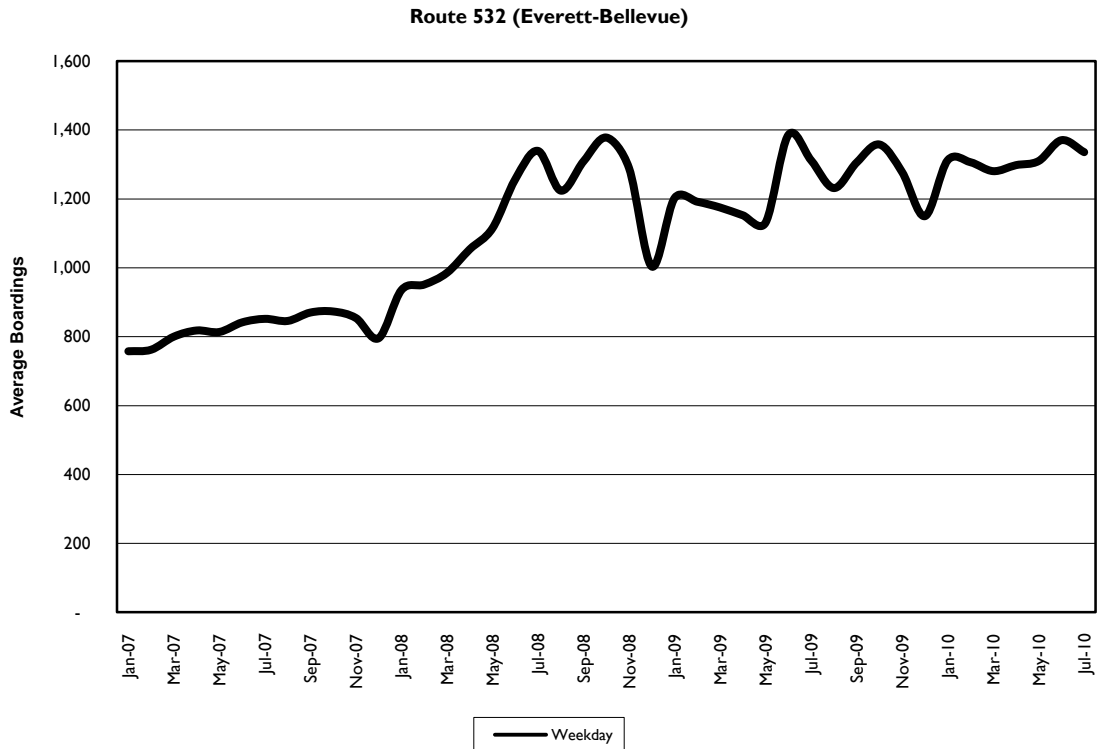
***Performance Assessment***

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,226	No weekend service	
Passengers per Trip	35.65	35.65		
Passengers per Revenue Hour	33.63	33.63		
Purch.Transport. Cost per Brding	\$5.67	\$5.67		
Route Assessment	1.67	1.67		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,327	No weekend service	
Passengers per Trip	34.09	34.09		
Passengers per Revenue Hour	32.59	32.59		
Purch.Transport. Cost per Brding	\$5.90	\$5.90		
Route Assessment	1.67	1.67		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+8%	No weekend service	
Passengers per Trip	-4%	-4%		
Passengers per Revenue Hour	-3%	-3%		
Purch.Transport. Cost per Brding	+4%	+4%		



***Additional Data Pertinent to Route***

The following table looks at each direction by time period on weekdays.

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	PM Peak
<b>Northbound</b>			
Pass/Trip	No service	17.52	45.62
Pass/ Rev Hr		18.44	41.30
<b>Southbound</b>			
Pass/Trip	30.22	45.61	14.22
Pass/ Rev Hr	31.08	40.90	14.04

**Service Change Concepts (Early 2011)**

Route 532 has proven to be a success story, with strong ridership growth and good productivity. End-to-end travel time has steadily decreased as new Sound Transit freeway stops and direct access ramps have been completed at South Everett, Canyon Park, Totem Lake and downtown Bellevue. Ridership has continued to increase during the first half of 2010 as major employers have consolidated their offices in downtown Bellevue. Standees and customer overload complaints are frequent occurrences, particularly on P.M. peak trips.

***Service Change Highlights***

- The ST2 service improvements originally approved for this route in the 2010 Service Implementation Plan will be implemented in early 2011 as planned.

## Route 535: Lynnwood – Bellevue

See map in Route 532 section above.

### Description

The Lynnwood to Bellevue Express began service in September 1999. It operates generally along the I-405 corridor, with intermediate stops at Alderwood Mall, Canyon Park Freeway Station, UW-Bothell/Cascadia Community College, Bothell Park-and-Ride, Brickyard Park-and-Ride, and Totem Lake Freeway Station. Service operates in both directions seven days a week. In June 2005, the I-405 freeway stop at Kingsgate was closed for construction of the new Totem Lake Freeway Station and Direct Access Ramps, which opened for service in November 2007. During the construction period, Route 535 began serving the Brickyard Road Freeway Station on all trips, which it continues to do since the opening of Totem Lake. The new Canyon Park Freeway Station opened in June 2007, reducing southbound travel time by about 5 minutes. In September 2006, midday service on weekdays improved from every 60 minutes to every 30 minutes to replace the discontinued service along I-405 that was provided by Route 530 (see Route 532 section). Service to the Houghton Park-and-Ride was discontinued at the same time.

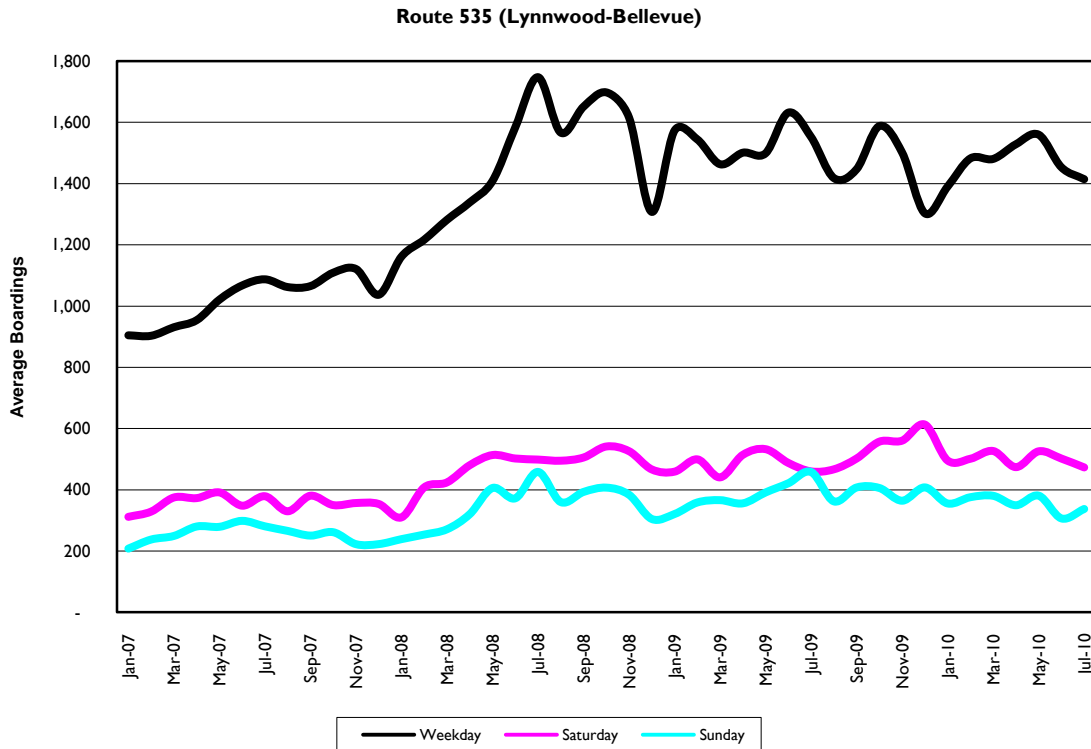
### Performance Assessment

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,545	513	389
Passengers per Trip	22.08	23.29	17.70	13.43
Passengers per Revenue Hour	26.65	27.95	22.07	16.76
Purch.Transport. Cost per Brding	\$6.36	\$6.10	\$7.37	\$9.71
Route Assessment	3.00	3.00	3.67	3.67

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,512	503	350
Passengers per Trip	21.32	22.58	17.19	11.99
Passengers per Revenue Hour	25.62	26.97	21.35	14.89
Purch.Transport. Cost per Brding	\$6.90	\$6.34	\$9.75	\$14.03
Route Assessment	3.00	2.67	3.67	3.67

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-2%	-2%	-10%
Passengers per Trip	-3%	-3%	-3%	-11%
Passengers per Revenue Hour	-4%	-4%	-3%	-11%
Purch.Transport. Cost per Brding	+8%	+4%	+32%	+44%



Ridership on Route 535 declined during the first half of 2010, decreasing by 4 percent during the 1st Quarter and 3 percent during the 2nd Quarter. It is useful to note that Route 535 is one of only a small handful of ST Express routes that provide suburb-to-suburb service all day, seven days a week.

***Additional Data Pertinent to Route***

The following table looks at each direction by time period on weekdays.

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>						
Pass/Trip	No service	16.34	20.51	40.82	24.77	11.65
Pass/ Rev Hr		18.80	22.93	41.40	27.26	13.97
<b>Southbound</b>						
Pass/Trip	20.04	43.65	20.46	20.67	12.32	12.83
Pass/ Rev Hr	26.72	52.73	26.68	26.77	17.40	19.24

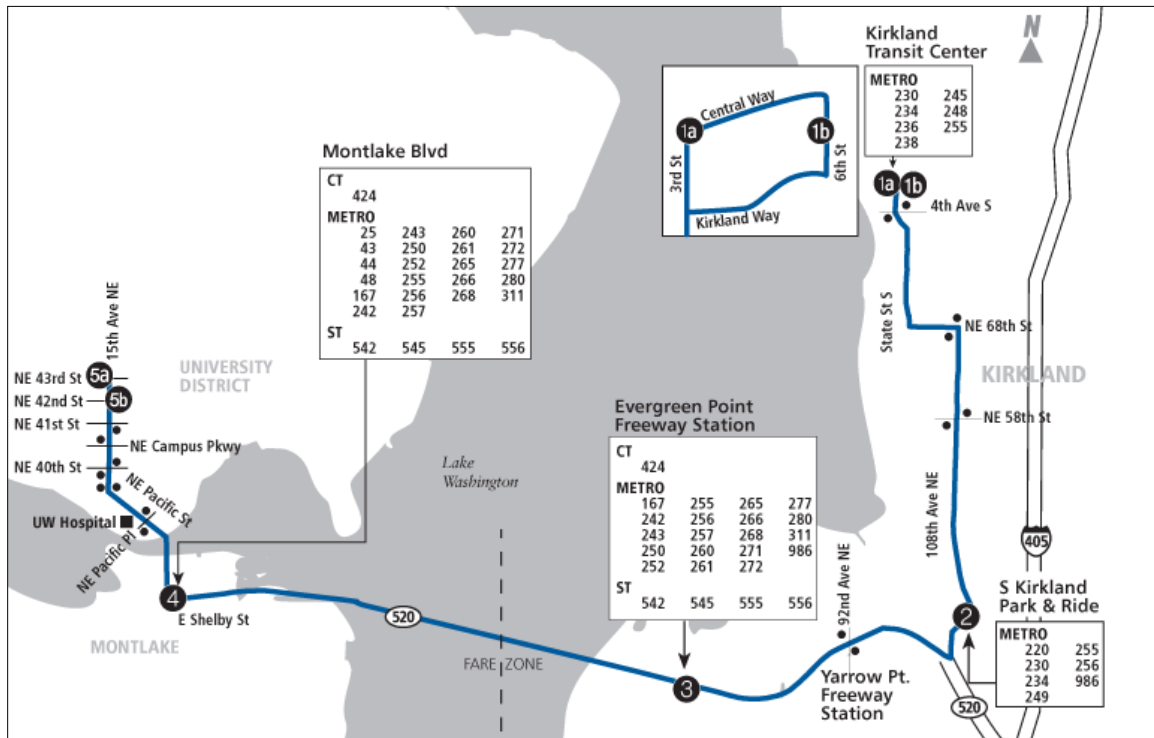
**Service Change Concepts**

Weekend productivity on Route 535 is rated as “Unsatisfactory” based on the ST Express Service Standards. Sunday productivity ranks near the bottom of the ST Express system with an average of about 12 passengers per trip and 15 passengers per revenue hour. The purchased transportation cost per boarding on Sunday is \$14.11, higher than any other ST route with Sunday service. The recent deletion of Sunday service on Community Transit has eliminated local transit connections in Snohomish County, further clouding the future outlook for Route 535 Sunday service.

*Service Change Highlights*

- To reduce operating costs and avoid more onerous service reductions at other times and other parts of the system, service on Route 535 will be deleted on Sundays and on holidays when a Sunday schedule is operated.
- This change will take place in June 2011.

## Route 540: Kirkland – University District



**Route 540**

### *Description*

The Kirkland to University District service started in September 2000, originally traveling as far east as Bear Creek Park-and-Ride in Redmond. It currently operates between the Kirkland Transit Center and the U-District, with key intermediate stops at the South Kirkland Park-and-Ride and freeway stations on SR-520 at Evergreen Point and Yarrow Point. Service operates weekdays only in both directions. In 2002, peak hour service was expanded between Kirkland Transit Center and the U- District to meet growing demand, primarily from the South Kirkland Park-and-Ride. In February 2008, the eastern segment of the route between Kirkland Transit Center and Bear Creek Park-and-Ride was deleted and replaced with King County Metro Route 248 operating along NE 85th Street. All weekend service was discontinued at that time due to low productivity. A thorough evaluation of the schedule in June 2010 resulted in improved operational efficiency while having no impact on service levels.

**Performance Assessment**

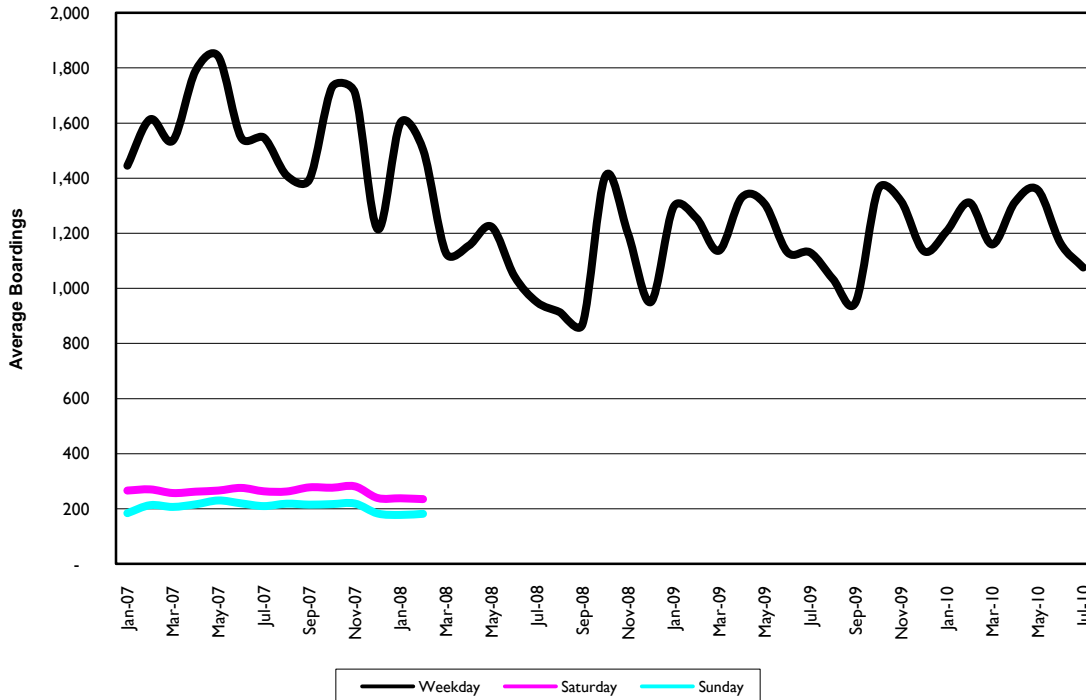
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,255	No weekend service	No weekend service
Passengers per Trip	16.95	16.95		
Passengers per Revenue Hour	19.45	19.45		
Purch.Transport. Cost per Brding	\$7.01	\$7.01		
Route Assessment	3.33	3.33		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,276	No weekend service	No weekend service
Passengers per Trip	17.34	17.34		
Passengers per Revenue Hour	19.85	19.85		
Purch.Transport. Cost per Brding	\$6.65	\$6.65		
Route Assessment	3.33	3.33		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+2%	No weekend service	No weekend service
Passengers per Trip	+2%	+2%		
Passengers per Revenue Hour	+2%	+2%		
Purch.Transport. Cost per Brding	-5%	-5%		

**Route 540 (Kirkland-U. District)**



During the first half of 2010, Route 540 ridership was stable compared with the same period in 2009. The trend graph illustrates the route’s strong dependence on UW ridership with the ups and downs closely tied to the University’s academic quarters.

***Additional Data Pertinent to Route***

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the spring 2009 service change.

***Passenger Activity by Time Period***

Weekday	AM Peak	Midday	PM Peak	Evening
Eastbound				
Pass/Trip	9.39	16.98	22.52	12.16
Pass/ Rev Hr	18.68	34.29	38.11	27.02
Westbound				
Pass/Trip	26.99	16.17	8.90	4.20
Pass/ Rev Hr	57.09	36.90	19.36	12.48

**Service Change Concepts**

Route 540 has developed a stable commuter market of UW students and employees but midday and evening ridership is weak. Compared with other East King County Sound Transit routes, Route 540 serves few areas of high-density employment apart from the UW. As a result, key productivity indicators, including boardings per trip, boardings per revenue hour and purchased transportation cost per boarding do not compare favorably with other ST Express routes. The route’s overall productivity rating is “Marginal” based on Sound Transit’s Service Standards and Performance Measures.

The Draft 2011 SIP, released in October 2010, proposed to delete all “reverse peak” service on Route 540 (trips operating eastbound A.M., westbound P.M.). As a result of further collaboration with King County Metro staff, the Draft SIP proposal was modified to keep peak period service levels intact in both directions and reduce midday and evening service instead. The revised change achieves greater savings than the original proposal.

King County Metro Route 255 follows the same path and serves the same stops as Route 540 between Kirkland Transit Center and Evergreen Point Freeway Station. At Montlake Boulevard, Route 540 leaves SR 520 and operates into the University District, while Route 255 continues on SR 520 into downtown Seattle. Connections can be made between Route 255 and University District routes at the Evergreen Point Freeway Station or at Montlake Freeway Station, and the Montlake Station is within walking distance of UW Medical Center. Beginning with the February 2011 service change, King County Metro is doubling midday Route 255 service levels from every 30 minutes to every 15 minutes. Off-peak direction service (eastbound A.M., westbound P.M.) will operate at least every 15 minutes as well. In addition, the start-up of Sound Transit’s new Route 542 service in October 2010 now provides frequent 15-minute connecting service between the Evergreen Point Freeway Station and the University District in both directions. Thus, adequate alternative service will exist for Route 540 riders when the current midday and evening service is deleted.

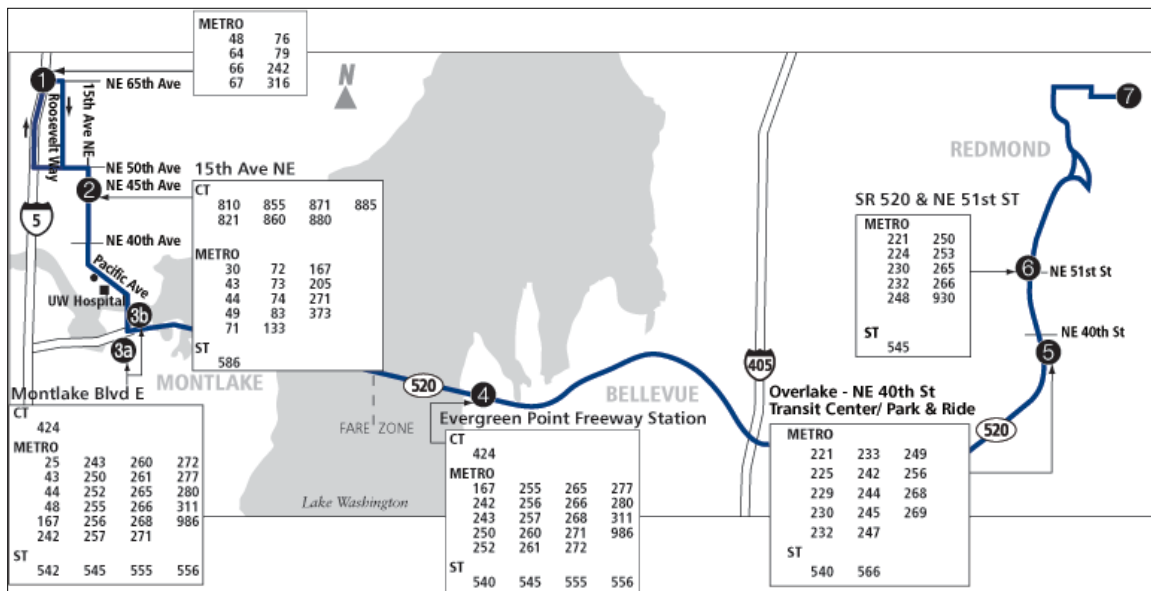
Since the primary destination of Route 540 riders is the University, U District routing will be revised to make a one-way loop through the UW campus, using Memorial Way, Stevens Way and Grant Lane. This brings UW students and employees closer to their destinations and allow the route to “live loop” (take no recovery time) in the U District to achieve more operating savings.

***Service Change Highlights***

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|---|
| <ul style="list-style-type: none"> <li>• Delete midday and evening service.</li> <li>• Revise University District routing to operate as a one-way loop using 15<sup>th</sup> Avenue NE, NE 45<sup>th</sup> Street, Memorial Way, Stevens Way, Grant Lane and 15<sup>th</sup> Avenue NE.</li> <li>• Implement changes in June 2011.</li> </ul> |
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## Route 542: Redmond – I-5/65th Street Park-and-Ride via University District (NEW)



**Route 542**

### Description

The Redmond to I-5/65th Park-and-Ride Express (Route 542) is a new route that began service in October 2010. It starts at the Redmond Transit Center and operates along the SR 520 corridor, with major intermediate stops at Redmond Town Center, the SR 520/NE 51st Freeway Station, Overlake Transit Center at NE 40th Street, Yarrow Point Freeway Station, Evergreen Point Freeway Station and six on-street stops in the University District. The Seattle terminus is at the I-5/65th Street Park-and-Ride near Green Lake.

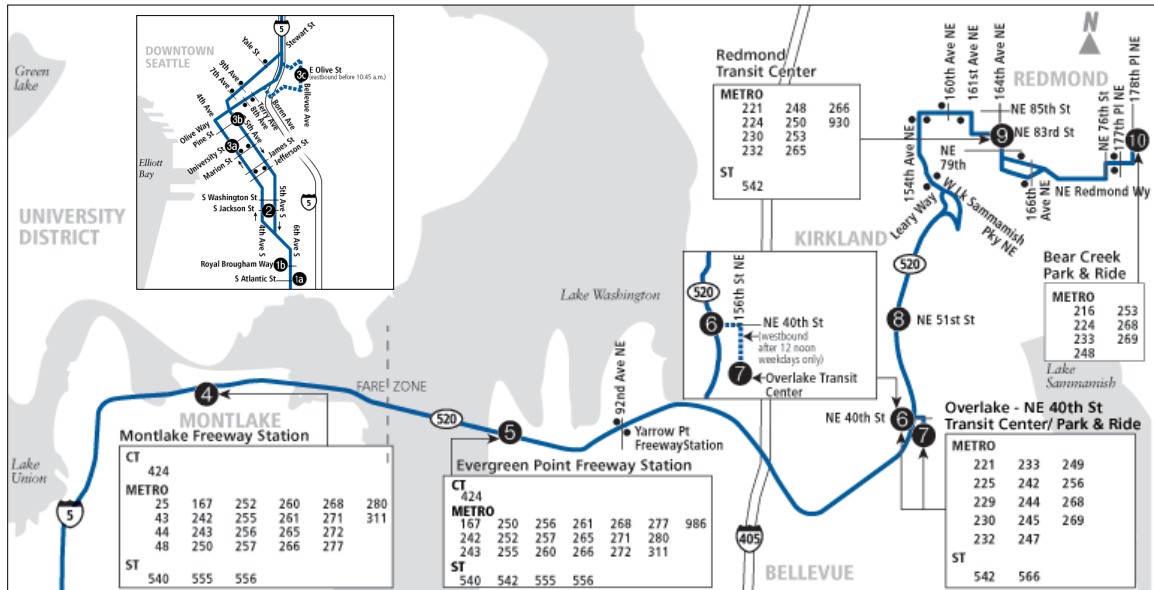
Service is provided every 15 minutes in both directions on weekdays from about 6 a.m. to 10 a.m., and from about 2 p.m. to 7 p.m. Serving major employment and education centers at both ends, the new route will address peak overcrowding on existing ST Express Route 545 (Redmond-Seattle) and help address construction-related traffic impacts when work begins on replacing the SR 520 bridge. The new route will also accommodate expected increases in ridership when vehicle tolls are implemented on the bridge in 2011.

Under the SR 520 Urban Partnership Agreement between USDOT, King County Metro and the Washington State Department of Transportation, buses used for SR 520 service are being purchased with USDOT grant funding.

### Service Change Highlights

- No changes are recommended at this time. ST Service Standards and Performance Measures recommend a two-year ridership development period for new ST Express routes before significant changes are implemented.

## Route 545: Redmond – Seattle



Route 545

### Description

The Redmond to Downtown Seattle Express began service in September 2000. It operates generally along the SR-520 corridor, with major intermediate stops in downtown Redmond, the Redmond Transit Center, the Overlake Transit Center and Montlake Freeway Station. A service restructure was implemented in February 2002 when stops were added at the new Overlake Transit Center and local circulation through the Overlake area was replaced with routing that used the SR-520 freeway at all times. Saturday service began in September 2003 and Sunday service began one year later. In September 2005, peak service was improved from every 15 minutes to every 10 minutes and a westbound morning stop was added at Bellevue Avenue and E. Olive St. on Capitol Hill. In February 2008, more peak hour service and 15-minute midday service was added. With the October 2010 service change, the schedule was interlined with Route 522 at the Seattle terminal to improve schedule efficiency; this is expected to save approximately \$68,000 per year in operating costs.

**Performance Assessment**

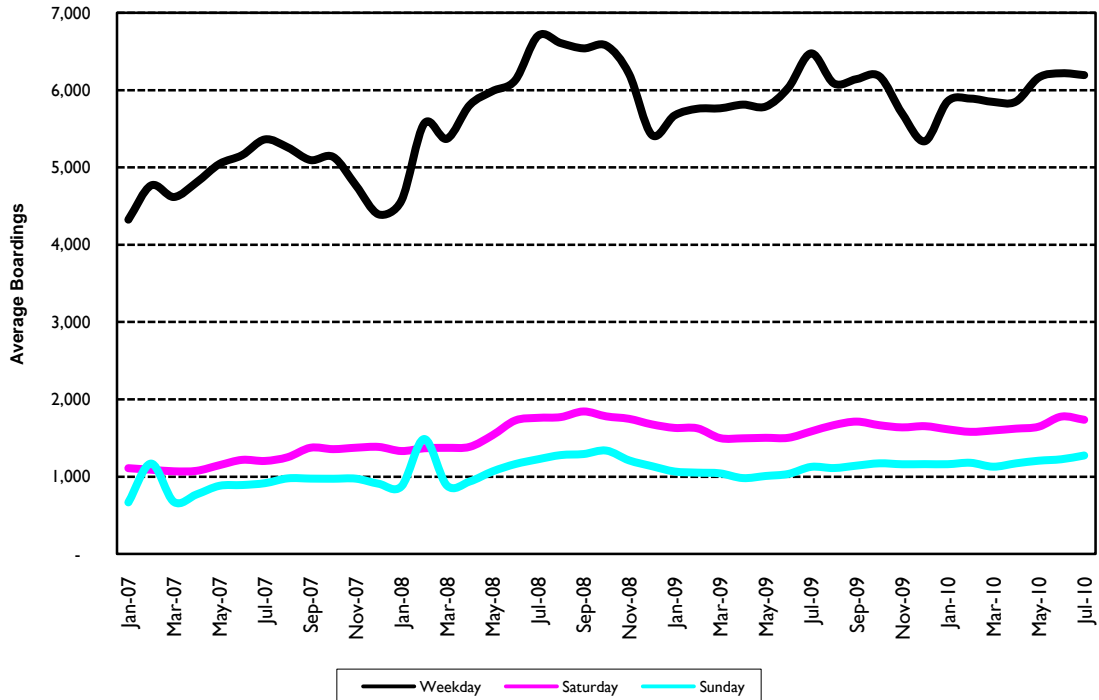
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,880	1,502	1,011
Passengers per Trip	34.39	36.82	23.85	16.04
Passengers per Revenue Hour	26.31	27.65	20.70	13.73
Purch.Transport. Cost per Brding	\$4.82	\$4.63	\$5.69	\$8.53
Route Assessment	2.00	2.00	3.00	3.33

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		6,075	1,681	1,204
Passengers per Trip	35.24	37.27	26.68	19.11
Passengers per Revenue Hour	26.99	27.99	23.37	16.62
Purch.Transport. Cost per Brding	\$4.71	\$4.57	\$5.17	\$7.26
Route Assessment	2.00	1.67	2.33	2.67

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+3%	+12%	+19%
Passengers per Trip	+2%	+1%	+12%	+19%
Passengers per Revenue Hour	+3%	+1%	+13%	+21%
Purch.Transport. Cost per Brding	-2%	-1%	-9%	-15%

**Route 545 (Redmond-Seattle)**



**Data Pertinent to Route**

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the spring 2010 Service Change.

**Passenger Activity by Time Period**

Weekday	Early Morning	AM Peak*	Midday♦	PM Peak**	Evening**	Night**
Eastbound						
Pass/Trip	20.22	48.41	32.82	43.48	26.24	14.92
Pass/ Rev Hr	25.27	45.57	34.42	40.79	33.50	21.07
Westbound						
Pass/Trip	25.62	49.79	27.77	49.89	27.08	18.28
Pass/ Rev Hr	36.17	56.03	29.73	45.03	32.12	24.38

\* Includes Bellevue & Olive stop eastbound

\*\* Includes Overlake Transit Center westbound

♦ See below

Route 545 has two significant route deviations, depending on the direction and time of day. Eastbound on weekday mornings, it serves an additional stop at Bellevue Avenue and Olive Street on Capitol Hill just prior to entering Interstate 5 towards Montlake and the Eastside. This stop, which adds about 5 minutes of travel time due to the route deviation needed to reach it, was added in response to many requests from Capitol Hill residents. On weekday afternoons after 12 p.m., westbound trips detour off of SR-520 to serve the Overlake Transit Center directly, adjacent to stops for Microsoft’s internal shuttle system and also a closer walk from the main Microsoft campus. Below is passenger activity (by trip and by revenue hour) by time period when these deviations are in effect. Eastbound in the morning peak, Bellevue & Olive is served by all trips, and westbound Overlake Transit Center is served during the afternoon peak, evening and night.

Weekday	Midday with Bellevue & Olive	Midday without Bellevue & Olive	Midday without Overlake TC	Midday with Overlake TC
Eastbound				
Pass/Trip	42.70	29.52		
Pass/ Rev Hr	42.00	31.66		
Westbound				
Pass/Trip			30.91	25.08
Pass/ Rev Hr			35.72	25.26

**Service Change Concepts**

The Draft 2011 SIP released in October 2010 proposed to reduce Route 545 midday service from every 15 minutes to every 20 minutes, and to reduce Sunday/Holiday service from every 30 minutes to every 60 minutes. While midday service on Route 545 is productive compared with other ST Express routes, the regular assignment of 57-seat articulated buses on all runs makes it possible to reduce midday service while still providing seats for all passengers. On Sundays, Route 545 productivity is “Marginal,” with an average of about 19 passengers per hour.

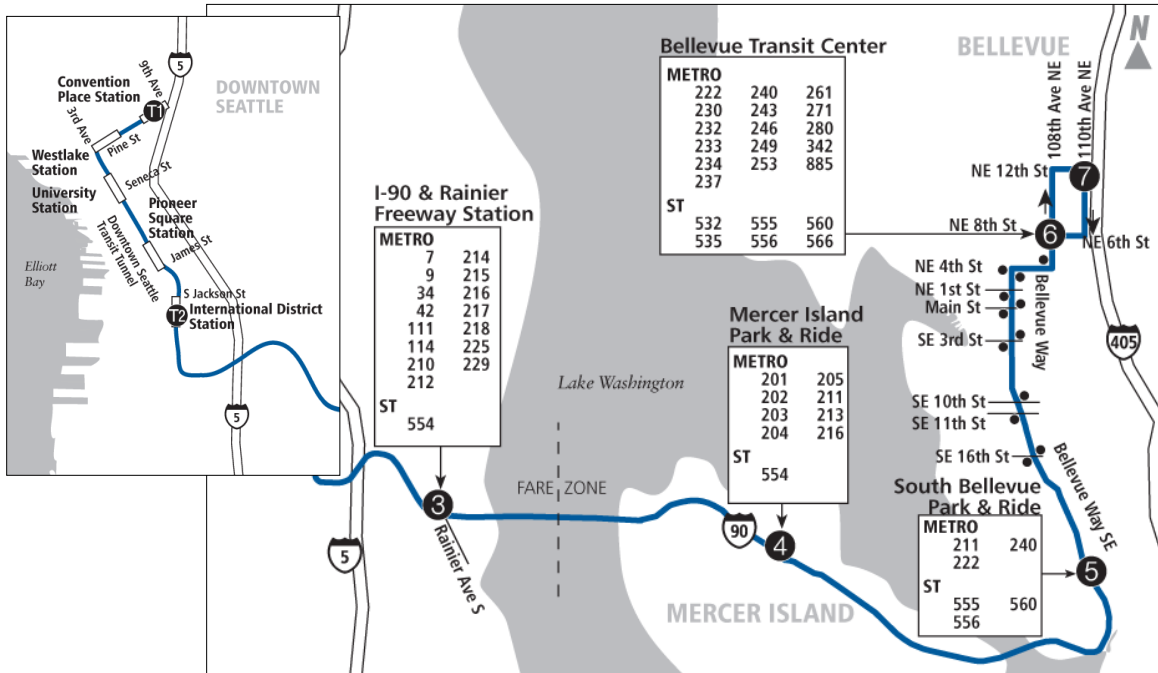
Following the SIP public outreach process and further discussions with King County Metro, Sound Transit staff dropped the Route 545 proposal because of its impact on connections with Metro local routes at Overlake Transit Center and downtown Redmond. These connections are important now and will become more so in the future as King County Metro implements its Bellevue-Redmond bus rapid transit line (the “B” Line) and focuses more local service at the Overlake and Redmond transit hubs. The Metro changes will be implemented in October 2011.

The equivalent cost savings from the original Route 545 proposal will still be achieved through revisions to the original proposals for Route 540 and Route 554.

Total Route 545 boardings went up during the first half of 2010, increasing by 2 percent during the 1st Quarter and 4 percent in the 2nd Quarter. With the exception of Route 550 (Seattle-Bellevue), Route 545 carries more passengers than any other single ST Express route.

No service changes are proposed for Route 545 during 2011.

## Route 550: Bellevue – Seattle



Route 550

### Description

The Bellevue to Seattle Express began service in September 1999. It provides the core transit connection between these two important activity centers, operating along Bellevue Way and the I-90 corridor, and when available uses transit-only facilities in the center of the I-90 roadway and in the Downtown Seattle Transit Tunnel. Major intermediate stops are at the South Bellevue Park-and-Ride, Mercer Island Park-and-Ride and the Rainier Avenue Freeway Station. Service operates all day, seven days a week. Route 550 is a well-performing, mature route and is part of a corridor slated for light rail transit in the future.

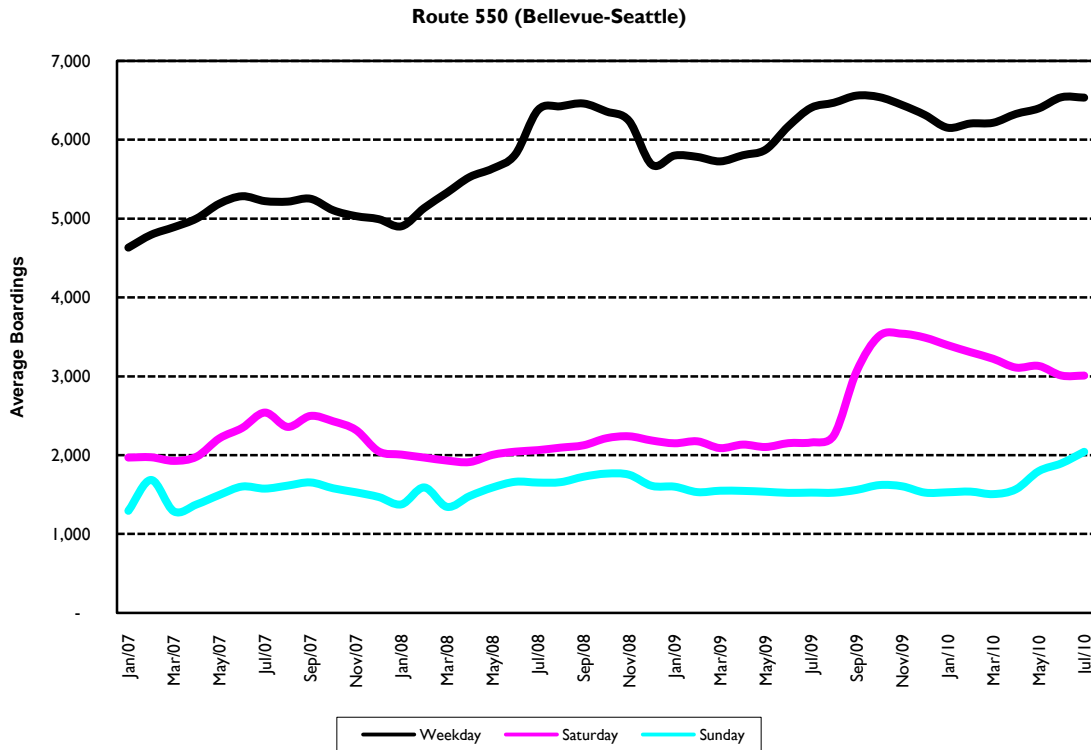
### Performance Assessment

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,952	2,128	1,536
Passengers per Trip	35.48	37.43	29.56	21.33
Passengers per Revenue Hour	36.82	39.47	28.60	20.24
Purch. Transport. Cost per Brding	\$3.41	\$3.23	\$4.09	\$5.67
Route Assessment	1.33	1.33	1.33	2.33

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		6,423	3,087	1,761
Passengers per Trip	36.87	39.41	27.32	24.50
Passengers per Revenue Hour	40.26	42.78	30.15	27.99
Purch. Transport. Cost per Brding	\$3.15	\$3.00	\$4.01	\$4.24
Route Assessment	1.00	1.00	1.33	1.33

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+8%	+45%	+15%
Passengers per Trip	+4%	+5%	-8%	+15%
Passengers per Revenue Hour	-4%	+8%	+5%	+38%
Purch.Transport. Cost per Brding	-8%	-7%	-2%	-25%



***Additional Data Pertinent to Route***

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the spring 2010 service change.

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>						
Pass/Trip	24.14	49.42	33.91	51.74	35.01	18.36
Pass/ Rev Hr	42.29	79.99	56.63	82.68	64.88	36.73
<b>Westbound</b>						
Pass/Trip	34.25	41.86	29.87	52.15	35.09	19.79
Pass/ Rev Hr	55.04	64.84	46.12	73.22	55.19	32.98

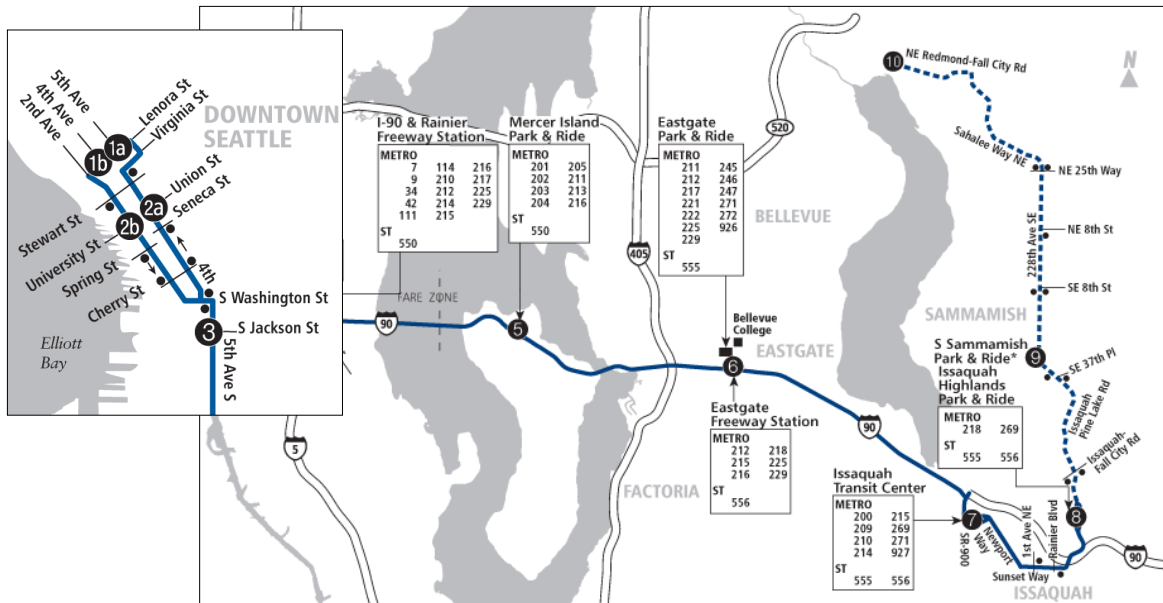
### **Service Change Concepts**

Route 550 is the most popular ST Express route, averaging over 6,400 average weekday boardings during the first two quarters of 2010. With its operation through the Downtown Seattle Transit Tunnel (DSTTT, limited stops and extensive use of I-90 HOV facilities, Route 550 has many bus rapid transit characteristics. Ridership and productivity increased 10 percent between the first half of 2009 and the same period in 2010, helped by the implementation of 15-minute Saturday service in September 2009. Productivity is rated as “Good” during all time periods.

No service changes are proposed for Route 550 during 2011.



## Route 554: Issaquah – Seattle



Route 554

### Description

The Issaquah to Seattle Express began service in September 2001. It operates along the I-90 corridor with intermediate stops in downtown Issaquah, Issaquah Transit Center, Eastgate Park-and-Ride, Mercer Island Park-and-Ride and the Rainier Avenue Freeway Station. Service operates all day, seven days a week. Originally the route went only as far east as Issaquah Transit Center; in September 2003, weekday service was extended from the transit center to the Issaquah Highlands Park-and-Ride on the Sammamish Plateau, and weekend service to the Highlands followed in June 2006. Sunday service was also doubled in June 2006 from every 60 minutes to every 30 minutes. In September 2006 routing was revised to serve downtown Issaquah and two night trips were extended from Issaquah Highlands to the South Sammamish Park-and-Ride at the request of the City of Sammamish. Additional service was added to South Sammamish in June 2008, including three extra night trips and two early morning trips operating from South Sammamish to Issaquah Highlands and on to Seattle.

The rebuilt and expanded Issaquah Transit Center opened in June 2008, and an adjacent 800-stall park-and-ride garage followed in July 2008. Heavy ridership generated by Bellevue College prompted the implementation of midday Seattle-Eastgate turnback trips in September 2008; when combined with existing through trips, this provided 15-minute service between Seattle and Eastgate during the midday. In June 2009, Route 554 routing was streamlined in the Eastgate area to stop only at the Eastgate Freeway Station adjacent to I-90. Efficiencies gained from this change allowed the Eastgate turnback trips to be extended to and from Issaquah Transit Center at no additional cost, thus increasing the midday Issaquah-Seattle service to every 15 minutes.

Finally, in September 2009 trips serving South Sammamish were revised to start or end in Redmond, as shown by the dashed line on the map above. This extension was requested by the City of Sammamish. All trips operating beyond Issaquah Highlands are “deadhead” buses operating to and from Metro’s East Base, so the cost of the extended trips is relatively small.

**Performance Assessment**

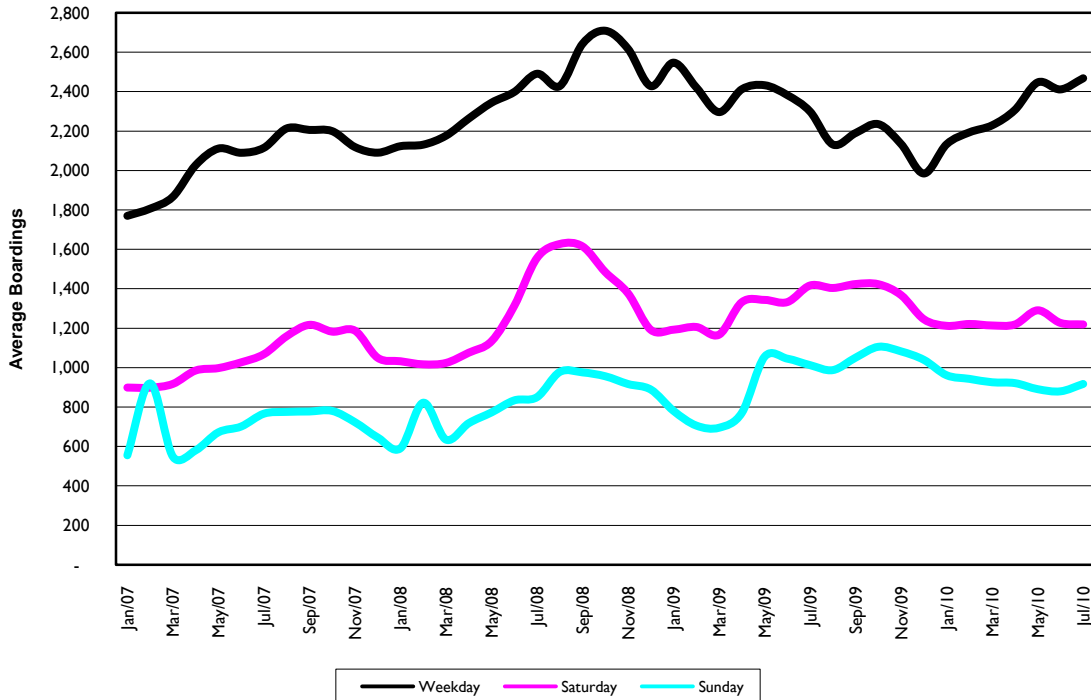
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,408	1,337	971
Passengers per Trip	24.43	25.62	21.57	17.98
Passengers per Revenue Hour	20.88	22.30	17.61	14.08
Purch.Transport. Cost per Brding	\$5.87	\$5.56	\$6.62	\$8.38
Route Assessment	3.00	2.67	3.00	3.00

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,387	1,249	896
Passengers per Trip	23.09	25.13	18.93	13.58
Passengers per Revenue Hour	20.01	21.67	16.70	11.96
Purch.Transport. Cost per Brding	\$6.19	\$5.74	\$7.33	\$10.28
Route Assessment	2.67	2.67	3.67	4.00

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		<-1%	-7%	-8%
Passengers per Trip	-5%	-2%	-12%	-24%
Passengers per Revenue Hour	-4%	-3%	-5%	-15%
Purch.Transport. Cost per Brding	+5%	+3%	+11%	+23%

**Route 554 (Issaquah-Seattle)**



Weekday ridership has been relatively stable between 2<sup>nd</sup> Quarter 2009 and the same period in 2010 but weekend ridership has declined.

**Additional Data Pertinent to Route**

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for Spring 2010 Service Change.

**Passenger Activity by Time Period**

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Eastbound						
Pass/Trip	No service	24.51	23.12	34.11	28.05	7.79
Pass/ Rev Hr		32.47	32.90	37.90	34.22	23.38
Westbound						
Pass/Trip	8.46	34.84	23.39	31.86	16.49	10.55
Pass/ Rev Hr	25.38	39.98	31.42	33.89	21.60	14.38

Below is passenger activity (by trip and by revenue hour) for both the Issaquah service operated during the Spring 2010 Service Change, as well as the trips serving Sammamish.

Weekday	AM Peak (Sammamish trips only)	Issaquah only (Midday)	Evening/Night (Sammamish trips only)
Eastbound			
Pass/Trip		16.36	22.10
Pass/ Rev Hr		29.44	25.40
Westbound			
Pass/Trip	31.63	19.56	
Pass/ Rev Hr	27.30	31.00	

**Service Change Concepts**

Route 554 service improvements funded by the ST2 program were planned when ridership, employment and student enrollment on the I-90 corridor was growing rapidly. The improvements would have increased peak period service from every 30 minutes to every 15 minutes. Weekday ridership on Route 554 peaked in the 4th Quarter of 2008 and has since declined from about 2,700 to 2,400 boardings. Currently, there are about 36 passenger boardings per peak trip, and no peak period overloads have been reported during 2010. King County Metro’s Seattle commuter routes in the corridor have experienced a similar trend. With the expanded use of high-capacity articulated buses on Route 554, there is no need to increase peak service levels at this time.

Sound Transit increased midday service on Route 554 to every 15 minutes in September 2008. While this initially attracted new riders, the ridership increase was not enough to offset the large increase in trips and platform hours. With weekday boardings virtually unchanged between 2<sup>nd</sup> Quarter 2009 and the same period in 2010, overall productivity has declined. Currently, 15-minute midday service is provided between Seattle and Issaquah Transit Center, with every other trip extended to Issaquah Highlands. Midday service averages about 23 boardings per trip. With approval of the 2011 SIP, a 20-minute midday service will be provided over the full length of the route. This will result in a more efficient schedule as well as reduced costs, while still providing ample seat capacity.

Productivity on both weekend days is rated “Unsatisfactory,” with Sunday productivity well below Saturday performance. The Draft SIP released in October 2010 proposed to reduce Sunday service from every 30 minutes to every 60 minutes all day. Following the SIP public outreach process and further discussions with King County Metro, the proposal was modified to reduce service to every 60 minutes on both Saturday and Sunday, but only before 10:00 A.M. and

after 7:00 P.M. Weekend service would continue to operate every 30 minutes between 10:00 A.M. and 7:00 P.M. The revised plan, which was approved by the Board's Operations and Administration Committee, targeted the time periods with the lowest ridership and achieved greater overall cost savings than the original proposal. The span of service (first trip/last trip times) will remain unchanged.

The combined savings from deferring ST2 service improvements and reducing midday and Sunday service total about 16,000 annual platform hours or about \$2.1 million per year.

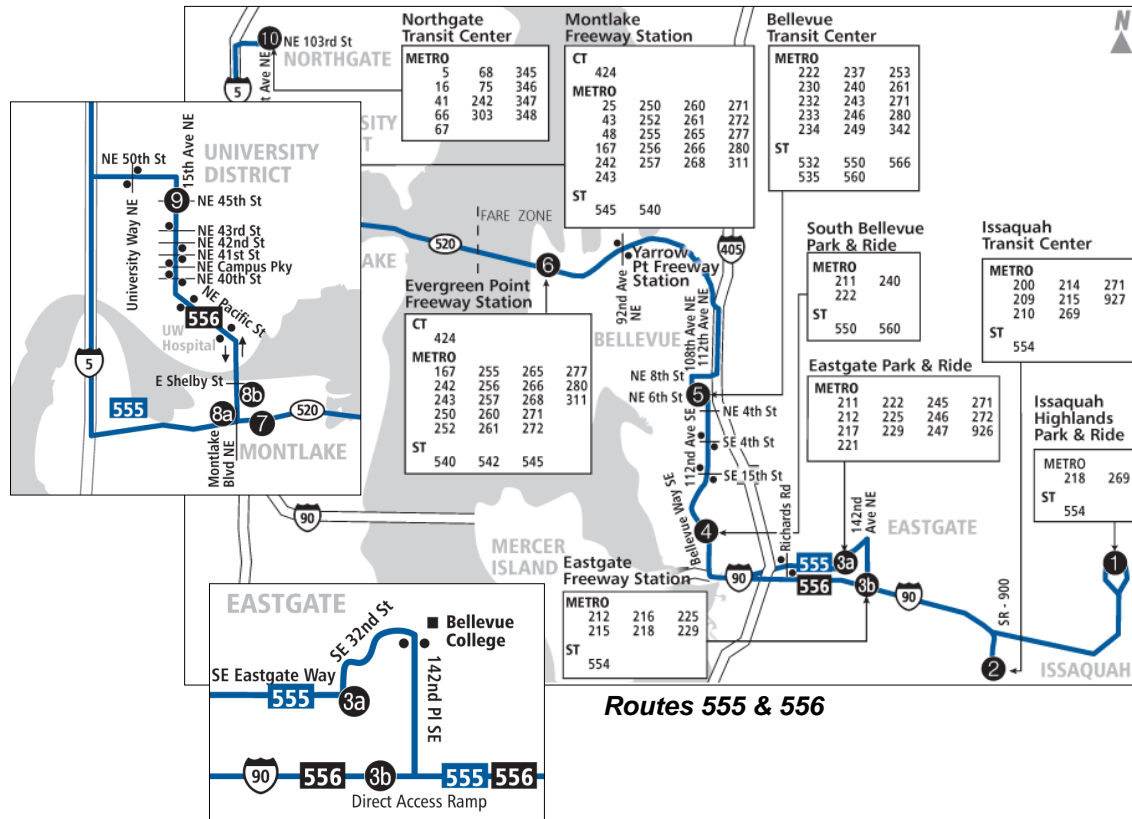
#### *Potential New Stop*

An additional Route 554 bus stop is being considered in the Issaquah Highlands area near the new Eastside Swedish Hospital campus, scheduled to open in 2011. To serve this activity center, a new stop may be implemented on the existing route near the intersection of Highlands Drive NE and NE Discovery Drive. Unfortunately the hospital site is located about a quarter-mile walk from Highlands Drive, the main arterial and bus corridor serving the Issaquah Highlands area. The evaluation will consider whether the stop will generate at least 25 daily boardings, the minimum called for in Sound Transit's Service Standards and Performance Measures to maintain the integrity of the express service.

#### *Service Change Highlights*

- Defer the ST2 service improvements previously approved by the Board in the 2010 SIP.
- Reduce midday service from every 15 minutes to every 20 minutes.
- Reduce weekend service (and holiday service when a Sunday schedule is operated) from every 30 minutes to every 60 minutes before 10:00 A.M. and after 7:00 P.M.
- Evaluate the potential ridership of a new stop located at Highlands Drive NE and NE Discovery Drive.

## Routes 555/556: Northgate – Bellevue – Issaquah



### Description

The Issaquah to Northgate Express began service in September 2001. It operates generally along the I-90 and SR 520 corridors, with major intermediate stops at Eastgate and the Bellevue Transit Center. Service operates in both directions during weekday peak periods only. In September 2005, a route variation (Route 556) was implemented to operate through the University District on westbound trips in the morning and eastbound trips in the afternoon, providing access to that important activity center for work and school trips. In September 2006, at the urging of the City of Bellevue, Sound Transit changed Route 555 to provide additional service in the Factoria area. Bus stops were added along SE 36th Street at 136th Avenue SE and Factoria Boulevard SE. In September 2008, the University District routing of Route 556 was changed to operate along 15th Avenue NE so that common U-District stops are provided for passengers going to Evergreen Point Freeway Station, where connections can be made to all other SR 520 bus routes.

The most recent change occurred in June 2009 when both routes were modified to operate between Eastgate and downtown Bellevue via I-90 and Bellevue Way. Route 556 buses now operate a streamlined routing that uses the Eastgate Freeway Station, while Route 555 serves the Eastgate Park-and-Ride and a single Factoria-area stop at I-90 and Richards Road. Both routes now serve the South Bellevue Park-and-Ride, a major transfer point and future light rail station.

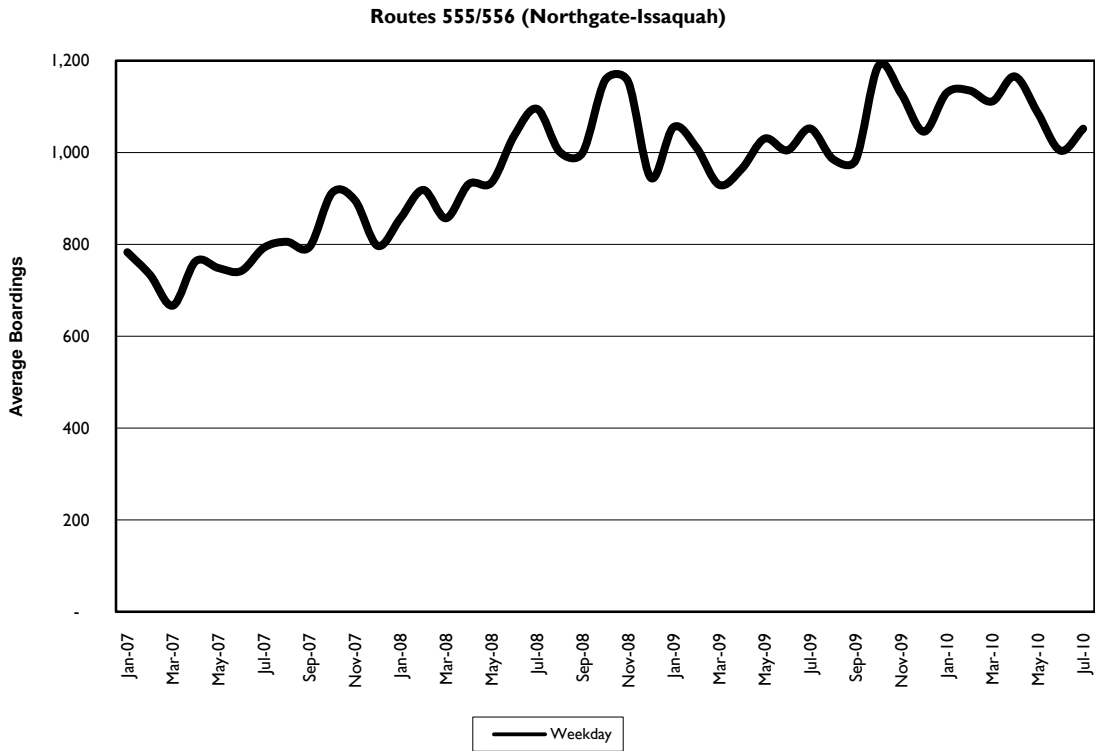
**Performance Assessment**

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		999	No weekend service	
Passengers per Trip	37.44	37.44		
Passengers per Revenue Hour	24.86	24.86		
Purch.Transport. Cost per Brding	\$5.53	\$5.53		
Route Assessment	2.00	2.33		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,085	No weekend service	
Passengers per Trip	38.77	38.77		
Passengers per Revenue Hour	25.74	25.74		
Purch.Transport. Cost per Brding	\$5.48	\$5.48		
Route Assessment	1.67	1.67		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+9%	No weekend service	
Passengers per Trip	+4%	+4%		
Passengers per Revenue Hour	+4%	+4%		
Purch.Transport. Cost per Brding	<-1%	<-1%		



Ridership and performance metrics continue to improve on this service, and productivity rates as “Satisfactory” overall based on Sound Transit’s Service Standards & Performance Measures.

***Additional Data Pertinent to Route***

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the Spring 2010 service change.

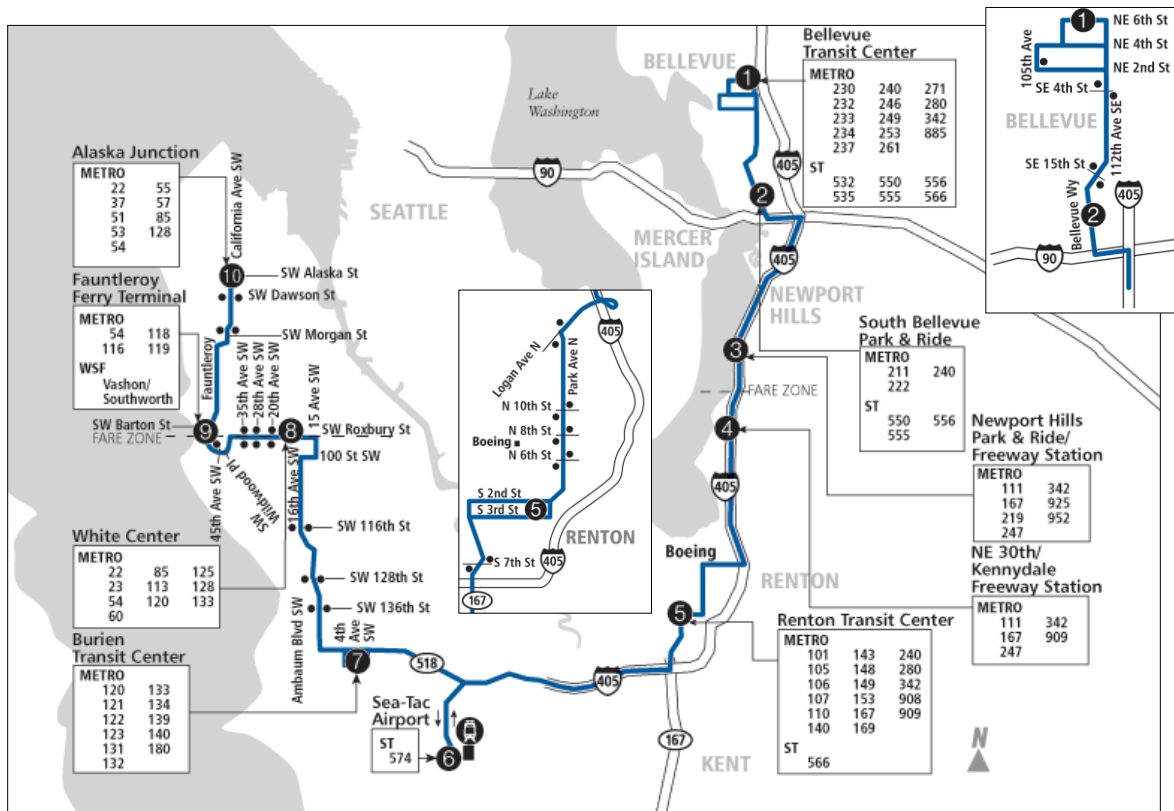
***Passenger Activity by Time Period***

	Route 555		Route 556	
Weekday	AM Peak Eastbound	PM Peak Westbound	AM Peak Westbound	PM Peak Eastbound
Pass/Trip	36.22	30.02	45.26	42.64
Pass/ Rev Hr	33.35	24.11	40.97	34.57

**Service Change Concepts**

No changes are proposed for Routes 555 and 556 during 2011.

## Route 560: Bellevue – SeaTac – West Seattle



Route 560

### Description

The current West Seattle to Bellevue Express dates from September 2003 when the Westside Express (Route 570) and the Bellevue-SeaTac Express (old Route 560) were merged into one route. The Westside Express originally began service in September 1999, and the Bellevue-SeaTac Express initially began operation in September 2000. The combined route now operates between West Seattle Junction and Bellevue Transit Center via Sea-Tac Airport and the Burien Transit Center. In contrast to most ST Express routes, the West Seattle-Burien segment operates entirely on arterial streets with eight intermediate stops. Between Burien and Bellevue Transit Center, the route travels primarily along the SR 518 and I-405 freeways with stops at Sea-Tac Airport, Renton Transit Center, Newport Hills Park-and-Ride, and South Bellevue Park-and-Ride. Service operates all day, seven days a week.

Two major changes were approved for February 2010 as part of the 2009 Service Implementation Plan. The Wilburton Park-and-Ride stop was discontinued due to low use, and buses use a more direct routing to and from downtown Bellevue via 112th Avenue SE between SE 8th Street and NE 4th Street. Ridership on the Burien-West Seattle segment is lower than the rest of the route, and alternative King County Metro local service is provided along the corridor, so midday service was reduced on this segment from every 30 minutes to every 60 minutes. The savings from this change were used to help make frequency improvements on Routes 574, 577 and 578 needed for the I-5 South service restructure implemented in February 2010.



**Performance Assessment**

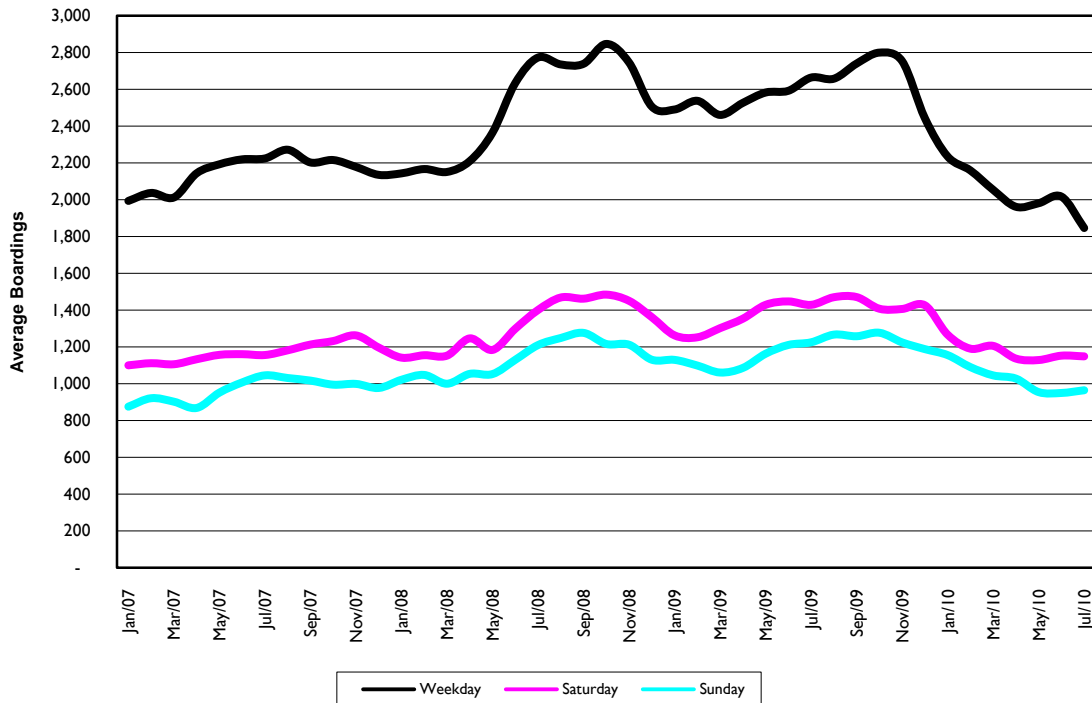
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,567	1,411	1,154
Passengers per Trip	37.34	37.75	39.20	32.07
Passengers per Revenue Hour	19.64	19.77	21.00	17.22
Purchased Transportation Cost per Boarding	\$6.00	\$5.91	\$5.83	\$7.08
Route Assessment	2.67	2.67	2.33	2.33

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,987	1,138	974
Passengers per Trip	29.22	29.21	31.62	27.06
Passengers per Revenue Hour	16.21	16.32	16.98	14.54
Purchased Transportation Cost per Boarding	\$7.49	\$7.39	\$7.33	\$8.52
Route Assessment	3.00	3.33	2.67	2.33

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-23%	-19%	-16%
Passengers per Trip	-22%	-23%	-19%	-16%
Passengers per Revenue Hour	-17%	-17%	-19%	-16%
Purchased Transportation Cost per Boarding	+25%	+25%	+26%	+20%

**Route 560 (West Seattle-SeaTac-Bellevue)**



**Additional Data Pertinent to Route**

The following table looks at each direction by time period. The following tables represent the stop level boarding information. Information was taken from Automatic Passenger Count (APC) information for spring 2010 service change.

**Passenger Activity by Time Period**

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Eastbound						
Pass/Trip	28.57	40.69	23.37	24.46	19.84	21.39
Pass/ Rev Hr	20.29	26.49	18.40	15.90	13.84	15.37
Westbound						
Pass/Trip	17.54	25.99	31.65	39.91	24.55	See Evening service
Pass/ Rev Hr	12.10	19.95	23.27	27.32	19.21	

Weekday	Midday from Burien Transit Center only	AM Peak/Midday to Burien Transit Center only	Evening to Burien Transit Center only
Eastbound			
Pass/Trip	29.51		
Pass/ Rev Hr	29.59		
Westbound			
Pass/Trip		18.81	21.60
Pass/ Rev Hr		18.96	22.09

**Service Change Concepts**

While the overall impact of the February 2010 service restructuring has been positive, the changes resulted in reduced ridership on Route 560. Three specific factors can be cited:

- Midday frequency on Route 560 was reduced from every 30 minutes to every 60 minutes between West Seattle and Burien.
- Prior to the restructuring, the bus stop on the airport drive at Sea-Tac Airport served as a major transfer point between Route 560 and other routes. These connections are no longer possible because the main focal point for service has moved from the airport drive to the Tukwila International Boulevard Station and Sea-Tac/Airport Station. Only ST Routes 560 and 574 continue to serve the airport drive bus stop. Route 174 riders transferring to east-west service now do so at Tukwila International Boulevard Station, where connections are made with Metro Route 140. ST staff considered a change to Route 560 that would have allowed it to serve Sea-Tac/Airport Station and thus make direct connections with light rail and Route 174, but this would have increased running time to the point where another bus would have to be added to the schedule.
- King County Metro has greatly streamlined and increased service on Route 140, which provides an alternative to Route 560 for travel between Burien and Renton. The February 2010 restructure reduced Route 140 Burien-Renton travel times by 10 minutes, and service now operates every 15 minutes throughout the day on weekdays and every 30 minutes on weekends. By comparison, Route 560 service operates every 30 minutes on weekdays and every 60 minutes on weekends. Route 140 serves the major transit “hub” at Tukwila International Boulevard where light rail, Rapid Ride A (the replacement for former Route 174) and other South King County routes intersect.

King County Metro plans additional improvements to Route 140 when it is converted to a “Rapid Ride” route in 2013.

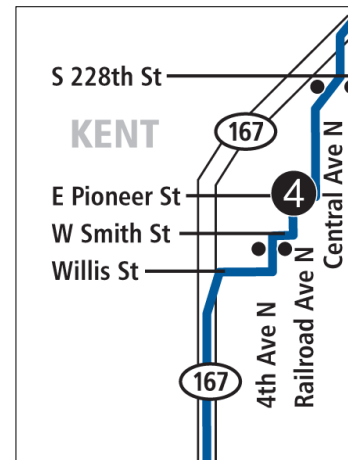
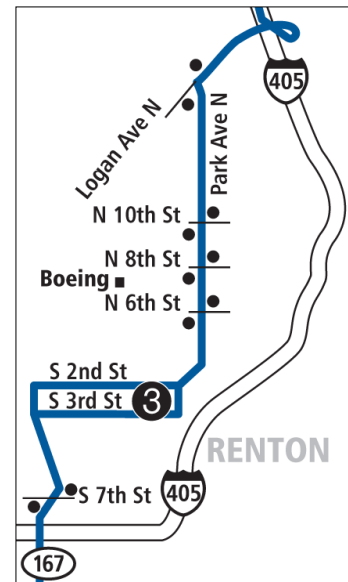
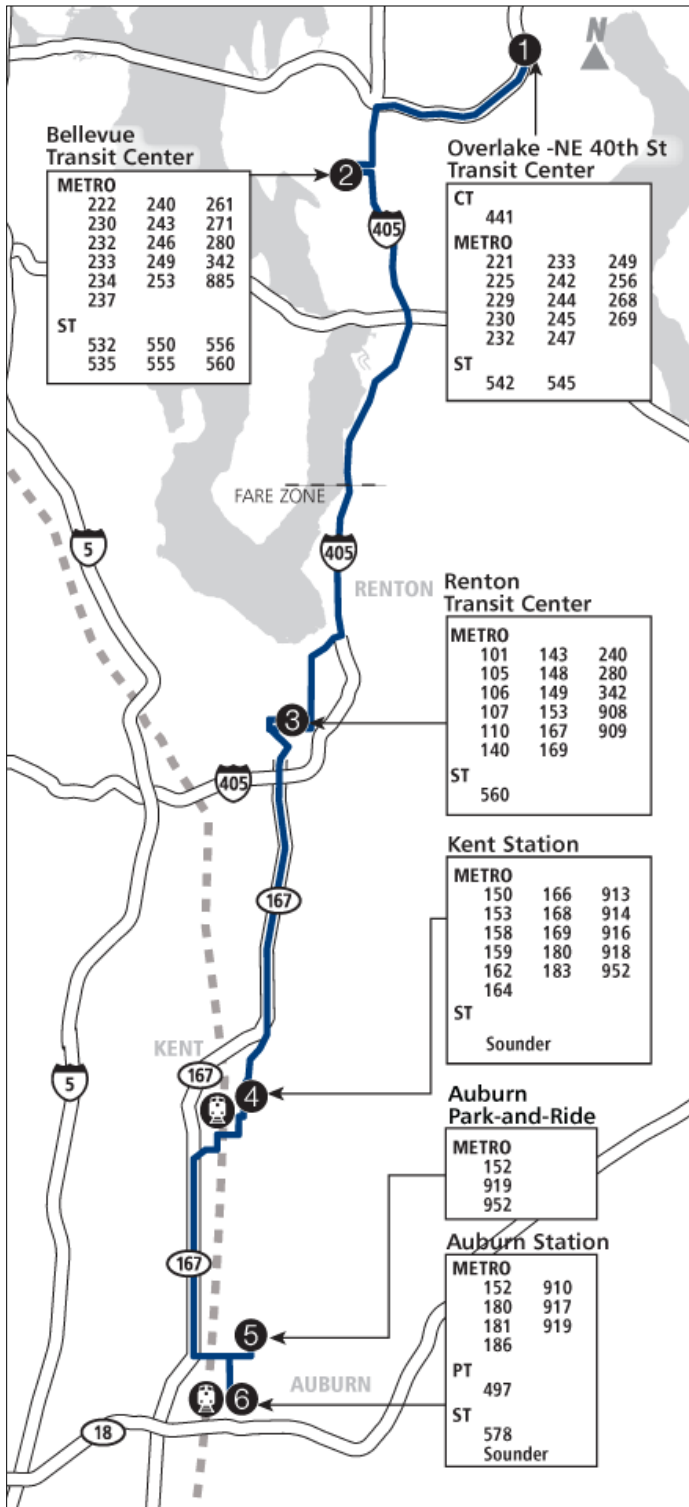
Total Route 560 ridership has declined about 23 percent between 2<sup>nd</sup> Quarter 2009 and the same period in 2010. This does not necessarily mean that these riders are lost but it is likely that many now use other public transit services. With the increased availability of Metro alternatives between many of the points served by Route 560, the West Seattle-Burien segment will be deleted entirely except during weekday commuter hours. This will continue to provide West Seattle residents with direct access to the airport during peak demand times while achieving significant cost savings. Alternative West Seattle-Airport service is now available outside of commuter hours using Metro Route 128, which operates between West Seattle and the Tukwila International Boulevard Station with a one-station connection to the airport via light rail.

### ***Service Change Highlights***

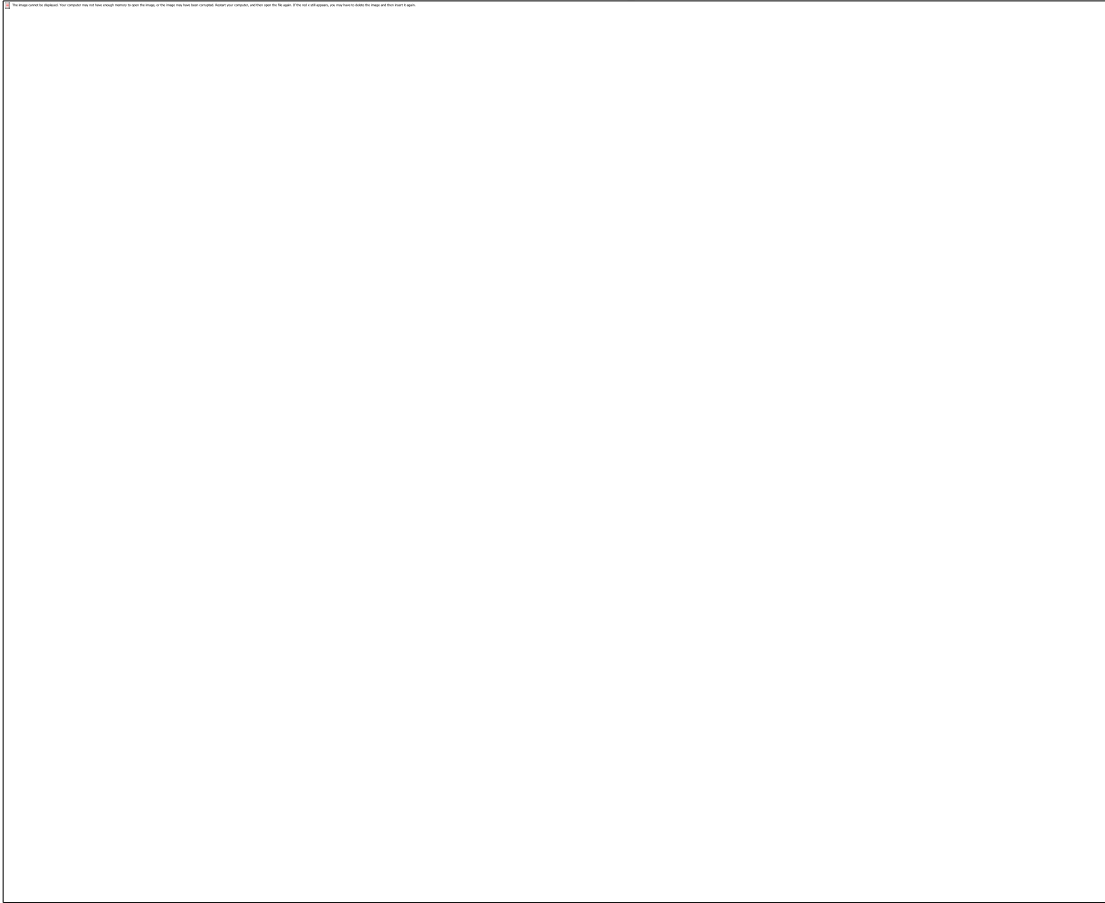
- Delete route segment between West Seattle Junction and Burien Transit Center except during weekday peak periods. The West Seattle segment will operate from approximately 4:20 A.M. to 9:00 A.M. and from 3:00 P.M. to 7:00 P.M. on weekdays.
- Jointly with King County Metro, continue to evaluate the role of Route 560 in the regional bus network as other partner agency changes are planned.

# Route 566: Auburn-Overlake

## Route 566



## ***Route 566 Extension – Proposed for Deferral***



### ***Route 566 Description***

ST Express bus service on the SR 167 corridor began with Route 565 in 1999. Initially this route connected Federal Way with Bellevue with all-day service on weekdays. As ridership increased, it was joined by a companion route, Route 564, which started at South Hill Transit Center in Puyallup and shared a common path with Route 565 between Auburn and Bellevue. Route 564 began operation in 2003. Both routes were extended from Bellevue to Overlake in September 2005. With increasing ridership on the northern end of the corridor, Sound Transit added new peak period turnback trips between Kent and Overlake in 2006. This resulted in 7 to 15 minute service between these points during weekday peak periods.

Ridership on the Federal Way and South Hill “tails” was not very productive, and a major service restructure was approved by the Board for February 2010 implementation. The objectives were to improve on-time performance, reduce service duplication and better integrate bus service with Sounder. Starting in February 2010, Routes 564 and 565 were combined into a single route (566) operating between Auburn and Overlake only. Route 578 provides an alternate connection between Federal Way and Auburn, and Sounder trains connect Puyallup with Auburn. Route 566 operates all day on weekdays, with a basic 30-minute headway supplemented by frequent turnback trips between Kent and Overlake during peak periods. The turnback trips combine with the through service to provide bus departures every 7 to 15 minutes northbound from Kent in the morning, and every 7 to 15 minutes southbound from Overlake in the afternoon.

**Performance Assessment- Route 566**

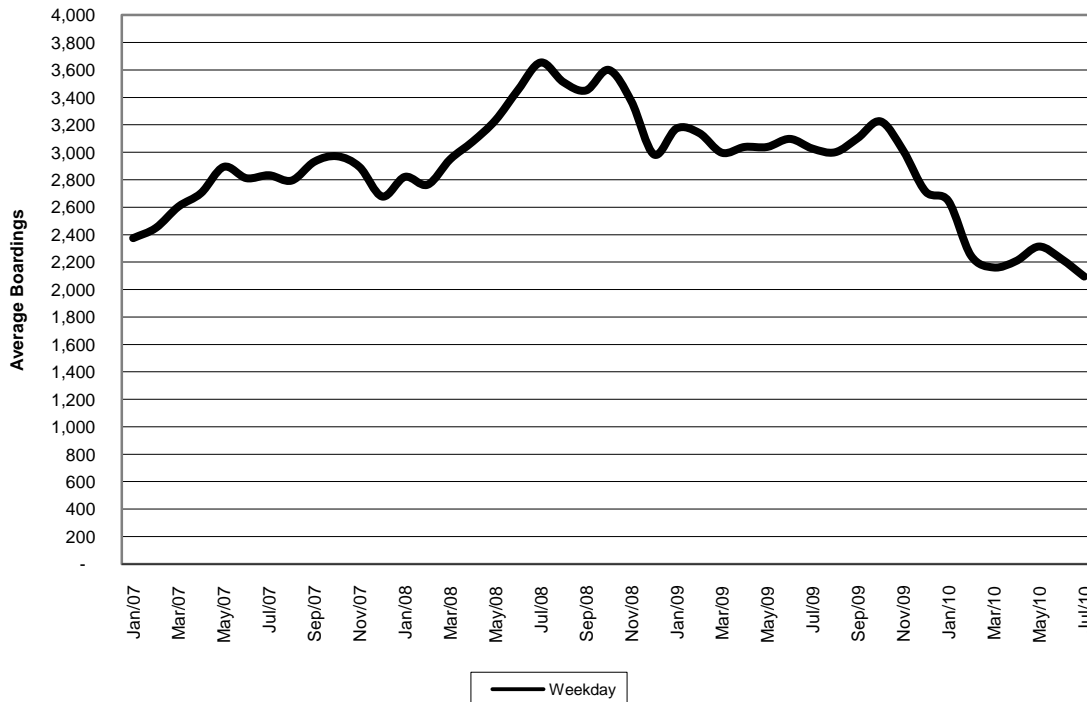
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009 – Routes 564 & 565	Overall	Weekday	Saturday	Sunday
Daily Boardings		3,020	No weekend service	
Passengers per Trip	38.25	38.25		
Passengers per Revenue Hour	20.00	20.00		
Purch.Transport. Cost per Brding	\$7.27	\$7.27		
Route Assessment	3.00	3.00		

2nd Quarter 2010 - Route 566	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,246	No weekend service	
Passengers per Trip	26.43	26.43		
Passengers per Revenue Hour	18.92	18.92		
Purch.Transport. Cost per Brding	\$7.39	\$7.39		
Route Assessment	3.00	3.00		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-26%	No weekend service	
Passengers per Trip	-31%	-31%		
Passengers per Revenue Hour	-7%	-7%		
Purch.Transport. Cost per Brding	+2%	+2%		

SR-167 Corridor- Route 566



**Additional Data Pertinent to Route**

The following table looks at each direction by time period. Trip level information is from Automatic Passenger Count (APC) information for spring 2010.

**Passenger Activity by Time Period (Spring 2010)**

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening
Northbound					
Pass/Trip	33.37	36.77	17.83	18.42	9.85
Pass/Rev Hr	36.97	38.81	16.90	17.27	9.85
Southbound					
Pass/Trip	No service	15.98	23.05	35.09	18.85
Pass/Rev Hr		13.67	17.79	29.07	15.28

Weekday	Early Morning/AM Peak from Kent Station only	PM Peak to Kent Station only
Northbound		
Pass/Trip	35.85	
Pass/ Rev Hr	44.27	
Southbound		
Pass/Trip		26.50
Pass/ Rev Hr		25.33

**Service Change Concepts**

Ridership totals on Route 566 declined significantly during the 2nd Quarter of 2010 compared with the Route 564/565 service it replaced. Productivity also declined, although boardings per revenue hour fell less than the overall loss of ridership and the overall performance rating of “Marginal” did not change. The drop started before the February 2010 route restructuring and the trend line was similar to the Sounder declines, reflecting the major impact the recession has had on commuter-oriented services. With the restructuring, some reduction in ridership was expected as riders on the deleted Federal Way and South Hill “tails” shifted to alternative services. For example, with the deletion of Route 565, Federal Way-Auburn riders shifted to new Route 578, which provides the same connection. Still, the 26 percent drop in weekday boardings was unexpectedly large and is likely the result of multiple factors, including the economic recession.

In a separate action, the Sound Transit Board approved moving operation of Route 566 from King County Metro to Pierce Transit effective with the February 2011 service change. This change is expected to save approximately \$877,000 per year and improve Route 566 productivity by reducing the purchased transportation cost per boarding. Routing and service levels will remain unchanged.

In the longer term, staff believes Route 566 holds promise as a very successful and productive route, connecting lower-cost housing areas in South King County with major employment centers in Renton, downtown Bellevue, Overlake and Redmond.

**Overlake-Redmond Extension**

As part of the 2010 SIP, the Sound Transit Board approved the extension of Route 566 from Overlake to Redmond as part of the ST2 package of service improvements. After further evaluation of this change and consultation with King County Metro, staff recommended that the extension be deferred indefinitely, and this was approved by the Board’s Operations and Administration Committee as part of the 2011 SIP. Metro plans to continue operation of Route

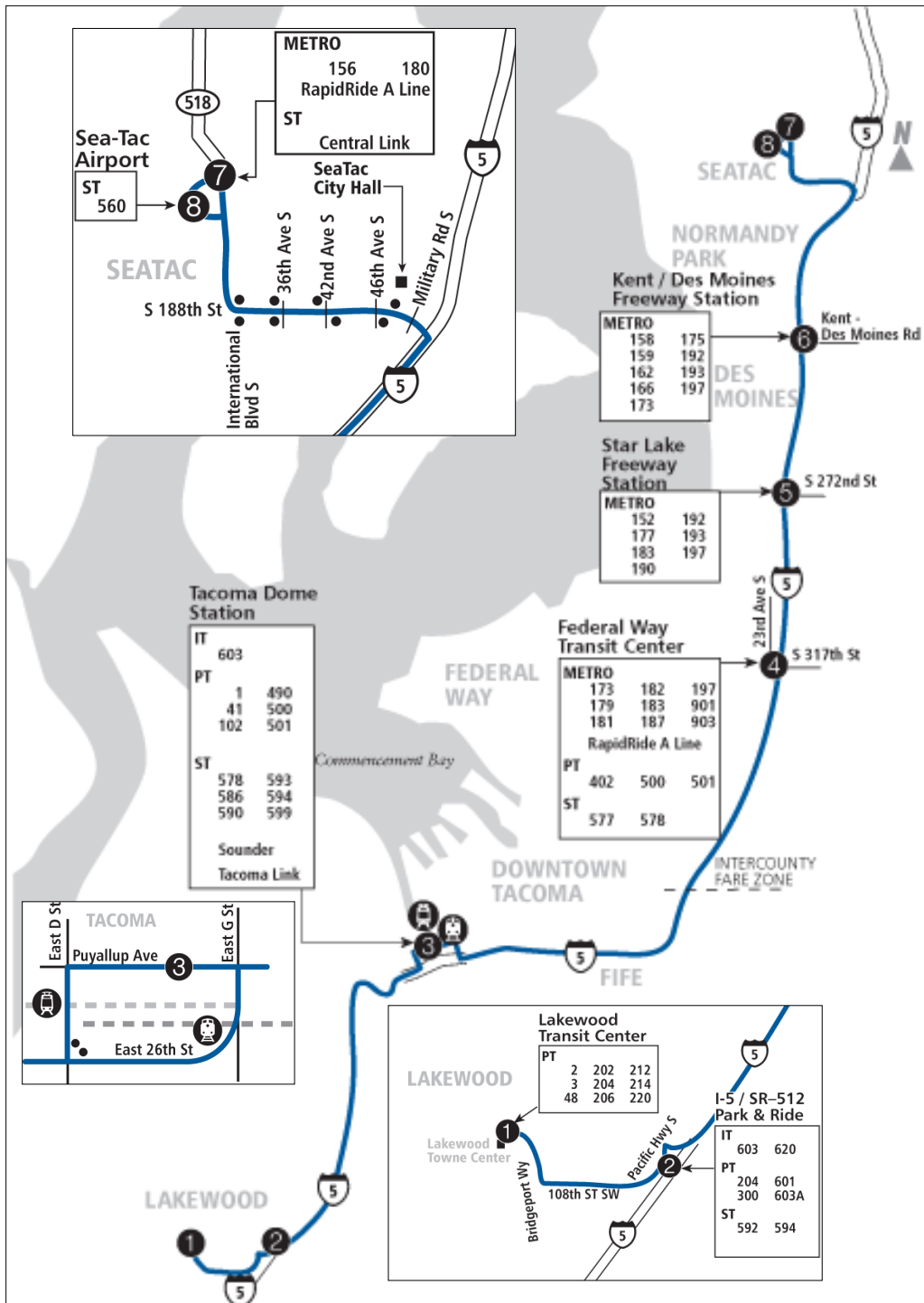
232, which now provides freeway express service directly between Redmond and downtown Bellevue during weekday peak periods. Sound Transit currently provides frequent service between Overlake and Redmond on Route 545, and the connection will be further enhanced with the start-up of new Route 542 in October 2010. Thus, during the times when Route 232 is not operating, riders can make a relatively fast trip between Bellevue and Redmond by taking Route 566 and connecting with Routes 542 or 545 at Overlake Transit Center. Deferring the extension of Route 566 will save approximately \$918,000 annually.

***Service Change Highlights***

- Defer Route 566 extension from Overlake Transit Center to downtown Redmond, as approved in the 2010 Service Implementation Plan.



## Route 574: Lakewood – Sea-Tac Airport



Route 574

### Description

The Lakewood-Sea-Tac Express began service in September 1999. It operates along the I-5 corridor, with intermediate stops at SR 512 Park-and-Ride, Tacoma Dome Station, Federal Way Transit Center, Star Lake Park-and-Ride, Kent/Des Moines Park-and-Ride and along South 188th

Street in SeaTac. Route 574 operates all day, seven days a week, with early morning trips serving airport employees starting at 3:45 a.m. In June 2005, late morning service was reduced from every 30 minutes to every 60 minutes due to lower ridership and productivity during that time period. Routing was revised in February 2006 to use the new South 317<sup>th</sup>/I-5 HOV Direct Access ramps and Sound Transit's new Federal Way Transit Center.

Route 574 was an integral part of the rail-bus service restructuring that took place in February 2010. Routing was modified to serve the Sea-Tac/Airport Link Station as well as the airport drive. Route 574 replaced the former Metro Route 194 service between Sea-Tac Airport and Federal Way, and as a result the pre-June 2005 weekday morning service levels were restored, increasing from every 60 minutes to every 30 minutes between 8:00 a.m. and 12 noon. In addition, new southbound trips were added early weekday afternoons to accommodate a major airport employee shift time.

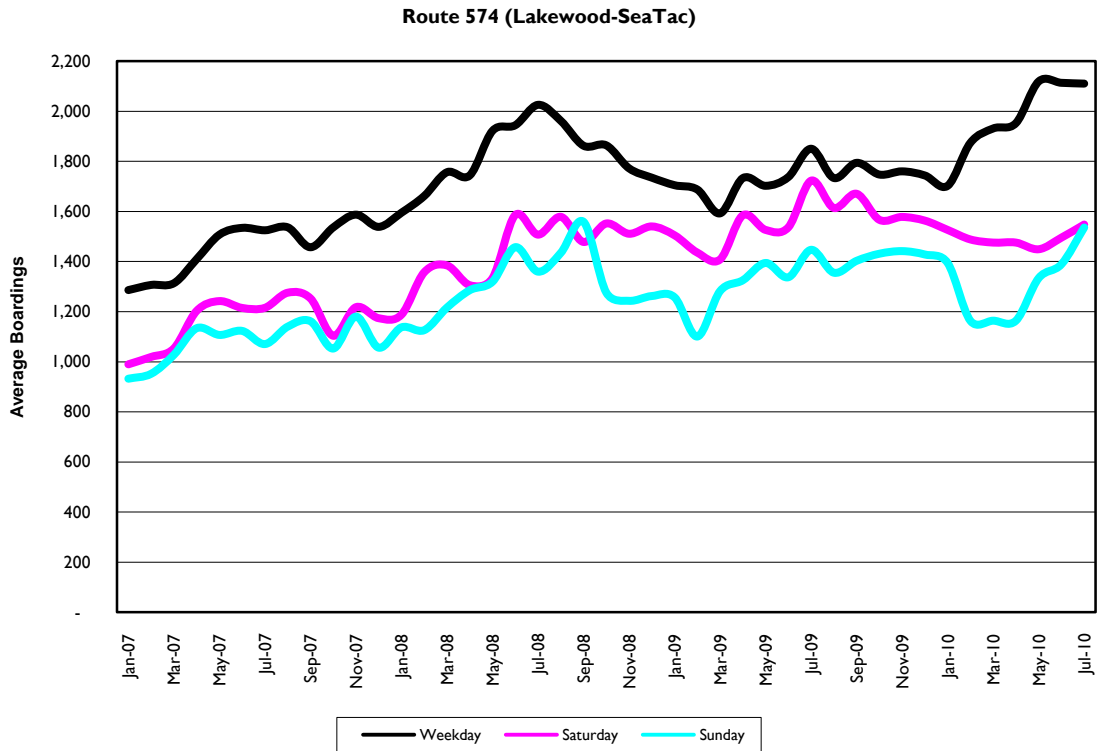
***Performance Assessment***

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,725	1,548	1,359
Passengers per Trip	25.24	25.74	26.68	23.42
Passengers per Revenue Hour	18.55	18.83	19.15	16.56
Purch.Transport. Cost per Brding	\$6.58	\$6.58	\$6.11	\$7.04
Route Assessment	3.00	3.00	3.00	2.67

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,046	1,399	1,339
Passengers per Trip	24.32	24.66	23.71	22.69
Passengers per Revenue Hour	17.33	17.37	17.58	16.82
Purch.Transport. Cost per Brding	\$7.75	\$7.76	\$7.54	\$7.88
Route Assessment	3.33	3.67	3.00	2.33

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+19%	-10%	-1%
Passengers per Trip	-4%	-4%	-11%	-3%
Passengers per Revenue Hour	-7%	-8%	-3%	+2%
Purch.Transport. Cost per Brding	+18%	+18%	+23%	+12%



***Additional Data Pertinent to Route***

The following table looks at each direction by time period. Trip level information is from Automatic Passenger Count (APC) information for spring 2010.

***Passenger Activity by Time Period***

Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>						
Pass/Trip	31.85	33.67	29.04	24.41	21.49	See Evening service
Pass/ Rev Hr	27.56	26.47	24.20	20.34	19.31	
<b>Southbound</b>						
Pass/Trip	12.09	15.64	17.58	40.40	19.05	28.22
Pass/ Rev Hr	11.89	14.51	20.52	30.68	17.50	27.31

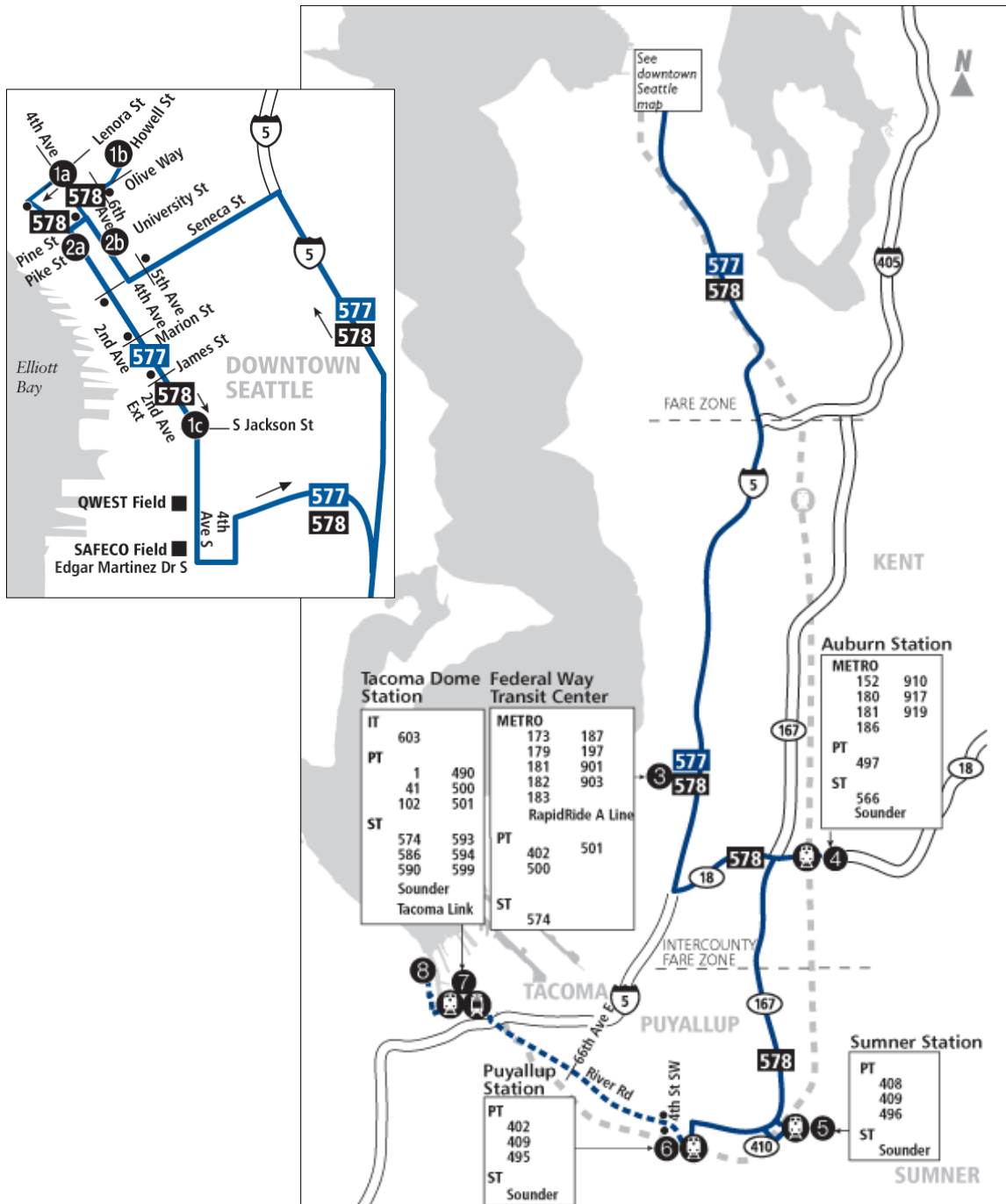
Weekday	Midday to Federal Way Transit Center only
<b>Southbound</b>	
Pass/Trip	9.59
Pass/ Rev Hr	23.02

## **Service Change Concepts**

As expected, the bus-rail service restructuring and service improvements in February 2010 increased ridership significantly on Route 574, but the increase was not large enough to improve productivity. Average weekday boardings were 2,060 during 2nd Quarter 2010, a 19 percent increase over the same period in 2009, but boardings per revenue hour declined by 7 percent. Weekday afternoon service improvements implemented to accommodate a major airport employee shift change were set at a high level in order to avoid potential overloads, but the actual ridership increase during that time period turned out to be less than expected. As a result, some southbound afternoon trips were deleted with the October 4 service change. This adjustment should help to improve all productivity metrics.

With the relatively short period of time since the restructuring, the service is still maturing and gaining new riders. As a result, no service changes are proposed at this time.

## Route 577: Federal Way – Seattle



**Routes 577 and 578**

### Description

Route 577 began operation as a peak-hour, peak-direction service between the new Federal Way Transit Center and downtown Seattle in February 2006. Adjacent to the transit center is a 1,200 stall park-and-ride garage. The route provides non-stop express service between the transit center and downtown Seattle, utilizing the I-5 HOV lanes over the entire distance to provide a very time-competitive trip.

With the September 2009 service change, King County Metro modified Route 179 to serve the Federal Way Transit Center, augmenting Route 577 express service between the transit center and downtown Seattle during peak periods. This change addressed “peak of the peak” overloads on Route 577 and allowed room for future ridership growth.

As part of the major bus-rail service restructuring in February 2010, Routes 577 and 578 replaced all the Seattle-Federal Way service formerly provided by Metro Route 194. This allowed King County Metro to redeploy the Route 194 hours for service improvements elsewhere in Seattle and South King County. To accomplish this transition, service levels on Route 577 were expanded to provide hourly headways on Saturdays, Sundays and holidays. Route 578 was expanded to provide Federal Way express service in the “reverse direction” during weekday peak periods and in both directions during the midday and at night. Thus, service expansion on the two routes covered all the time periods formerly served by Metro Route 194.

***Performance Assessment***

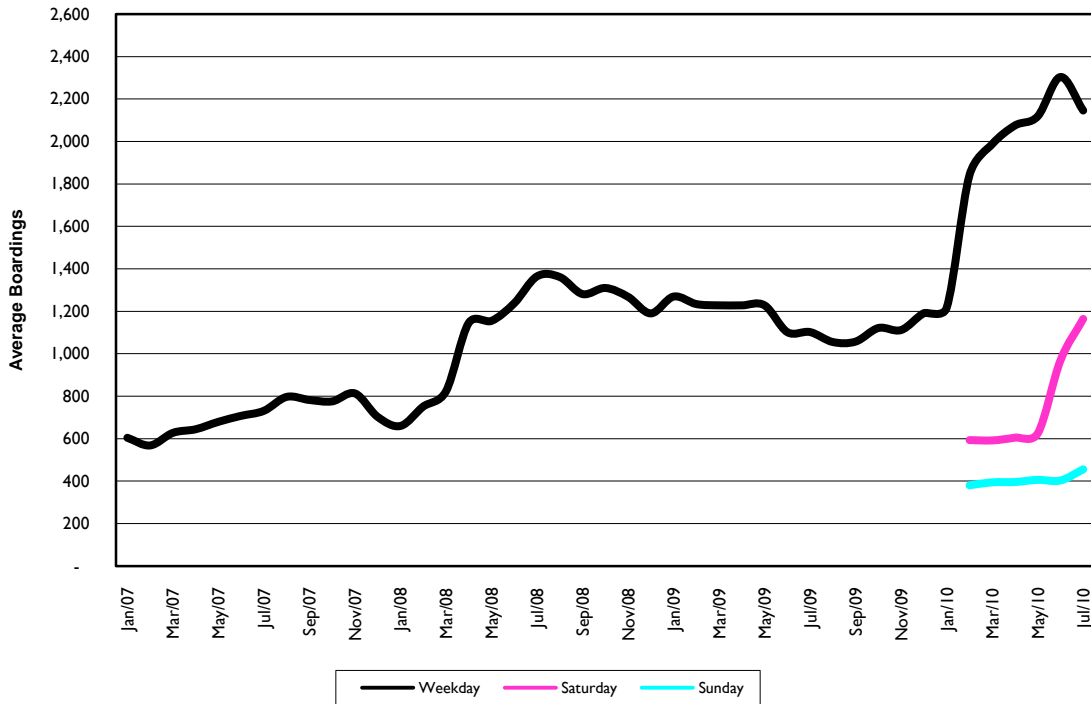
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,182	No weekend service	
Passengers per Trip	43.76	43.76		
Passengers per Revenue Hour	46.05	46.05		
Purch.Transport. Cost per Brding	\$4.29	\$4.29		
Route Assessment	1.00	1.33		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,204	618	403
Passengers per Trip	35.41	43.92	19.31	14.39
Passengers per Revenue Hour	39.41	49.64	20.73	15.56
Purch.Transport. Cost per Brding	\$4.35	\$4.00	\$5.15	\$7.90
Route Assessment	1.33	1.00	2.67	2.00

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+2%	N/A	N/A
Passengers per Trip	-19%	+<1%	N/A	N/A
Passengers per Revenue Hour	-14%	+8%	N/A	N/A
Purch.Transport. Cost per Brding	+1%	-7%	N/A	N/A

**Routes 577/578 (Seattle-Federal Way/Puyallup)**



***Additional Information Pertinent to Route***

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the spring 2010 service change.

***Passenger Activity by Time Period***

Weekday	AM Peak Northbound	PM Peak Southbound
Pass/Trip	45.17	44.22
Pass/ Rev Hr	66.80	53.87

**Service Change Concepts**

Overall productivity of Route 577 service remains “Good” despite the addition of less productive weekend service in February 2010. After a slow start, weekend ridership is on an upward trend, particularly on Saturdays.

In a separate action, the Sound Transit Board approved the transfer of Route 577 operation from King County Metro to Pierce Transit effective with the February 2011 service change. The current articulated buses used on the route will be replaced with high-capacity MCI buses, and “trippers” not needed for all-day service would be stored in Seattle during the midday, reducing fuel and maintenance costs by eliminating deadhead trips to and from the operating base. Changing service providers will save approximately \$476,000 per year and improve Route 577 productivity by reducing the purchased transportation cost per boarding.

No service changes are proposed for Route 577 during 2011.

## Route 578: (Tacoma)-Puyallup-Seattle

See map in Route 577 section above.

### Description

This route began in June 2009 with one early evening weekday trip, intended as an alternative for train passengers who formerly rode the 6:45 p.m. Sounder train trip from Seattle. The Sounder departure time had been shifted 30 minutes earlier to 6:15 p.m., leaving evening commuters without a return service to Auburn, Sumner and Puyallup. This single one-way trip was the beginning of an important express route that now serves many different functions in the South Corridor. Operating non-stop between downtown Seattle and Federal Way Transit Center, Route 578 provides a fast, auto-competitive trip between these points using the I-5 HOV Lanes. The route continues from Federal Way to Auburn Station, Sumner Station and Puyallup Station, with a peak period extension from Puyallup to downtown Tacoma. Because it serves several Sounder stations, the route is very useful as a “Shadow” service when Sounder trains are not scheduled to operate, providing a comprehensive service for South Line riders.

With the February 2010 service restructuring, Route 578 was expanded to provide off-peak direction trips and two-way midday and evening trips on weekdays. Schedules are designed to complement rather than duplicate Sounder train service, and Route 578 is carefully coordinated with Route 577 schedules to provide full-time service between Seattle and Federal Way. Beginning in June 2010, Saturday Route 578 service was inaugurated on a 60-minute headway, alternating with Route 577 trips to provide a combined 30-minute service between Federal Way Transit Center and Seattle.

### Performance Assessment

Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2010	Overall	Weekday	Saturday*	Sunday
Daily Boardings		953	568	No Sunday service
Passengers per Trip	18.69	18.68	18.95	
Passengers per Revenue Hour	10.15	10.14	10.29	
Purch.Transport. Cost per Brding	\$12.01	\$12.01	\$11.96	
Route Assessment	4.00	4.00	4.00	

\*Route 578 began Saturday service on June 12, 2010 and operated for three Saturdays in 2<sup>nd</sup> Quarter 2010.

### Additional Data Pertinent to Route

The following table looks at each direction by time period. Trip level information is from Automatic Passenger Count (APC) information for spring 2010.

### Passenger Activity by Time Period

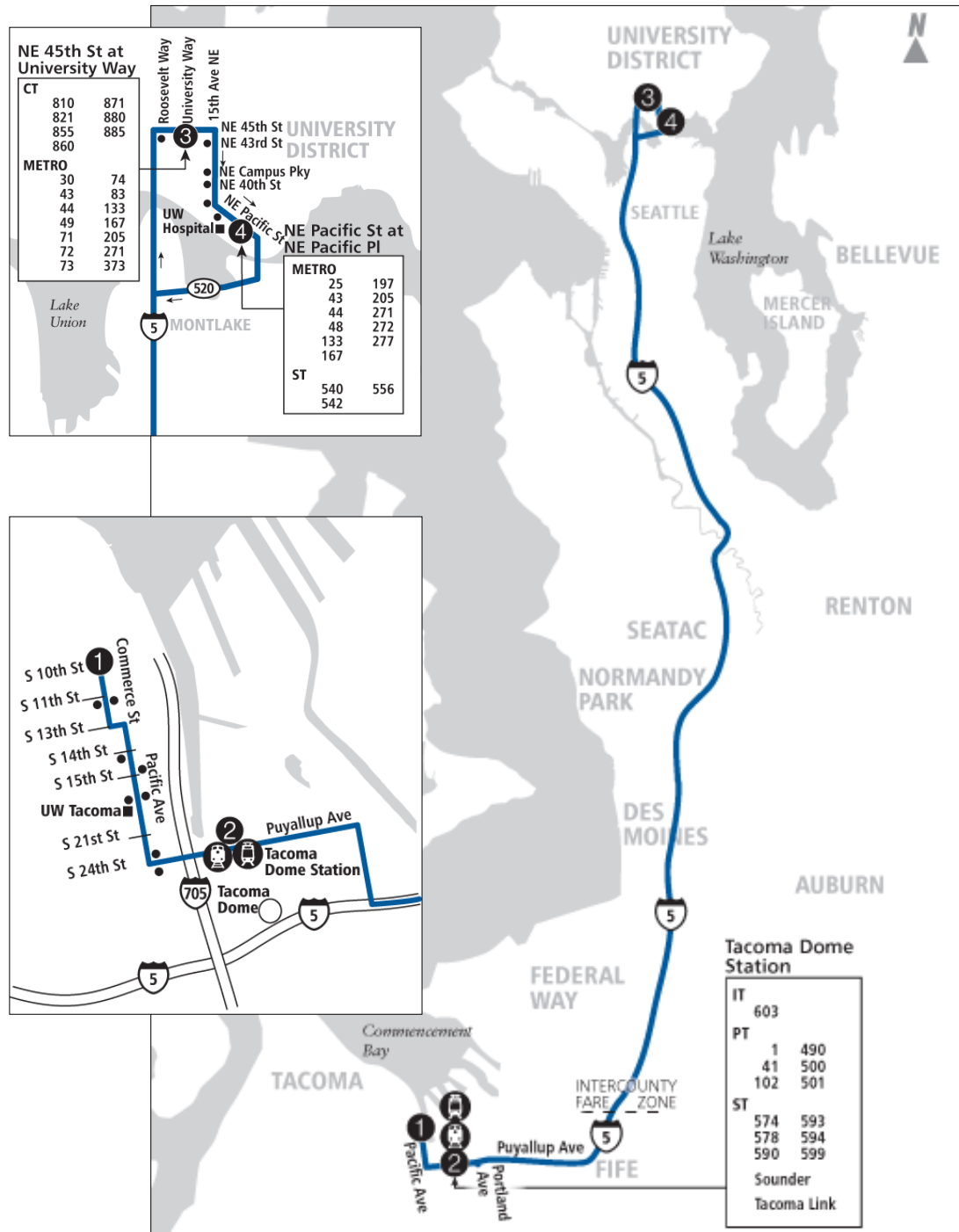
Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Northbound						
Pass/Trip	No service	No service	19.92	22.83	12.15	No service
Pass/ Rev Hr			14.57	12.80	8.14	
Southbound						
Pass/Trip	20.10	13.50	18.98	No service	20.02	See Evening service
Pass/ Rev Hr	13.01	8.84	13.55		14.30	



## **Service Change Concepts**

Ridership on Route 578 quickly grew following the February 2010 restructuring and expansion of service levels, and is now averaging just under 1,000 average weekday boardings. The route's length, combined with a schedule that does not include peak period/peak directional trips, has hampered productivity. However, the service is still in the 2-year maturation period called for in the Sound Transit Service Standards, and ridership is continuing to increase. No changes are recommended for Route 578 during 2011.

## Route 586: Tacoma – University District



*Route 586*

### **Description**

The Tacoma – U-District Express began service in September 2002. It operates generally along the I-5 corridor, with an intermediate stop at Tacoma Dome Station. Service operates weekdays only in the peak direction, northbound in the morning and southbound in the afternoon. There are currently nine trips from Tacoma to the U-District, and 10 return trips.

With the June 2006 Service Change, three northbound trips leaving downtown Tacoma in the morning and four southbound trips leaving the U-District in the afternoon were added. In addition, a reduced summer schedule was dropped at that time and the same level of service is provided year-around. In June 2010, several schedule efficiencies were implemented and one southbound trip was deleted. These efficiencies saved approximately \$192,000 per year in operating costs. There are currently nine trips from Tacoma to the U District and 10 return trips.

**Performance Assessment**

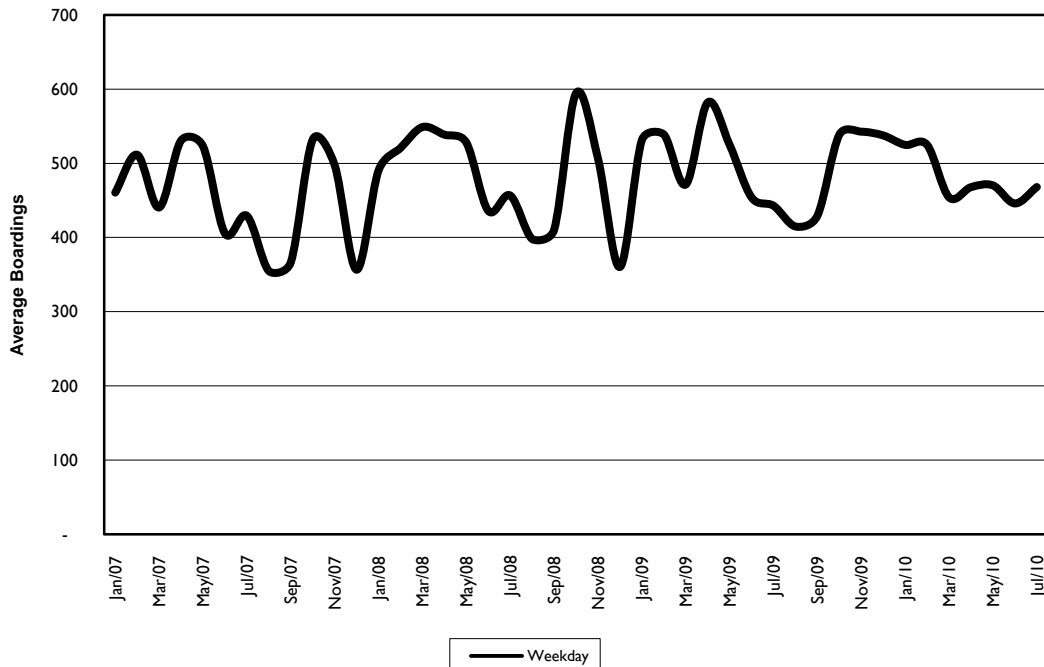
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		520	No weekend service	
Passengers per Trip	26.01	26.01		
Passengers per Revenue Hour	17.94	17.94		
Purch.Transport. Cost per Brding	\$12.03	\$12.03		
Route Assessment	3.67	3.67		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		467	No weekend service	
Passengers per Trip	23.60	23.60		
Passengers per Revenue Hour	17.15	17.15		
Purch.Transport. Cost per Brding	\$13.25	\$13.25		
Route Assessment	3.67	3.67		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-10%	No weekend service	
Passengers per Trip	-9%	-9%		
Passengers per Revenue Hour	-4%	-4%		
Purch.Transport. Cost per Brding	+10%	+10%		

**Route 586 (Tacoma-U. District)**



Like Route 540, Route 586 ridership is almost entirely UW-oriented and the ups and downs in the graph above reflect the relative levels of activity during the school year. There is a regular downturn in ridership during the summer quarter. Overall ridership declined during the 2<sup>nd</sup> Quarter of 2010 and the route’s productivity rating is “Unsatisfactory,” caused in part by long trip lengths and a relatively high cost per boarding.

***Additional Information Pertinent to Route***

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the Spring 2010 service change.

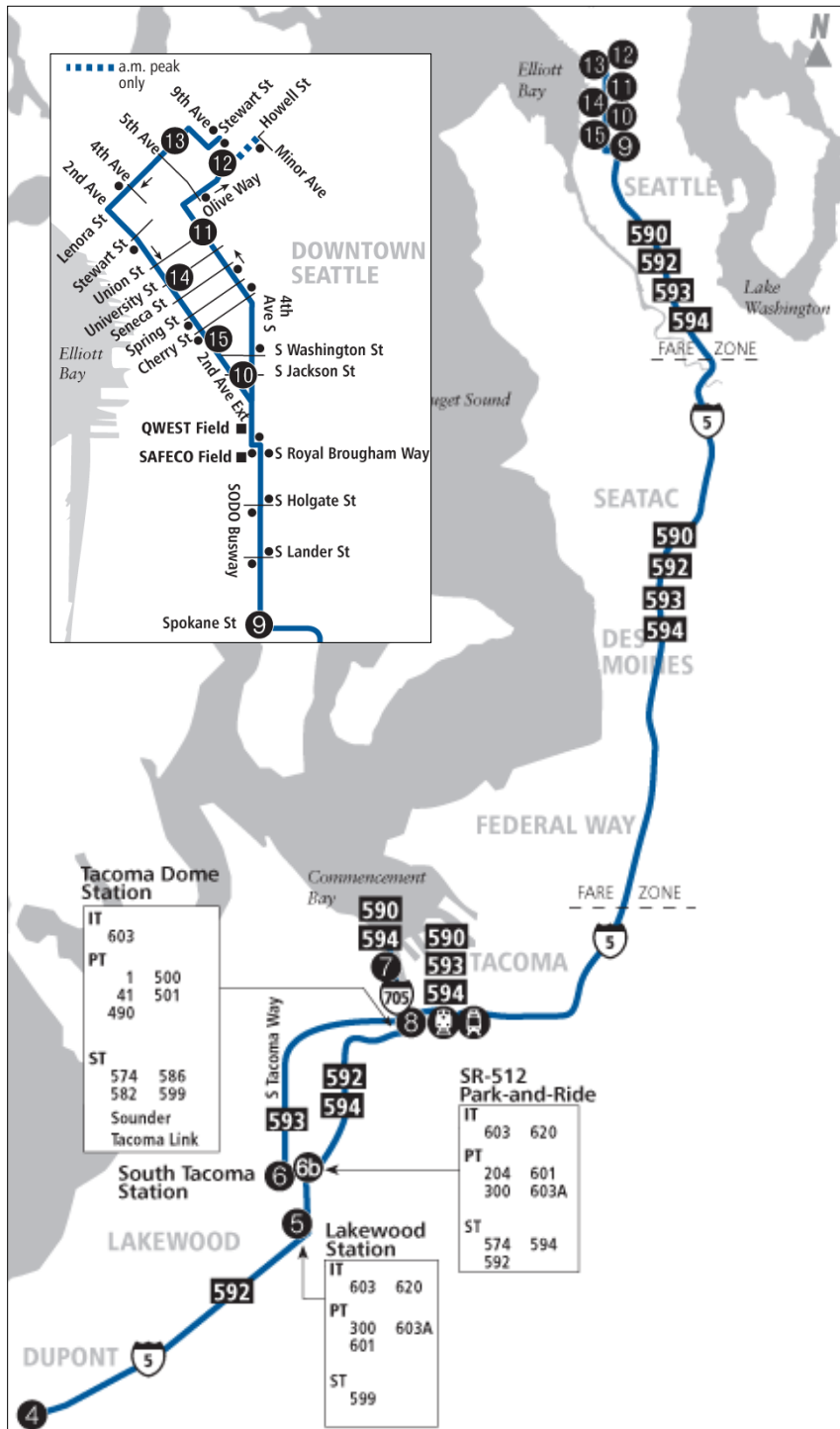
***Passenger Activity by Time Period***

Weekday	AM Peak	Midday	PM Peak
Northbound			
Pass/Trip	25.45	No service	
Pass/ Rev Hr	18.67		
Southbound			
Pass/Trip	No service	24.98	20.75
Pass/ Rev Hr		22.71	17.35

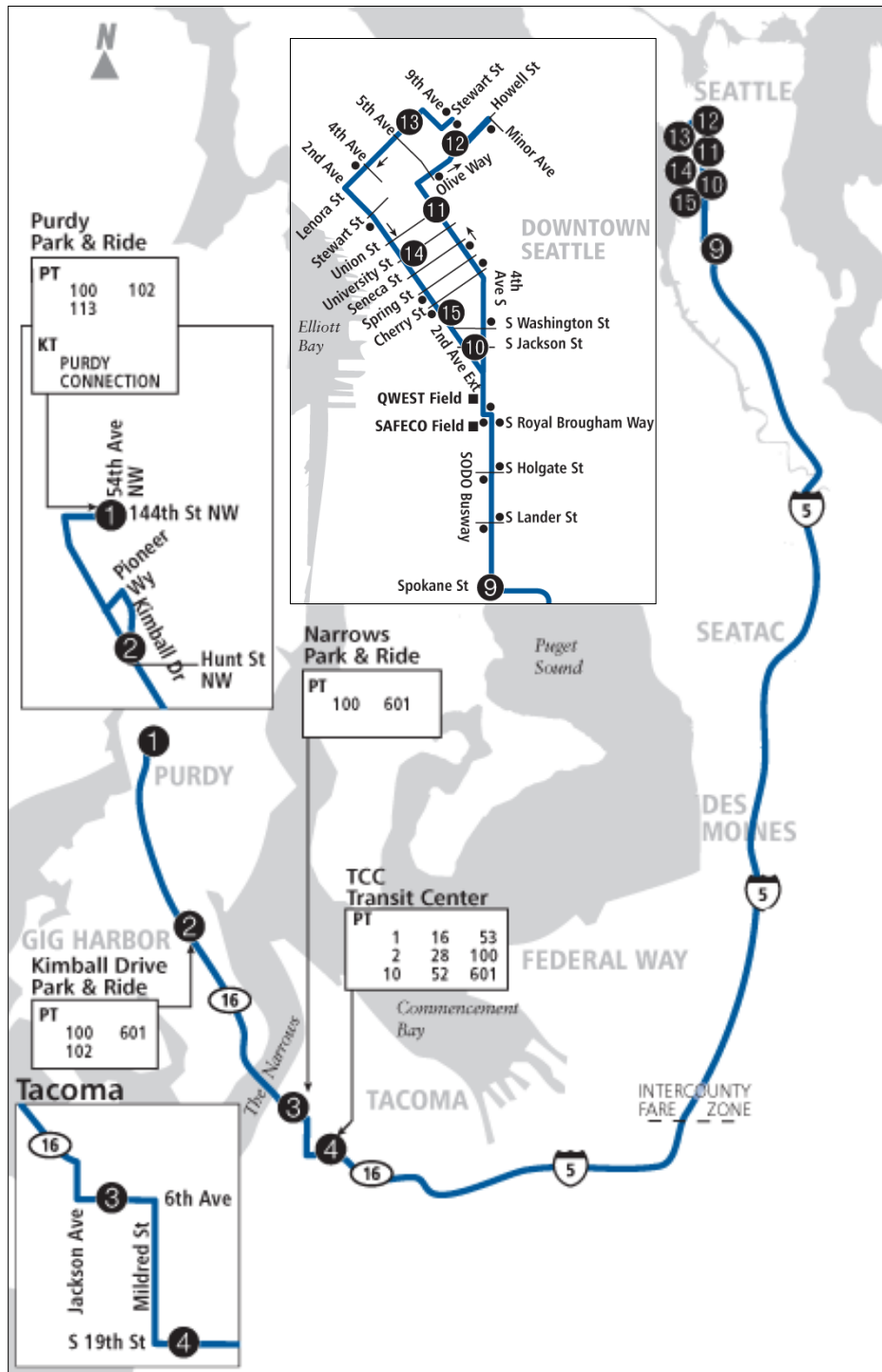
**Service Change Concepts**

The schedule efficiencies and trip cut implemented in June 2010 should improve productivity. While no specific service changes are recommended during 2011, staff will continue to monitor the performance of this route and evaluate additional actions that would improve productivity.

# Route 590/592/593/594/595: DuPont – Lakewood – Tacoma – Seattle



Routes 590/592/593/594 (Tacoma/Lakewood Service)



**Route 595 (Gig Harbor Service)**

**Description**

The Tacoma/Lakewood-Seattle Express began as a Pierce Transit service in 1991, and was incorporated into Sound Transit's regional express network in September 1999. The four routes share common routing in Seattle, operate along the I-5 corridor and make limited stops

within Pierce County. Route 590 operates only during peak periods, making stops in downtown Tacoma and at the Tacoma Dome Station. Route 592, which also operates only during peak periods, provides very limited stops with service to DuPont Station, Lakewood Station and SR 512 Park-and-Ride. Route 594, operating during off-peak periods seven days a week, makes stops at Lakewood Station, SR-512 Park-and-Ride, downtown Tacoma, and the Tacoma Dome Station. Route 595 serves peak period commuters along the SR-16 corridor, including the Purdy Park-and-Ride, Gig Harbor Park-and-Ride, the Narrows Park-and-Ride and Tacoma Community College Transit Center. The segment of Route 595 west of the Tacoma Narrows is funded by Pierce Transit since the Gig Harbor/Purdy area is outside of the Sound Transit district.

Sound Transit has steadily increased service and improved operating efficiency along this corridor. Route 592 was extended to DuPont Station Park-and-Ride in February 2002, and Sunday Route 594 service was increased from every 60 minutes to every 30 minutes in June 2002. Thirteen new high-capacity MCI highway buses were put into service in 2005, followed by another seven MCI's in 2008. These buses have been very economical to operate and are popular with customers with their smooth ride and comfortable seating. With the June 2006 service change, the peak period schedule was improved and additional "reverse peak" trips were implemented. To increase operating efficiency and reduce fuel consumption, Sound Transit worked with Pierce Transit to develop a demonstration program in 2006 that stores buses in Seattle during the midday (The "Midday Storage Program"). This eliminates the need to deadhead up to 25 buses to and from Pierce County, saving approximately 2,000 bus miles per day. Buses are now stored at Sound Transit's Central Link Operations and Maintenance Facility (OMF) during the midday, and the program has been made permanent.

In September 2008, Route 594 was extended to the new Lakewood Station and Sound Transit added more trips on Route 592 to serve the new park-and-ride. At the same time, the Route 592 schedule was adjusted to expand the span of service to DuPont Station. Route 591, a peak-only route similar to Route 594, was discontinued and replaced by additional trips on Routes 590 and 592. This change added more capacity for ridership growth during peak "shoulder" periods.

Board approval of the 2008 SIP authorized the start-up of interim bus service to the new South Tacoma Station, but implementation was delayed until February 2009 to coordinate with the completion date of the new facility, which has 213 parking stalls. The South Tacoma route, designated Route 593, provides peak period service between South Tacoma Station, Tacoma Dome Station and downtown Seattle, with seven weekday round trips. Route 593 is intended as an interim route that will be discontinued when Sounder commuter rail service is extended directly to South Tacoma.

**Performance Assessment**

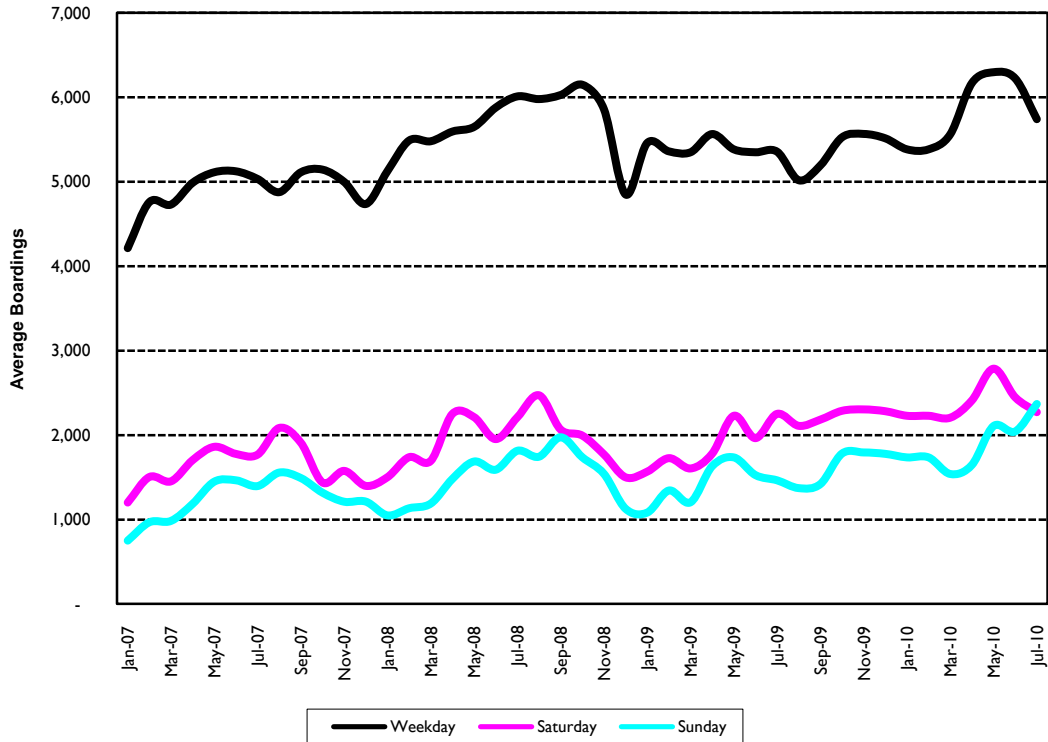
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,434	2,009	1,646
Passengers per Trip	27.00	27.04	29.54	24.21
Passengers per Revenue Hour	16.41	16.48	17.22	14.59
Purch.Transport. Cost per Brding g	\$9.08	\$9.32	\$6.66	\$8.12
Route Assessment	3.67	3.67	2.67	2.67

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		4,913	2,086	1,621
Passengers per Trip	23.95	23.51	30.68	23.84
Passengers per Revenue Hour	15.48	15.40	18.06	14.13
Purch.Transport. Cost per Brding	\$9.66	\$10.02	\$6.51	\$8.34
Route Assessment	3.67	3.67	2.67	2.67

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		-10%	+4%	-2%
Passengers per Trip	-11%	-13%	+4%	-2%
Passengers per Revenue Hour	-6%	-6%	+5%	-3%
Purch.Transport. Cost per Brding	+6%	+8%	-2%	+3%

**Routes 590/592/593/594/595 (Lakewood/Tacoma-Seattle)**





**Additional Information Pertinent to Route**

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the Spring 2010 service change.

**Passenger Activity by Time Period**

Route 590 Weekday	Early Morning	AM Peak	PM Peak
Northbound			
Pass/Trip	23.44	28.53	16.09
Pass/ Rev Hr	25.48	26.36	14.41
Southbound			
Pass/Trip	See AM Peak service	15.69	24.40
Pass/ Rev Hr		14.06	19.37

Route 590 Weekday	Peak direction trips to/from Tacoma Dome Station only	Peak direction trips to/from 10 <sup>th</sup> & Commerce/Downtown Tacoma
Northbound		
Pass/Trip	22.85	33.16
Pass/ Rev Hr	23.86	28.78
Southbound		
Pass/Trip	24.06	24.98
Pass/ Rev Hr	19.86	18.61

Route 592 Weekday	Early Morning	AM Peak	PM Peak
Northbound			
Pass/Trip	21.38	24.22	No service
Pass/ Rev Hr	15.52	16.08	
Southbound			
Pass/Trip	See AM Peak service	8.55	21.48
Pass/ Rev Hr		7.12	13.87

Route 592 Weekday	Peak direction trips to/from Lakewood Station only	Peak direction trips to/from DuPont Station
Northbound		
Pass/Trip	22.12	24.00
Pass/ Rev Hr	16.95	14.97
Southbound		
Pass/Trip	19.88	22.93
Pass/ Rev Hr	14.34	13.52

Route 593 Weekday	AM Peak Northbound	PM Peak Southbound
Pass/Trip	26.98	26.67
Pass/ Rev Hr	22.13	18.39

Route 594 Weekday	AM Peak	Midday	PM Peak	Evening	Night
Northbound					
Pass/Trip	No service	34.06	32.63	16.39	See Evening service
Pass/ Rev Hr		23.18	22.50	12.10	
Southbound					
Pass/Trip	25.60	28.28	No service	28.04	20.66
Pass/ Rev Hr	16.34	17.85		19.87	15.11

Route 595 Weekday	AM Peak Northbound	PM Peak Southbound
Pass/Trip	28.05	27.37
Pass/ Rev Hr	17.90	15.79

All Routes: Weekday	Early Morning	AM Peak	Midday	PM Peak	Evening	Night
Northbound						
Pass/Trip	22.91	28.71	31.34	30.27	16.39	See Evening service
Pass/ Rev Hr	19.07	22.95	22.21	21.58	12.10	
Southbound						
Pass/Trip	11.51	22.04	26.33	25.39	21.57	20.66
Pass/ Rev Hr	9.94	15.77	17.42	17.61	15.95	15.11

### **Service Change Concepts**

This route group showed an upward trend in both ridership and productivity during the 2nd Quarter of 2010, a very encouraging sign in light of the economic recession and declines on other ST Express routes. Collectively, the Route 590-595 group carry more riders than any other ST Express service apart from Route 550 Bellevue-Seattle.

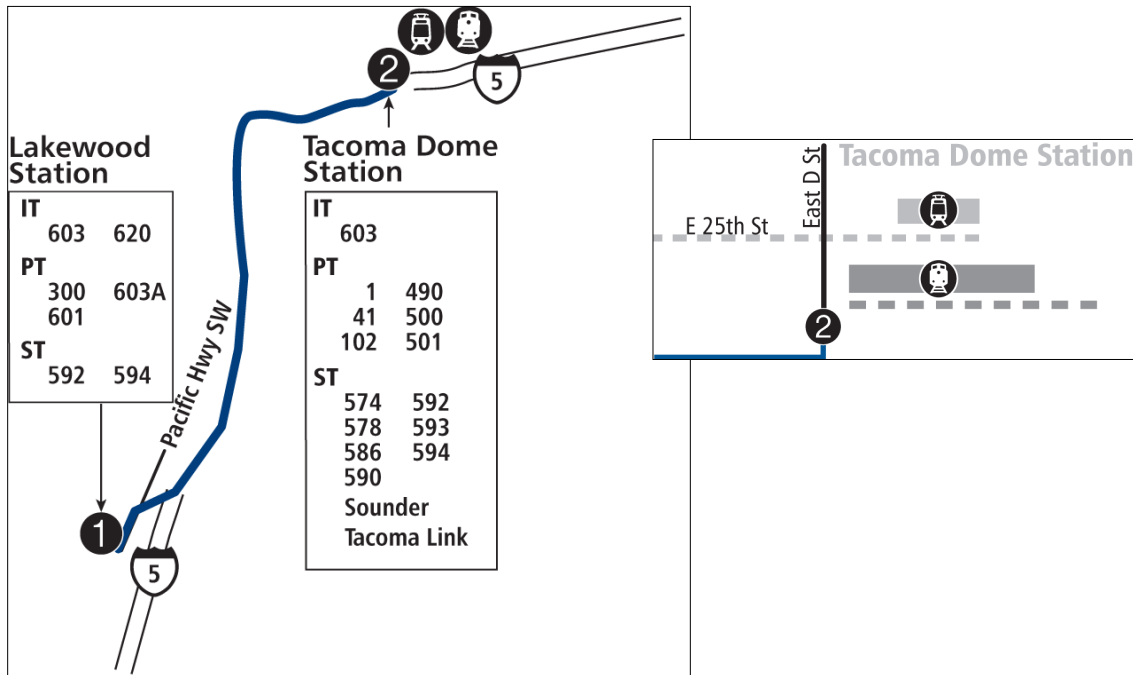
In October 2010, schedule efficiencies and trip cuts of unproductive service were implemented to improve productivity. These changes are expected to save approximately \$304,000 per year in operating costs while having little or no effect on ridership.

#### ***Potential Route 592 Olympia Service***

Intercity Transit (IT), the public transportation provider in the Olympia area, has applied for a WSDOT Regional Mobility grant that would fund a direct Olympia-Seattle commuter express service. Existing DuPont trips on ST Route 592 would start and end at the Olympia Transit Center with an intermediate stop at a park-and-ride in Lacey. The grant would fund the additional cost of this extension, and IT has requested grant funding to cover a 4-year period starting in October 2011.

Because of the uncertainty associated with the grant, the proposed Olympia service was not included as an action item in the 2011 SIP. If the grant is approved, IT and Sound Transit would negotiate an interlocal agreement outlining the detailed terms and conditions of the service. Staff would request approval of the agreement in a Board action separate from the SIP.

## Route 599: Lakewood – Tacoma



### Description

The Lakewood-Tacoma route began service in September 2008. Its primary purpose is to connect Lakewood Station with Sounder trains at Tacoma Dome Station and to develop the market for future Sounder service operating directly to Lakewood. Each train arrival and departure connects with a trip on Route 599 to or from Lakewood Station, and afternoon buses will wait for late trains if necessary. Service is funded by Sound Transit, but operated by Pierce Transit under a purchased transportation service agreement.

### Performance Assessment

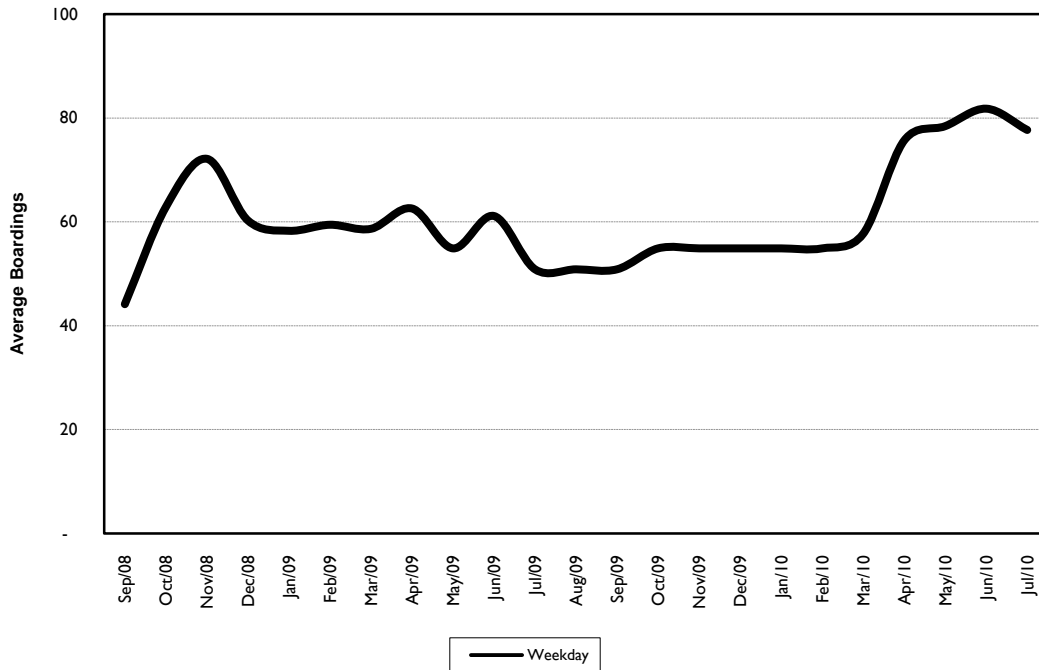
Performance Measure Rating	Good	Satisfactory	Marginal	Unsatisfactory
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2nd Quarter 2009	Overall	Weekday	Saturday	Sunday
Daily Boardings		60	No weekend service	No weekend service
Passengers per Trip	3.58	3.58		
Passengers per Revenue Hour	6.83	6.83		
Purch.Transport. Cost per Brding	\$25.07	\$25.07		
Route Assessment	4.00	4.00		

2nd Quarter 2010	Overall	Weekday	Saturday	Sunday
Daily Boardings		78	No weekend service	No weekend service
Passengers per Trip	4.32	4.32		
Passengers per Revenue Hour	7.78	7.78		
Purch.Transport. Cost per Brding	\$21.39	\$21.39		
Route Assessment	4.00	4.00		

2009-2010 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		+30%	No weekend service	No weekend service
Passengers per Trip	+21%	+21%		
Passengers per Revenue Hour	+14%	+14%		
Purch.Transport. Cost per Brding	-15%	-15%		

**Route 599 (Lakewood-Tacoma)**



**Additional Information Pertinent to Route**

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the Spring 2010 service change.

Route 599 Weekday	AM Peak	PM Peak
Northbound		
Pass/Trip	4.09	0.73
Pass/ Rev Hr	13.64	2.44
Southbound		
Pass/Trip	1.33	5.73
Pass/ Rev Hr	4.44	19.10

**Service Change Concepts**

Ridership and productivity on this route has been disappointing. Weekday boardings during 2nd Quarter 2010 averaged about 72 passengers, or about 4 boardings per trip, the lowest productivity of any Sound Transit route. The route is past its 2-year maturation period called for in Sound Transit’s Service Standards. Alternative service is available between Lakewood Station and Seattle (Route 592) and between Lakewood Station and Tacoma Dome Station (IT Route 603). In addition, ST Express Route 574 provides full-time service between the nearby SR 512 Park-and-Ride and the Tacoma Dome Station. While the alternative services to Tacoma Dome Station do not provide dedicated connections with Sounder trains, it is clear this market is so small that Route 599 is unlikely to ever be productive.

**Service Change Highlights**

- The Operations and Administration Committee of the Sound Transit Board approved the deletion of Route 599 as part of the 2011 SIP.
- Route 599 service will end with the June 2011 service change.

# Chapter 3: Preliminary Service Plan 2012-2016

## Link Light Rail

Central Link service levels are expected to remain stable through 2015. Extra trains may be operated for large-scale public events, particularly after 27 additional light rail cars are delivered in 2010/2011. Minor schedule and running time refinements are likely as ridership continues to increase and more experience is gained with operations.

### Initial Link light rail service schedule for 2011 – 2015 *(For planning purposes only)*

Weekday	Time	Headway
Early/Late	5:00 a.m. to 6:00 a.m.	15
AM Peak	6:00 a.m. to 9:00 a.m.	7 to 8
Base	9:00 a.m. to 3:00 p.m.	10
PM Peak	3:00 p.m. to 6:30 p.m.	7 to 8
Base	6:30 p.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15

Saturday	Time	Headway
Early/Late	5:00 a.m. to 8:00 a.m.	15
Base	8:00 a.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15

Sunday	Time	Headway
Early/Late	6:00 a.m. to 8:00 a.m.	15
Base	8:00 a.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 12:00 a.m.	15

### Central Link Extensions

Construction work on the University Link extension is currently underway. When completed in 2016, the U Link extension will add 3.15 route miles and two new stations to Central Link. The Capitol Hill Station will serve the state’s most densely populated urban area, and the UW Station will serve the largest educational institution in the Northwest. Together the two stations will significantly increase ridership on Central Link and require increased passenger capacity.

On the south end of Central Link, a Record of Decision (ROD) and preliminary engineering have been completed for a 1.6-mile extension from Sea-Tac/Airport Station to a new terminus at South 200th Street. Some of the right-of-way for the extension has also been acquired. The South 200th Street station will include a park-and-ride lot with approximately 600 stalls. The adopted ST2 Plan assumes a service start-up date of 2020 for South 200th Station, but plans are under consideration to move that date forward to 2016. For purposes of preliminary planning, the 2011 SIP assumes that both the UW and South 200th extensions will be opened for service at approximately the same time in 2016.

The preliminary operations plan for the South 200th-to-UW Link service is summarized in the following table (From: “Operations Plan- University of Washington to SeaTac Airport With Extension to S. 200th Street,” Sound Transit Link Operations Division, July 22, 2010.)

**2016 Central Link Service: South 200<sup>th</sup> to UW**

Alignment Length:	20.3 miles
Stations:	16
Projected End-to-End Travel Time:	48 minutes, 50 seconds
Cycle (turnaround) Time:	116 minutes
Peak Headway:	6 minutes
Train Length:	2 and 3 car trains
Peak Cars in Service:	52
Fleet Size:	62
Peak 1 hour ridership demand	2,600
Peak 1 hour capacity	2,960
Design Load Factor	2.0
Actual Load Factor	1.76

**Tacoma Link**

Assuming the new 11th & Commerce station and revised headways are implemented in 2011, Tacoma Link service levels are expected to remain stable through 2016 (see Tacoma Link schedule in Chapter 2). Large-scale special events, such as Tacoma Dome and Convention Center activities, may result in the need for additional service from time to time.

## Sounder Commuter Rail

### North Line

Service levels are expected to remain unchanged on the North Line through 2016. Minor schedule adjustments may be implemented to allow for changes in running time and improved connections with ferries at Edmonds and Mukilteo.

### South Line

The capital improvements needed to extend Sounder service to South Tacoma and Lakewood are expected to be complete in mid-2012. During the past year, agreement was reached with BNSF Railway for the addition of four new round trips called for in the ST2 program. However, to reduce the overall ST2 financial shortfall, the implementation dates for the new trips will be delayed. The revised schedule of implementation is outlined in the following table:

Roundtrip Easement #	Original Start Date	Description	Proposed New Start Date
1	7/2012	Peak/peak direction round trip	9/2013
2	9/2014	Peak/peak direction round trip	9/2016
3	7/2015	Peak/Reverse direction round trip	9/2016
4	7/2016	Off-peak round trip	9/2017

For purposes of preliminary planning, it was assumed that Lakewood service would start in mid-2012, and that the first new ST2-funded round trip would begin in September 2013, followed by a second and third new round trip in 2016. The Sounder ridership/revenue estimates reflect these assumptions. Since the Tacoma-Lakewood segment of the South Line is largely single track, changes to some existing schedules may be necessary to accommodate train meets at passing sidings, particularly if Amtrak trains begin using the Tacoma-Lakewood line. As work moves forward, more details on the Lakewood schedule and added South Line service will be presented in the 2012 SIP.

### ST Express Bus

Preliminary ST Express service change concepts for late 2012 through 2016 are described below. These proposals are shown for preliminary planning purposes and are subject to change. *Please note that Sound Transit's three largest partner agencies- Community Transit, King County Metro and Pierce Transit- are planning major revisions to service in 2012 that may result in additional ST Express changes not foreseen at this time.*

**2012**

- Temporary Route 593 discontinued with extension of Sounder service to South Tacoma; trips converted to Route 590 service between Seattle and Tacoma Dome only.

**2013**

- Potential restructure of Route 560 in conjunction with start-up of Metro’s Rapid Ride Line “F.”

**2014**

- Potential restructure of Route 540 in conjunction with opening of new SR 520/108<sup>th</sup> Avenue NE HOV direct access ramps.

**2015**

- Proposals still under development.

**2016**

- Potential deletion or restructure of Route 586 in conjunction with opening of U Link.

The following list includes additional services that are not affordable at this time, but could be considered if additional funds and resources are available to meet future demand based on ridership trends. At this time, the list is not prioritized and multiple options may be listed for certain corridors.

Route 510

Extend minimum of 30-minute frequency at all times  
Match light rail span of service in the evenings

Route 511

Extend minimum of 30-minute frequency at all times  
Match light rail span of service in the evenings  
Develop the light rail market and begin installation of off-board fare payment, next bus information, improved bus stop amenities and improve frequencies as listed in the following table.

Weekday	Time	Headways
Early/Late	5:00 a.m. to 6:00 a.m.	15
AM Peak	6:00 a.m. to 9:00 a.m.	7 to 8
Base	9:00 a.m. to 3:00 p.m.	10
PM Peak	3:00 p.m. to 6:30 p.m.	7 to 8
Base	6:30 p.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15
Weekends		
Early/Late	5:00 a.m. to 8:00 a.m.	15
Base	8:00 a.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15

Route 513

Operate 14 round trips between Eastmont and downtown Seattle



Route 522

Extend 30-minute frequency in the evenings  
 Match light rail span of service in the evenings  
 Implement corridor as a high-capacity transit corridor and begin installation of off-board fare payment, next bus information, improved bus stop amenities and improve frequencies as listed in the following table.

Weekday	Time	Headways
Early/Late	5:00 a.m. to 6:00 a.m.	15
AM Peak	6:00 a.m. to 9:00 a.m.	7 to 8
Base	9:00 a.m. to 3:00 p.m.	10
PM Peak	3:00 p.m. to 6:30 p.m.	7 to 8
Base	6:30 p.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15
Weekends		
Early/Late	5:00 a.m. to 8:00 a.m.	15
Base	8:00 a.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15

Route 545  
 Route 550

Match light rail span of service in the evenings  
 Add peak period trips to better meet demand  
 Develop the light rail market and begin installation of off-board fare payment, next bus information, improved bus stop amenities and improve frequencies as listed in the following table.

Weekday	Time	Headways
Early/Late	5:00 a.m. to 6:00 a.m.	15
AM Peak	6:00 a.m. to 9:00 a.m.	6 to 8
Base	9:00 a.m. to 3:00 p.m.	10
PM Peak	3:00 p.m. to 6:30 p.m.	6 to 8
Base	6:30 p.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15
Weekends		
Early/Late	5:00 a.m. to 8:00 a.m.	15
Base	8:00 a.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15

Route 554

Extend minimum of 30-minute frequency at all times  
 Match light rail span of service in the evenings

Route 556

Improve peak-hour, peak direction frequency to every 15-minutes  
 Add midday service every 30-minutes on weekdays

Route 560

Extend route to South Sammamish Park-and-Ride  
 Improve frequency between Burien and Bellevue to every 15-minutes on weekdays

Route 566

Implement weekend service

Route 574 Improve weekday service to 15-minute frequency  
Improve weekend service to 30-minute frequency all day

Route 577 Improve peak-hour, peak-direction frequency

Route 578 Extend weekday span of service later in the evenings  
Provide 30-minute service on weekends between 5:00 a.m. and 1:00 a.m. (replacing Route 577)

Routes 590-594 Improve midday service between Tacoma and Seattle  
Match light rail span of service in the evenings

SR-520 Service Develop SR-520 service into a fast bus corridor and begin installation of off-board fare payment, next bus information, improved bus stop amenities and improve frequencies as listed in the following table. Services to the University District would be combined to provide similar levels of service that is provided on Route 545 between I-405 and the University District. Service levels on Routes 542 and 545 will provide a frequent service between downtown Redmond and a future Link terminal at NE 40<sup>th</sup> Street.

Weekday	Time	Headways		
		Route 542	Route 545	Route 556
Early/Late	5:00 a.m. to 6:00 a.m.	30	15	30
AM Peak	6:00 a.m. to 9:00 a.m.	15	7 to 8	15
Base	9:00 a.m. to 3:00 p.m.	20	10	20
PM Peak	3:00 p.m. to 6:30 p.m.	15	7 to 8	15
Base	6:30 p.m. to 10:00 p.m.	20	10	20
Early/Late	10:00 p.m. to 1:00 a.m.	30	15	30
Weekends				
Early/Late	5:00 a.m. to 8:00 a.m.	30	15	30
Base	8:00 a.m. to 10:00 p.m.	20	10	20
Early/Late	10:00 p.m. to 1:00 a.m.	30	15	30

Central Link Expand span on Sundays to match Saturday service (create a weekday and weekend schedule)  
Operate between 1:00 a.m. and 5:00 a.m. at 30-minute frequencies

## **Chapter 4: Financial Plan and Ridership / Revenue Forecast**

Estimated ridership, fare revenue and operations and maintenance costs are shown in this chapter for 2010 through 2016.

### **Link Light Rail**

#### **Tacoma Link**

##### **Operating & Maintenance Cost Assumptions**

Financial projections with a few exceptions assume an approximate four-and-a-half percent annual cost increase. Projections are broken down by salaries, services, materials, supplies, insurance, expenses, contingency and agency overhead.

#### **Central Link Initial Segment**

##### **Ridership Assumptions**

Total annual boarding data for the segment is provided by Planning, Environment and Project Development Department staff. For the 2011 SIP, the average weekday boardings were adjusted based on ridership data in 2010.

##### **Fare Revenue Assumptions**

Fare revenue projections are based on ridership estimates from the Planning, Environment and Project Development Department.

##### **Downtown Tunnel Debt Service Assumptions**

During the late 1980's, the Municipality of Metropolitan Seattle (now King County Metro) sold bonds to finance construction of the Downtown Seattle Transit Tunnel. These bonds are expected to be paid off by 2019. Starting in 2009, it is assumed that Sound Transit will pay 40 percent of the debt service on the DSTT, split between ST Express and Link in proportion to the amount of each service operated in the tunnel. The ST Express share is expected to be 17 percent leaving Link light rail with 23 percent.

## **Souder Commuter Rail**

### **Operating & Maintenance Cost Assumptions**

Expenditures for operations and maintenance increase each year at the estimated rate of inflation, together with the cost of any added service. Souder operating and maintenance costs are subcategorized in Appendix Table A-5 as Purchased Transportation (the costs billed to Sound Transit for the provision of commuter rail service by Burlington Northern Santa Fe Railroad) and Program Costs, which covers expenses such as facilities maintenance, administration and customer information materials.

## **ST Express Bus**

### **Operating & Maintenance Cost Assumptions**

Bus operating and maintenance costs include purchased transportation and program costs in Table A-6.

### **Purchased Transportation Services Costs**

Purchased Transportation costs are the costs billed to Sound Transit for the operation and maintenance of ST Express buses by Sound Transit's partner agencies. Every fall, Sound Transit staff provides an estimate of platform hours to be operated the following calendar year and each transit partner develops a total cost estimate for their assigned routes based on these hours. The final cost will be negotiated with the transit partners to establish annual baseline costs. Bus Contingency hours will not be included in the estimates and the Bus Contingency budget will be managed by Sound Transit directly.

Projected Purchased Transportation costs are shown in Table A-6. They have been updated since the 2010 SIP was published to include negotiated costs for 2010, an estimated cost provided by the partnering agencies for 2011, and preliminary costs for future years estimated at a 4.5 percent annual inflation rate.

### **Program Costs**

Program Costs include Transportation Services staff salaries and benefits, other staff costs (such as rent, office supplies, etc.), and costs allocated to Transportation Services by support departments (Executive, Board Administration, Facilities Maintenance, Legal, Communications, Project Delivery Support Services and Finance & Information Services). Program costs also include a portion of downtown Seattle transit tunnel debt service costs and operations and maintenance costs (see Central Link section above).

### **Bus Contingency Hours**

In the 2011 budget, an operating contingency of \$1.4 million is listed as a line item for all operating modes combined, rather than carried separately by mode as shown in previous SIP's.

## **Paratransit**

As part of the Intergovernmental Agreement with King County, the County provides complementary paratransit service as required by Section 223 of the Americans with Disabilities Act of 1990 and as promulgated in 49CFR part 37, Subpart F as amended.

### **Operating and Maintenance Cost Assumptions**

Sound Transit is responsible for 50 percent of the trip costs of the paratransit trips having both origin and destination within the Central Link paratransit service area corridor and 50 percent of the registration and certification costs for those registered paratransit riders within the Central Link paratransit service corridor. The average system trip cost for all King County paratransit trips is used for trips within the Central Link service area.

## **Projected Ridership and Fare Revenue**

### **Fare Structure**

Sound Transit's current bus fare structure is zone-based, consisting of five zones; however, no single Sound Transit trip is priced higher than a three-zone fare. Generally speaking, the zone boundaries are defined as follows:

- King County is divided into three zones: Seattle/North King County (including Shoreline), East King County (east of Lake Washington, including Lake Forest Park, Bothell, and Kenmore), and South King County (south of Seattle city limits, including Renton).
- Snohomish County.
- Pierce County.

On ST Express, single-ride fares for adult riders are currently \$2.00 for one zone, \$2.50 for two zones, and \$3.00 for inter-county travel. Corresponding monthly pass prices are \$72.00, \$90.00, and \$108.00. Senior/disabled fares are approximately 50 percent of the adult fare and youth fares are discounted about 25 percent from the adult fare. For 2010, the average fare per boarding is estimated at approximately \$1.67. In June 2011, ST Express fares will transition into a county-based fare structure where travel within a county will be \$2.50 and inter-county travel will be \$3.50. Monthly passes for regular adults will be \$90 and \$126 respectively.

On Sounder, the fare structure was revised in June 2007 from a zone system to station-to-station fares. The fare is a base \$2.55 and 5.5-cents per mile rounded to the nearest quarter. Regular adult fares range from \$2.75 to \$4.75. Monthly pass prices range from \$99.00 to \$171.00. Senior/disabled fares are approximately 50 percent of the adult fare and youth fares are discounted about 25 percent from the adult fare. The average fare per boarding in 2009 is estimated at approximately \$3.05.

Central Link light rail fares were established in 2009 using a station-to-station fare structure. The fare is a base \$1.75 and five cents per mile rounded to the nearest quarter. Regular adult fares range from \$1.75 to \$2.50. Monthly pass prices range from \$63.00 to \$90.00. Senior/disabled fares are approximately 50 percent of the adult fare and the monthly pass sold by King County Metro for \$9.00. For purposes of estimating fare revenue, fares for Central Link are assumed to have an average fare per boarding of \$1.30.

On Tacoma Link, no fares are currently collected. Staff has proposed that a fare be implemented, and the Sound Transit Board may take action on the proposal in early 2011.

### Link Light Rail

The ridership forecast for Link now includes both lines (Tacoma Link and Central Link).

Additional operating experience with Tacoma Link has resulted in a slightly modified ridership projection compared with last year's SIP. Ridership was adjusted downward from the 2010 Service Implementation Plan due to the reduced level of service.

Central Link light rail ridership numbers were provided by the Planning, Environment and Project Development Department. Average weekday boardings were adjusted based on actual operating data.

### Central Link Ridership Assumptions

Total annual boarding data for the segment is provided by Planning, Environment and Project Development Department staff. For the 2011 SIP, the average weekday boardings were adjusted based on ridership data in 2010.

### Central Link Fare Revenue Assumptions

Fare revenue projections are based on ridership estimates from the Planning, Environment and Project Development Department.

### Tacoma Link Ridership Assumptions

Short-term ridership estimates through 2016 shown here are based on historical system performance. Boarding estimates include assumptions for adjusting service from 10-minute to 12-minute service.

	Actual		Estimated Boardings					
Tacoma Line	2009	2010	2011	2012	2013	2014	2015	2016
Weekday	3,029	2,944	2,474	2,183	2,190	2,196	2,202	2,207
Annual	887,519	871,793	0.7 mil	0.7 mil	0.7 mil	0.7 mil	0.7 mil	0.7 mil
Central Line	2009	2010	2011	2012	2013	2014	2015	2016
Weekday	15,547	21,053	31,212	33,636	34,545	35,753	36,667	40,606
Annual	2,501,211	6,992,075	10.3 mil	11.1 mil	11.4 mil	11.8 mil	12.1 mil	13.4 mil

### Sounder Commuter Rail

The ridership forecast for Sounder has been refined to take into account the following:

- One more year of operating experience
- Park-and-ride capacity constraints
- Revised expansion of service on the South Line

**Ridership Assumptions**

It is assumed that Sounder ridership will grow to fill existing capacity and as additional service is implemented, and that by 2016 ridership will be 3.0 million annual boardings. Ridership estimates are revised each year based on three factors:

- Additional operating experience
- Adjusted implementation schedule based on completion of capital projects
- Train capacity constraints

On the South Line, expansion of the Tacoma storage yard in 2009 allowed Sound Transit to operate 18 round trips between Tacoma and Seattle, including the two “reverse commute” Sounder trips. At this time, the Sounder extension to Lakewood is planned for late 2012.

**Fare Revenue Assumptions**

Fare revenue is tied to the increase in boardings. After 2010, the projections assume that the average fare per boarding (AFB) will increase at the estimated rate of inflation.

	Actual		Estimated Boardings					
	2009	2010	2011	2012	2013	2014	2015	2016
<b>Weekday</b>	9,331	8,771	9,463	9,538	9,832	10,205	10,563	10,721
<b>Annual</b>	2,493,682	2,364,290	2.5 mil	2.6 mil	2.6 mil	2.8 mil	2.9 mil	3.0 mil

**ST Express Bus**

The ridership forecast for ST Express has been refined to take into account the following:

- One more year of operating experience
- Service revisions by discontinuing or reducing unproductive service
- Reduced level of implementation of ST2 services

**Ridership Assumptions**

The short-term (through 2016) ridership estimates shown here are based on historical system performance and an assessment of similar transit markets to determine maturation rates for new routes and expansion of existing services. Results are estimated at the route level to best reflect the unique characteristics of each market served by ST Express.

**Fare Revenue Assumptions**

Like Link and Sounder, ST Express fare revenue projections are based on ridership forecasts together with estimates of the average fare per boarding (AFB) after 2009. The projections are inflated annually based on estimated consumer price indices. However, ST Express projections are more complex because of the wider range of trip lengths, fare categories and transfer activity compared with the other two modes. At present, the ST Express estimates shown are preliminary and are subject to change as further analysis is done.

	Actual		Estimated Boardings					
	2009	2010	2011	2012	2013	2014	2015	2016
<b>Weekday</b>	42,316	42,519	44,277	45,401	45,767	46,093	46,389	46,520
<b>Annual</b>	12,730,592	12,494,546	13.0 mil	13.3 mil	13.4 mil	13.5 mil	13.6 mil	13.6 mil

## Paratransit

The ridership forecast was estimated from actual ridership within the Link light rail paratransit coverage area and increased by 15 percent per year.

### Ridership Assumptions

Ridership is estimated on the basis of historical system performance in the Link system area, which represents a three-quarter mile linear corridor along the Link segment. As actual paratransit usage is gathered, updated paratransit ridership forecasts will be developed.

### Fare Revenues

There is no fare revenue associated with paratransit operations.

	Actual		Estimated Boardings					
	2009	2010	2011	2012	2013	2014	2015	2016
<b>Weekday</b>	169	226	248	272	299	329	362	399
<b>Annual</b>	31,030	82,540	0.1 mil	0.1 mil	0.1 mil	0.1 mil	0.1 mil	0.2 mil

### Annual Projections – Fare Revenue (millions)

Fare revenue projections are provided by the Finance Department.

Year	Central Link	Sounder	ST Express	Tacoma Link	Total
2009 actual	\$2.4	\$7.8	\$18.9	\$0.0	\$29.1
2010 est.	\$9.6	\$6.0	\$20.5	\$0.0	\$36.1
2011 est.	\$16.0	\$8.5	\$23.6	\$0.2	\$48.3
2012 est.	\$17.3	\$9.4	\$24.9	\$0.4	\$51.9
2013 est.	\$17.7	\$10.1	\$24.9	\$0.4	\$53.1
2014 est.	\$20.1	\$10.7	\$27.6	\$0.4	\$58.9
2015 est.	\$20.6	\$12.2	\$27.8	\$0.4	\$61.1
2016 est.	\$22.8	\$12.9	\$28.1	\$0.4	\$64.3

The Sound Transit Board will decide whether to charge fares on Tacoma Link during 2011. For planning purposes, the impact of fares is incorporated into Draft SIP ridership and fare revenue projections for 2011 and future years.



# APPENDIX A: Tables

**Table A-1: Subarea Vehicle Mile Summary – Link Light Rail**

<b>Central Link</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	30,236	32,729	556,621	565,467	60,478	65,462	1,113,309	1,131,001
2010 Estimated	77,518	80,350	1,372,143	1,401,777	148,195	153,724	2,614,882	2,665,342
2011 Estimated	77,472	80,300	1,371,551	1,401,184	127,218	132,324	2,218,844	2,242,807
2012 Estimated	77,639	80,472	1,374,673	1,404,382	127,385	132,496	2,221,966	2,246,004
2013 Estimated	77,472	80,300	1,371,551	1,401,184	127,218	132,324	2,218,844	2,242,807
2014 Estimated	77,472	80,300	1,371,551	1,401,184	127,218	132,324	2,218,844	2,242,807
2015 Estimated	77,472	80,300	1,371,551	1,401,184	127,218	132,324	2,218,844	2,242,807
2016 Estimated	77,654	80,487	1,374,937	1,404,652	127,401	132,512	2,222,230	2,246,274
<b>Tacoma Link</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	9,424	9,555	89,427	89,596	9,424	9,555	89,427	89,596
2010 Estimated	9,710	9,844	90,044	90,326	9,710	9,844	90,044	90,326
2011 Estimated	9,708	9,843	90,028	90,310	9,708	9,843	90,028	90,310
2012 Estimated	9,716	9,851	90,105	90,388	9,716	9,851	90,105	90,388
2013 Estimated	9,708	9,843	90,028	90,310	9,708	9,843	90,028	90,310
2014 Estimated	9,708	9,843	90,028	90,310	9,708	9,843	90,028	90,310
2015 Estimated	9,708	9,843	90,028	90,310	9,708	9,843	90,028	90,310
2016 Estimated	9,737	9,872	90,294	90,577	9,737	9,872	90,294	90,577
<b>Link Light Rail Total</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	39,660	42,284	646,048	655,063	69,902	75,017	1,202,736	1,220,597
2010 Estimated	87,228	90,194	1,462,186	1,492,103	157,905	163,568	2,704,926	2,755,668
2011 Estimated	87,180	90,142	1,461,579	1,491,495	136,926	142,167	2,308,872	2,333,117
2012 Estimated	87,355	90,323	1,464,778	1,494,770	137,102	142,347	2,312,072	2,336,392
2013 Estimated	87,180	90,142	1,461,579	1,491,495	136,926	142,167	2,308,872	2,333,117
2014 Estimated	87,180	90,142	1,461,579	1,491,495	136,926	142,167	2,308,872	2,333,117
2015 Estimated	87,180	90,142	1,461,579	1,491,495	136,926	142,167	2,308,872	2,333,117
2016 Estimated	87,391	90,359	1,465,231	1,495,229	137,137	142,383	2,312,524	2,336,851

**Table A-2: Subarea Train Miles Summary – Sounder Commuter Rail**

<b>North Line</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	2,077	2,605	72,230	73,286	7,612	9,547	264,742	268,613
2010 Estimated	2,085	2,608	72,504	73,564	6,354	7,934	221,001	223,815
2011 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
2012 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
2013 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
2014 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
2015 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
2016 Estimated	2,077	2,598	72,230	73,286	6,330	7,904	220,180	222,982
<b>South Line</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	4,343	5,303	173,560	175,797	28,398	34,671	1,134,945	1,149,384
2010 Estimated	5,081	5,668	184,788	186,115	35,540	39,543	1,292,499	1,298,977
2011 Estimated	5,061	5,646	184,081	185,403	35,404	39,391	1,287,547	1,293,990
2012 Estimated	5,207	5,792	189,444	190,766	35,493	39,424	1,292,731	1,299,046
2013 Estimated	5,799	6,412	211,638	213,025	36,853	40,816	1,351,518	1,357,906
2014 Estimated	6,255	6,952	229,726	231,303	40,045	44,593	1,478,134	1,485,852
2015 Estimated	6,255	6,952	229,726	231,303	40,045	44,593	1,478,134	1,485,852
2016 Estimated	6,406	7,131	235,724	237,364	41,103	45,846	1,520,117	1,528,276
<b>Sounder Total</b>								
	Train Statistics				Passenger Car Statistics			
	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
2009 Actual	6,420	7,908	245,790	249,083	36,010	44,218	1,399,687	1,417,997
2010 Estimated	7,166	8,276	257,292	259,679	41,894	47,477	1,513,500	1,522,791
2011 Estimated	7,138	8,245	256,311	258,689	41,734	47,296	1,507,727	1,516,972
2012 Estimated	7,284	8,391	261,674	264,052	41,823	47,329	1,512,911	1,522,028
2013 Estimated	7,876	9,011	283,868	286,311	43,183	48,720	1,571,698	1,580,888
2014 Estimated	8,332	9,550	301,956	304,589	46,375	52,498	1,698,314	1,708,834
2015 Estimated	8,332	9,550	301,956	304,589	46,375	52,498	1,698,314	1,708,834
2016 Estimated	8,483	9,729	307,954	310,650	47,433	53,750	1,740,297	1,751,258

**Table A-3: Subarea Platform Hour Summary – ST Express**

Route	Route Description	Annual Platform Hours							
		2009	2010	2011	2012	2013	2014	2015	2016
		Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
<b>Snohomish</b>									
510	Everett/Seattle	42,754	45,472	47,812	48,469	48,354	48,354	48,354	48,498
511	Lynnwood/Seattle	36,383	42,337	45,937	45,076	45,076	45,076	45,076	45,158
513	Eastmont/Seattle	5,441	5,823	6,571	6,546	6,546	6,546	6,546	6,546
532	Everett/Bellevue	9,883	9,655	13,254	13,735	13,735	13,735	13,735	13,735
535	Lynnwood/Bellevue	9,493	9,881	9,315	9,024	9,024	9,024	9,024	9,037
	<b>Subarea Total</b>	<b>103,954</b>	<b>113,167</b>	<b>122,890</b>	<b>122,850</b>	<b>122,734</b>	<b>122,734</b>	<b>122,734</b>	<b>122,974</b>
<b>East King</b>									
532	Everett/Bellevue	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831
535	Lynnwood/Bellevue	16,164	16,824	15,862	15,365	15,365	15,365	15,365	15,388
522	Woodinville/Seattle	49,980	49,723	51,266	51,601	51,501	51,501	51,501	51,601
540	Kirkland/U. District	20,207	18,167	14,133	12,156	12,108	12,108	12,108	12,108
542	Redmond/U. District	0	5,198	19,291	19,783	19,783	19,783	19,783	19,291
545	Redmond/Seattle	71,162	70,242	65,482	64,306	64,252	64,252	64,252	64,328
550	Bellevue/Seattle	53,566	54,220	54,403	54,470	54,403	54,403	54,403	54,506
554	Issaquah/Seattle	39,205	39,067	36,886	35,230	35,182	35,182	35,182	35,257
555	Northgate/Issaquah	6,077	5,849	5,872	5,872	5,872	5,872	5,872	5,872
556	Issaquah/Northgate	6,905	7,345	7,374	7,374	7,374	7,374	7,374	7,374
560	West Seattle/Airport/Bellevue	19,764	19,745	19,478	19,265	19,234	19,234	19,234	19,265
564	South Hill/Overlake	11,272	1,105	0	0	0	0	0	0
565	Federal Way/Overlake	10,851	1,064	0	0	0	0	0	0
566	Auburn/Overlake	0	22,906	29,464	29,894	29,894	29,894	29,894	29,894
	<b>Subarea Total</b>	<b>311,985</b>	<b>318,285</b>	<b>326,342</b>	<b>322,146</b>	<b>321,798</b>	<b>321,798</b>	<b>321,798</b>	<b>321,715</b>
<b>South King County</b>									
560	West Seattle/Airport/Bellevue	23,202	21,566	17,911	15,137	15,112	15,112	15,112	15,137
564	South Hill/Overlake	8,967	879	0	0	0	0	0	0
565	Federal Way/Overlake	10,425	1,022	0	0	0	0	0	0
566	Auburn/Overlake	0	11,092	12,704	13,431	13,431	13,431	13,431	13,431
574	Lakewood/Sea-Tac	19,095	24,290	25,369	25,427	25,369	25,369	25,369	25,427
577	Federal Way/Seattle	11,509	14,346	14,681	14,707	14,681	14,681	14,681	16,881
	<b>Subarea Total</b>	<b>73,197</b>	<b>73,195</b>	<b>70,666</b>	<b>68,702</b>	<b>68,593</b>	<b>68,593</b>	<b>68,593</b>	<b>70,876</b>
<b>Pierce County</b>									
564	South Hill/Overlake	5,380	527	0	0	0	0	0	0
574	Lakewood/Sea-Tac	16,266	20,692	21,611	21,660	21,611	21,611	21,611	21,660
578	Seattle/Puyallup	465	24,194	26,941	26,941	26,941	26,941	26,941	25,907
582	Bonney Lake/Tacoma	6,942	680	0	0	0	0	0	0
586	Tacoma/U. District	14,351	14,277	14,390	14,390	14,390	14,390	14,390	14,390
590-595	Lakewood/Tacoma/Seattle	121,719	121,241	121,525	121,645	121,525	121,525	121,525	121,645
599	Lakewood Sounder Connector	3,678	3,934	1,773	0	0	0	0	0
	<b>Subarea Total</b>	<b>168,801</b>	<b>185,545</b>	<b>186,239</b>	<b>184,636</b>	<b>184,467</b>	<b>184,467</b>	<b>184,467</b>	<b>183,602</b>
<b>ST EXPRESS TOTAL</b>		<b>657,938</b>	<b>690,193</b>	<b>706,137</b>	<b>698,333</b>	<b>697,593</b>	<b>697,593</b>	<b>697,593</b>	<b>699,166</b>

**Table A-4: Subarea Summary Operating & Maintenance Costs – Link Light Rail**

	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>North King County</b>								
Purchased Transportation	\$ 8,146,901	\$ 13,978,731	\$ 16,333,201	\$ 16,457,527	\$ 17,133,172	\$ 17,555,979	\$ 19,419,186	\$ 24,871,065
Program Costs	\$ 6,992,721	\$ 12,652,871	\$ 14,794,004	\$ 14,947,097	\$ 15,417,395	\$ 15,798,440	\$ 17,475,120	\$ 22,381,208
<b>Subarea Total</b>	<b>\$ 15,139,621</b>	<b>\$ 26,631,602</b>	<b>\$ 31,127,204</b>	<b>\$ 31,404,624</b>	<b>\$ 32,550,567</b>	<b>\$ 33,354,419</b>	<b>\$ 36,894,306</b>	<b>\$ 47,252,273</b>
<b>South King County</b>								
Purchased Transportation	\$ 3,834,724	\$ 9,149,547	\$ 10,690,626	\$ 10,772,002	\$ 11,214,233	\$ 11,490,975	\$ 11,759,472	\$ 12,034,241
Program Costs	\$ 3,256,890	\$ 8,281,727	\$ 9,683,170	\$ 9,783,375	\$ 10,091,200	\$ 10,340,606	\$ 10,582,223	\$ 10,829,485
<b>Subarea Total</b>	<b>\$ 7,091,614</b>	<b>\$ 17,431,274</b>	<b>\$ 20,373,796</b>	<b>\$ 20,555,376</b>	<b>\$ 21,305,433</b>	<b>\$ 21,831,581</b>	<b>\$ 22,341,694</b>	<b>\$ 22,863,727</b>
<b>Pierce County</b>								
Program Costs	\$ 4,188,684	\$ 4,142,949	\$ 4,230,000	\$ 4,658,000	\$ 4,824,000	\$ 4,907,000	\$ 5,054,000	\$ 5,186,000
<b>Subarea Total</b>	<b>\$ 4,188,684</b>	<b>\$ 4,142,949</b>	<b>\$ 4,230,000</b>	<b>\$ 4,658,000</b>	<b>\$ 4,824,000</b>	<b>\$ 4,907,000</b>	<b>\$ 5,054,000</b>	<b>\$ 5,186,000</b>
<b>Light Rail Total</b>								
Purchased Transportation	\$ 11,981,625	\$ 23,128,278	\$ 27,023,826	\$ 27,229,529	\$ 28,347,405	\$ 29,046,954	\$ 31,178,657	\$ 36,905,307
Program Costs	\$ 14,438,294	\$ 25,077,547	\$ 28,707,174	\$ 29,388,471	\$ 30,332,595	\$ 31,046,046	\$ 33,111,343	\$ 38,396,693
<b>Light Rail Total</b>	<b>\$ 26,419,919</b>	<b>\$ 48,205,825</b>	<b>\$ 55,731,000</b>	<b>\$ 56,618,000</b>	<b>\$ 58,680,000</b>	<b>\$ 60,093,000</b>	<b>\$ 64,290,000</b>	<b>\$ 75,302,000</b>

**Table A-5: Subarea Summary Operating & Maintenance Costs – Sounder Commuter Rail**

	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Snohomish</b>								
Purchased Transportation	\$ 2,822,019	\$ 2,665,972	\$ 2,555,466	\$ 2,651,492	\$ 2,800,228	\$ 2,973,630	\$ 3,044,091	\$ 3,116,222
Program Costs	\$ 5,514,624	\$ 5,110,147	\$ 4,694,471	\$ 4,805,406	\$ 4,884,681	\$ 4,803,205	\$ 4,917,019	\$ 5,033,529
<b>Subarea Total</b>	<b>\$ 8,336,643</b>	<b>\$ 7,776,119</b>	<b>\$ 7,249,936</b>	<b>\$ 7,456,897</b>	<b>\$ 7,684,910</b>	<b>\$ 7,776,836</b>	<b>\$ 7,961,110</b>	<b>\$ 8,149,751</b>
<b>South King County</b>								
Purchased Transportation	\$ 2,533,634	\$ 2,556,420	\$ 2,364,075	\$ 2,441,043	\$ 2,857,765	\$ 3,032,532	\$ 3,150,072	\$ 3,418,735
Program Costs	\$ 13,604,842	\$ 13,542,992	\$ 11,911,866	\$ 12,011,388	\$ 11,094,295	\$ 11,363,428	\$ 11,803,873	\$ 12,810,600
<b>Subarea Total</b>	<b>\$ 16,138,476</b>	<b>\$ 16,099,412</b>	<b>\$ 14,275,942</b>	<b>\$ 14,452,431</b>	<b>\$ 13,952,060</b>	<b>\$ 14,395,959</b>	<b>\$ 14,953,945</b>	<b>\$ 16,229,335</b>
<b>Pierce County</b>								
Purchased Transportation	\$ 2,118,339	\$ 2,094,998	\$ 2,387,345	\$ 2,239,851	\$ 3,188,016	\$ 3,384,163	\$ 3,515,333	\$ 3,815,148
Program Costs	\$ 10,561,565	\$ 10,156,814	\$ 8,919,777	\$ 9,546,821	\$ 12,502,012	\$ 12,734,042	\$ 13,227,612	\$ 14,355,766
<b>Subarea Total</b>	<b>\$ 12,679,904</b>	<b>\$ 12,251,812</b>	<b>\$ 11,307,122</b>	<b>\$ 11,786,672</b>	<b>\$ 15,690,029</b>	<b>\$ 16,118,205</b>	<b>\$ 16,742,945</b>	<b>\$ 18,170,914</b>
<b>Sounder Total</b>								
Purchased Transportation	\$ 7,473,992	\$ 7,317,390	\$ 7,306,886	\$ 7,332,386	\$ 8,846,010	\$ 9,390,325	\$ 9,709,497	\$ 10,350,105
Program Costs	\$ 29,681,031	\$ 28,809,953	\$ 25,526,114	\$ 26,363,614	\$ 28,480,989	\$ 28,900,675	\$ 29,948,503	\$ 32,199,895
	<b>\$ 37,155,023</b>	<b>\$ 36,127,343</b>	<b>\$ 32,833,000</b>	<b>\$ 33,696,000</b>	<b>\$ 37,327,000</b>	<b>\$ 38,291,000</b>	<b>\$ 39,658,000</b>	<b>\$ 42,550,000</b>

**Table A-6: Subarea Summary Operating & Maintenance Costs – ST Express**

	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Snohomish</b>								
Purchased Transportation	\$ 9,833,044	\$ 11,427,621	\$ 12,092,249	\$ 12,898,017	\$ 13,882,631	\$ 14,744,651	\$ 15,526,500	\$ 15,565,289
Program Costs	\$ 1,725,423	\$ 1,786,118	\$ 1,893,281	\$ 2,012,372	\$ 2,139,598	\$ 2,263,754	\$ 2,374,668	\$ 2,366,914
<b>Subarea Total</b>	<b>\$ 11,558,467</b>	<b>\$ 13,213,740</b>	<b>\$ 13,985,531</b>	<b>\$ 14,910,389</b>	<b>\$ 16,022,229</b>	<b>\$ 17,008,405</b>	<b>\$ 17,901,167</b>	<b>\$ 17,932,203</b>
<b>East King</b>								
Purchased Transportation	\$ 36,862,589	\$ 40,160,277	\$ 41,455,381	\$ 43,587,691	\$ 46,376,539	\$ 49,256,217	\$ 51,868,074	\$ 51,882,389
Program Costs	\$ 5,327,179	\$ 5,524,797	\$ 5,861,182	\$ 6,229,861	\$ 6,623,724	\$ 7,008,085	\$ 7,351,448	\$ 7,327,443
<b>Subarea Total</b>	<b>\$ 42,189,768</b>	<b>\$ 45,685,074</b>	<b>\$ 47,316,563</b>	<b>\$ 49,817,552</b>	<b>\$ 53,000,263</b>	<b>\$ 56,264,302</b>	<b>\$ 59,219,521</b>	<b>\$ 59,209,832</b>
<b>South King County</b>								
Purchased Transportation	\$ 8,578,847	\$ 9,080,520	\$ 8,778,304	\$ 8,982,484	\$ 9,571,569	\$ 10,165,901	\$ 10,704,957	\$ 11,092,051
Program Costs	\$ 1,246,588	\$ 1,291,693	\$ 1,369,597	\$ 1,455,747	\$ 1,547,782	\$ 1,637,597	\$ 1,717,832	\$ 1,712,222
<b>Subarea Total</b>	<b>\$ 9,825,435</b>	<b>\$ 10,372,213</b>	<b>\$ 10,147,901</b>	<b>\$ 10,438,232</b>	<b>\$ 11,119,352</b>	<b>\$ 11,803,498</b>	<b>\$ 12,422,788</b>	<b>\$ 12,804,274</b>
<b>Pierce County</b>								
Purchased Transportation	\$ 17,843,958	\$ 21,410,201	\$ 22,649,688	\$ 24,052,968	\$ 25,252,806	\$ 26,820,839	\$ 28,243,039	\$ 28,126,549
Program Costs	\$ 2,736,705	\$ 2,841,524	\$ 3,013,317	\$ 3,202,860	\$ 3,405,350	\$ 3,602,956	\$ 3,779,483	\$ 3,767,142
<b>Subarea Total</b>	<b>\$ 20,580,663</b>	<b>\$ 24,251,725</b>	<b>\$ 25,663,005</b>	<b>\$ 27,255,827</b>	<b>\$ 28,658,157</b>	<b>\$ 30,423,795</b>	<b>\$ 32,022,523</b>	<b>\$ 31,893,692</b>
<b>ST Express Total</b>								
Purchased Transportation	\$ 73,118,439	\$ 82,078,619	\$ 84,975,623	\$ 89,521,160	\$ 95,083,546	\$ 100,987,608	\$ 106,342,570	\$ 106,666,278
Program Costs	\$ 11,035,895	\$ 11,444,132	\$ 12,137,377	\$ 12,900,840	\$ 13,716,454	\$ 14,512,392	\$ 15,223,430	\$ 15,173,722
	<b>\$ 84,154,333</b>	<b>\$ 93,522,751</b>	<b>\$ 97,113,000</b>	<b>\$ 102,422,000</b>	<b>\$ 108,800,000</b>	<b>\$ 115,500,000</b>	<b>\$ 121,566,000</b>	<b>\$ 121,840,000</b>

**Table A-7: Subarea Summary Operating Costs – Paratransit**

	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>	<b>Estimated</b>
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>North King County</b>								
Purchased Transportation	\$ 414,000	\$ 1,449,000	\$ 1,666,350	\$ 1,916,303	\$ 2,203,748	\$ 2,534,310	\$ 2,914,456	\$ 3,351,625
<b>Subarea Total</b>	<b>\$ 414,000</b>	<b>\$ 1,449,000</b>	<b>\$ 1,666,350</b>	<b>\$ 1,916,303</b>	<b>\$ 2,203,748</b>	<b>\$ 2,534,310</b>	<b>\$ 2,914,456</b>	<b>\$ 3,351,625</b>
<b>South King County</b>								
Purchased Transportation	\$ 186,000	\$ 651,000	\$ 748,650	\$ 860,948	\$ 990,090	\$ 1,138,603	\$ 1,309,393	\$ 1,505,802
<b>Subarea Total</b>	<b>\$ 186,000</b>	<b>\$ 651,000</b>	<b>\$ 748,650</b>	<b>\$ 860,948</b>	<b>\$ 990,090</b>	<b>\$ 1,138,603</b>	<b>\$ 1,309,393</b>	<b>\$ 1,505,802</b>
<b>Paratransit Total</b>								
Purchased Transportation	\$ 600,000	\$ 2,100,000	\$ 2,415,000	\$ 2,777,251	\$ 3,193,838	\$ 3,672,913	\$ 4,223,850	\$ 4,857,427
<b>Paratransit Total</b>	<b>\$ 600,000</b>	<b>\$ 2,100,000</b>	<b>\$ 2,415,000</b>	<b>\$ 2,777,251</b>	<b>\$ 3,193,838</b>	<b>\$ 3,672,913</b>	<b>\$ 4,223,850</b>	<b>\$ 4,857,427</b>

Note: These costs are a part of the Central Link light rail program costs.

# APPENDIX B: Fleet Management

Table B-1: ST Express Bus Fleet

	Coach Number	Manufacturer	Year in Service	Type	2009	2010	2011	2012	2013	2014	2015	2016
Existing Fleet	9000-9069	Gillig	1999	40-foot Diesel	70	70	32					
	9500-9524	New Flyer	1999	60-foot Diesel	25	25						
	9525-9536	New Flyer	2000	60-foot Diesel	12	12	12	11				
	9070-9089	Gillig	2001	40-foot Diesel	20	20	20	20				
	9400-9419	New Flyer	2001	40-foot LF CNG	20	20	20	20				
	9200	New Flyer	2003	40-foot LF Hybrid	1	1	1	1				
	9537-9552	New Flyer	2004	60-foot Diesel	16	16	16	16	16	16		
	9600-9621	New Flyer	2004	60-foot Hybrid	22	22	22	22	22	22	22	
	9090-9091	Gillig	2005	40-foot Diesel	2	2	2	2	2	2	2	
	9700-9712	MCI	2005	45-foot Diesel	13	13	13	13	13	13	13	13
	9092-9120	Gillig	2008	40-foot Diesel	30	30	30	30	30	30	30	30
	9622-9623	New Flyer	2008	60-foot Hybrid	2	2	2	2	2	2	2	2
	9713-9719	MCI	2008	45-foot Diesel	7	7	7	7	7	7	7	7
	9720-9722	MCI	2009	45-foot Diesel	3	3	3	3	3	3	3	3
Planned Fleet	9624-9636	New Flyer	2010	60-foot Hybrid		13	24	24	24	24	24	24
	9553-9565	New Flyer	2010	60-foot Diesel			13	13	13	13	13	13
	11500-11520	New Flyer	2011	60-foot Diesel			21	21	21	21	21	21
	11600-11614	New Flyer	2011	60-foot Hybrid			4	15	15	15	15	15
	11700-11716	MCI	2011	45-foot Diesel			17	17	17	17	17	17
	12500-12521		2012	60-foot Diesel				22	22	22	22	22
	13000-13039		2013	40-foot LF Diesel					40	40	40	40
	13500-13511		2013	60-foot Diesel					12	12	12	12
	15500-15515		2015	60-foot Diesel							16	16
	16000-16621		2016	60-foot Hybrid								22
16000-16001		2016	40-foot LF Diesel								2	
Fleet Statistics	Total Assigned Fleet:				243	256	259	259	259	259	259	259
	Peak Bus Requirements:				199	210	217	217	217	217	217	217
	Spares:				44	46	42	42	42	42	42	42
	Spare Ratio (in assigned fleet):				22%	22%	19%	19%	19%	19%	19%	19%



**TABLE B-2: Sounder Commuter Rail Fleet**

	Vehicle Number	Manufacturer	Year in Service	Type	2009	2010	2011	2012	2013	2014	2015	2016
Actual	901-911	GM	2000-2001	Locomotive	11	11	11	11	11	11	11	11
	101-111, 301-307	Bombardier	2000-2003	Cab Car	18	18	18	18	18	18	18	18
	201-240, 401-410	Bombardier	2000-2003	Coach	40	40	40	40	40	40	40	40
Planned	912-914		2012	Locomotive				3	3	3	3	3
	308-310		2014	Cab Car						3	3	3
	411-414		2014	Coach						4	4	4
	415-421		2015	Coach							7	7
	311		2015	Cab Coach							1	1
Fleet Statistics	Total Locomotives on Property:				11	11	11	14	14	14	14	14
	Peak Vehicle Requirements (including ready reserve):				10	10	10	11	11	11	11	12
	Spares:				1	1	1	3	3	3	3	2
	Spare Ratio (in assigned fleet):				10%	10%	10%	27%	27%	27%	27%	17%
	Total Passenger Cars on Property:				58	58	58	58	58	65	73	73
	Peak Vehicle Requirements (including ready reserve):				51	51	51	54	54	54	54	63
	Spares:				7	7	7	4	4	11	19	10
	Spare Ratio (in assigned fleet):				14%	14%	14%	7%	7%	13%	27%	12%

Notes:

2012: South Line operates with 2 6-car trains (flip trains) and 4 7-car trains for a total of 40 cars plus 12 cars for the North Line for a total of 52 cars plus two ready reserve cars bringing the total peak requirement to 54 cars. New service includes a peak-hour, peak-direction trip. For weekends when event trains are operating, one six-car train would be made into seven cars and up to two North Line trains would be made 5-car consists for a total of 57 cars in service on Friday night to Monday morning leaving only one spare car over the weekend.

2016: South Line operates with 7 7-car trains for a total of 49 cars plus 12 cars for the North Line for a total of 61 cars plus two ready reserve cars bringing the total peak requirement to 63 cars. New service includes a peak-hour, peak-direction trip and a peak-hour, reverse-direction trip. One train is stored during the midday in the south end (Lakewood?). For weekends when event trains are operating, up to two North Line trains would be made 5-car consists for a total of 67 cars in service on Friday night to Monday morning leaving two ready reserve cars and 6 spare cars over the weekend.

2017: Beyond the scope of the SIP this year, but the new trip would be a midday trip using the train that is stored in Lakewood. This new trip would not require any additional equipment.

**Table B-3: Link Light Rail Fleet**

	Coach No.	Manufacturer	Year in Service	Type	2009	2010	2011	2012	2013	2014	2015	2016
Actual	1001-1003	Skoda	2003	66-foot LR	3	3	3	3	3	3	3	3
	101-135	Kinkisharyo	2009	95-foot LR	35	35	35	35	35	35	35	35
Planned	136-162	Kinkisharyo	2011	95-foot LR			27	27	27	27	27	27
Fleet Statistics	Total Assigned Fleet				38	38	65	65	65	65	65	65
	Peak Vehicle Requirements				30	30	30	30	30	30	30	54
	Spares				8	8	35	35	35	35	35	11
	Spare Ratio				27%	27%	117%	117%	117%	117%	117%	20%

# APPENDIX C: Public Outreach Summary Report

## Introduction/Background

The Sound Transit Service Implementation Plan (SIP) is updated annually to reflect Sound Transit's progress as it rolls out its vision of the regional transit system. Sound Transit continues to improve service by revising and refining ST Express regional bus routes, and enhancing service on Sounder commuter rail and Link light rail trains. The changes to Sound Transit service proposed in the Draft 2011 SIP were significant to a number of individuals and groups. Because those individuals and groups have different information needs and interests, Sound Transit conducted an extensive public outreach effort.

## Goals of Outreach

- Raise awareness of Sound Transit and its proposed service changes.
- Solicit feedback from affected groups.
- Incorporate and/or respond to feedback.
- Build constituencies and long-term support for Sound Transit and its three operating lines of service.

## 2011 SIP Outreach

A key element of the 2011 SIP outreach was the *Regional Transit News (RTN)*, a tabloid that was produced and distributed during Fall 2010. Five thousand copies were printed for distribution. An electronic version also was posted on Sound Transit's website, and a link was e-mailed to the Service Planning subscription list and to a general Agency mailing list. The *RTN* contained explanations and maps (when necessary) of each proposal, and encouraged riders and the public to contact Sound Transit with comments and inquiries about the proposed changes. In addition, a copy of the full Draft 2011 SIP was posted on the Sound Transit Web site on Oct. 8, 2010.

As part of the outreach process, Sound Transit staff participated in meetings with stakeholder groups. The stakeholders included elected official delegations from each subarea, transit vehicle operators at partnering agency bases, the Service & Facilities Planning Transit Integration Group, the Washington State Department of Transportation, affected cities, Microsoft and the University of Washington; and numerous internal groups with direct interest in the proposals and the financial impacts.

The *RTN* included information about five open houses, located throughout the Sound Transit service area since all areas of the region will be impacted by the proposals. They were held at Everett Station, Bellevue City Hall, Freighthouse Square in Tacoma, the Burien Library and Union Station. The open houses were conducted between Oct. 19 and Nov. 4, 2010. In addition, the *RTN* was distributed at transit centers and park-and-ride lots in areas impacted by the proposed changes. Distribution also took place through the Employee Transportation Network and other Sound Transit meetings and events, at public libraries and on-board specific bus routes and on Sounder trains. There was no survey questionnaire included as a part of the 2011 SIP process. The *RTN* and website encouraged riders and other interested members of the public to send in specific comments by e-mail or letter.

In total, 92 comments were received to the 2011 SIP (80 e-mails and 12 written comments). The main comments received consisted of: opposition to the changes on Route 560, dislike of the

revised mid-day service change on Route 540, opposition of the discontinuation of Route 599, and opposition to the discontinuation of Route 535 service on Sunday.

While public comments are always reviewed by staff, the official comment period for the 2011 SIP concluded on Nov. 4, 2010 with a formal public hearing where interested citizens had an additional opportunity to comment on the proposals.

# APPENDIX D: Title VI Impacts

## Introduction

In compliance with Title VI of the Civil Rights Act of 1964, the Sound Transit 2011 SIP includes an impact assessment of the 2011 service changes on minority transit users and communities, an impact assessment on low-income persons, and an impact on persons with a limited ability to speak, understand, read and write English. The Federal Transit Administration (FTA) is responsible for ensuring that federally supported transit services and related benefits are distributed by applicants and recipients of FTA assistance in a manner consistent with Title VI. Section 601 of Title VI of the Civil Rights Act of 1964 states:

*No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.*

Sound Transit provides regional service to many diverse communities throughout the Central Puget Sound area. This is an assessment of potential impacts to minority communities and populations with the 2011 service changes.

Based on an examination of existing ridership patterns, and other options for completing trips, it does not appear that any of the service changes disproportionately affect minority or disadvantaged populations in the Sound Transit district. Tacoma Link service and ST Express bus service changes and potential impacts are discussed in the following section.

## Tacoma Link

The proposed change to Tacoma Link service is to add one more stop between Theater District Station and Convention Place Station. The new stop will be located on South 11<sup>th</sup> Street and Commerce Street. With the new station, frequency of service on Tacoma Link would decrease as a result of longer dwell time and signal delay. The current frequency of 10 minutes will be increased to 12 minutes for weekdays and Saturdays. Weekday evenings will operate with a 24 minute frequency. On Sundays, the frequency of service will decrease from every 20 minutes to every 24 minutes as well.

Several census tracts along the Tacoma Link alignment contain higher concentrations of minorities, populations with limited English proficiency, and populations living below poverty line. The positive change for riders in this area is the new station on South 11<sup>th</sup> Street. The trade off of the benefit is a slightly longer travel time and a slight decrease in service frequency.

Please refer to the back of Appendix D for maps on the distribution of Title VI populations.

## ST Express Bus

Changes to ST Express eliminate service on select route segments, reduce service frequency, or combine routes to achieve operating savings. These types of changes were evaluated for Title VI impacts. Each of these ST Express bus service changes and their Title VI impacts are discussed below.

All other changes on ST Express service in 2011 consist of additional service routes or increases in service. These changes will not negatively impact any disadvantaged communities.

### **Route 510/511: Seattle – Everett**

The service change in this corridor will consolidate Routes 510 and 511 on Sundays and holidays, together with shortening the route by starting and ending it at Everett Station instead of downtown Everett. The consolidated route will be designated Route 512. There will be no change in service frequency, but slightly more travel time for current 510 riders and the possibility of standing loads on some trips when major events are scheduled in Seattle.

Currently the two routes overlap each other between downtown Seattle and the NE 145<sup>th</sup> Street Freeway Station. Route 510 serves South Everett Park & Ride and Everett Station. Route 511 serves Lynnwood Transit Center and Ash Way Park & Ride. The two routes will be combined Sundays and holidays and see no change in weekday or Saturday service levels. In other words, for current 511 riders, there is no change to the service. For current 510 riders, the trip between Seattle and Everett will include extra stops at Lynnwood Transit Center and Ash Way Park & Ride. As a result of the extra stops, travel time between Everett and Seattle will increase by about 10 minutes on Sundays and holidays. Transfers between Route 512 and Everett Transit buses at Everett Station will be necessary for passengers continuing to and from downtown Everett. As a result, the cash fare will increase as riders need to pay a separate fare on each system; however, with an ORCA card, riders can transfer between the two services at no extra cost. The frequency of Sunday/Holiday service will decrease for Seattle passengers boarding at the NE 45<sup>th</sup> Street Freeway Station and NE 145<sup>th</sup> Street Freeway Station, since these stops will be served by one route instead of two.

Several census tracts near the I-5 bus stops have relatively high concentrations of minority populations, persons with limited English proficiency and persons living below poverty line. For all census tracts in Everett we also see the percentage of population under poverty level higher than the Sound Transit District average of 9.17%.

With alternative services available from Everett Transit, there is relatively little impact from the deletion of Sunday/Holiday service between Downtown Everett and Everett Station. However, the consolidation of Sunday and holiday service on the 510 and 511 may result in occasional standing loads on some trips, particularly when major events are scheduled in downtown Seattle.

Please refer to Appendix D for maps showing the distribution of Title VI populations by census tract.

### **Route 513: Seattle – Everett**

The service change for Route 513 will delete service on Evergreen Way between downtown Everett and Evergreen Way at 79<sup>th</sup> Pl SE. The current service connects downtown Everett and downtown Seattle via I-5, SR-526 and Evergreen Way. With the service change, the route would no longer serve downtown Everett and Evergreen Way except for the stop at Evergreen Way and 79<sup>th</sup> Pl SE, which would be the terminal stop at the route's north end.

In downtown Everett and along Evergreen Way between Pacific Avenue and 79<sup>th</sup> Pl SE, there is one census tract with a higher percentage of minority populations and people with limited English proficiency than the Sound Transit District average. There are a few more census tracts with a higher percentage of population living below the poverty line.

Everett Transit provides a frequent alternative service on Evergreen Way for current 513 riders. Riders who plan to travel to Seattle can either take the Everett Transit route 7 or 9 north to Everett Station for 510 services or south to Evergreen Way & 79<sup>th</sup> Pl SE for 513 services. Route 513 schedules will be adjusted to minimize transfer time between Everett Transit and Route 513.

A trip from the deleted section of Route 513 to Seattle will require a transfer with the service change. As a result, the cash fare will increase as the rider has to pay a separate fare on Everett Transit and Sound Transit service. However, with an ORCA card, riders can transfer between the two services at no additional cost.

Please refer Appendix D for maps showing the distribution of Title VI populations.

### **Route 535: Lynnwood – Bellevue**

The service change will eliminate Sunday and holiday service on Route 535 between Lynnwood and Bellevue. This hourly service has consistently been unproductive based on Sound Transit's service standards. Its cost per boarding for Sundays and holidays is one of the highest among ST Express services.

This route currently serves Lynnwood Transit Center and Bellevue Transit Center with intermediate stops at Canyon Park & Ride, UW Bothell, and Totem Lake Freeway Station. Without Sunday and holiday service, Route 535 riders can take King County Metro's local route 230 and 238 for trips between Bothell, Totem Lake, and Bellevue. Lynnwood riders who wish to travel to Bellevue on Sundays would need to transfer in downtown Seattle using 511 and 550 services. There is, however, no alternative Sunday and Holiday service for Alderwood Mall and Canyon Park because Community Transit no longer provides service on Sundays and holidays.

Except one census tract by Totem Lake Freeway Station, there are no census tracts with a higher concentration of Title VI communities adjacent to the current 535 service on I-405. At Totem Lake, there is one census tract with a higher percentage of population with limited English proficiency than the Sound Transit District average of 3.68%. Several census tracts around Lynnwood Transit Center have higher than average concentration of populations below poverty line, persons with limited English speaking and writing ability, and minority communities. Alternative service to Bellevue is available for these riders with a transfer in downtown Seattle. At Alderwood Mall, where no alternative service is available, there is a higher percentage of persons with limited English ability and minority populations.

A trip from Lynnwood to Bellevue on Sundays and holidays will require a transfer with the service change. As a result, the cash fare would increase as the rider has to pay a separate fare on each bus. However, with an ORCA card, riders can transfer between the two services at no additional cost.

Please refer to Appendix D for maps showing the distribution of Title VI populations.

### **Route 540: Kirkland – U-District**

The Route 540 change will eliminate most midday and evening service. Off-peak service between University District and Kirkland has been unproductive based on Sound Transit service standards. While peak period Route 540 service will remain, off-peak riders will need to use different service alternatives that involve transfers.

The current route has half hour frequency service during the midday and hourly frequency in the evening. The service change will delete most service during these time periods.

One census tract by South Kirkland Park & Ride has a higher concentration of populations with limited English proficiency. Several census tracts in the University District contain higher concentrations of minority communities and populations living under the poverty level. Communities near the other 540 stops do not appear to contain a higher percentage of Title VI populations.

King County Metro Route 255 is identical to Route 540 between Kirkland and Montlake. With the deletion of midday and evening Route 540 service, riders in the University District travelling to Kirkland during the midday or evening may take Routes 43, 48, 271 or 542 to Montlake Boulevard & SR-520 and transfer to Metro Route 255 heading east on the SR-520 bridge to Kirkland. Likewise, riders travelling from Kirkland to the University District during midday and evening time periods may take Metro Route 255 and transfer to Routes 43 or 48 at Montlake. King County Metro will double the midday service levels on Route 255 in February 2011, from every 30 minutes to every 15 minutes. King County Metro issues and accepts cash transfers within its system as well as the ORCA fare card.

Please refer to Appendix D for maps showing the distribution of Title VI populations.

### **Route 554: Seattle – Issaquah**

The Route 554 change will reduce midday service from every 15 minutes to every 20 minutes. In addition, service frequency on Saturdays and Sundays will decrease from every 30 minutes to every 60 minutes before 10:00 a.m. and after 7:00 p.m. Except for longer waiting time, there are no other negative impacts for current 554 riders with the change. Midday frequency of service to Issaquah Highlands Park & Ride will increase from every 30 minutes to every 20 minutes with the service change.

Census tracts in downtown Seattle and by I-90 & Rainier Avenue Freeway Station have a higher percentage of minority communities, population with limited English proficiency, and population living below the poverty level. Census tracts around Eastgate Park & Ride also contain higher than average numbers of Title VI communities.

Please refer to Appendix D for maps showing the distribution of Title VI populations.

### **Route 560: Bellevue – West Seattle**

The Route 560 change will delete service on the West Seattle-Burien segment of the route except during weekday peak periods. Peak period service will continue at current service levels between these points. The impacted neighborhoods are Alaska Junction, Morgan Junction, Fauntleroy, Arbor Heights, Westwood, White Center, Top Hat, Shorewood, Chelsea Park and Burien. Current 560 service on the remaining route segment between Burien Transit Center and Bellevue will remain unchanged.

Several census tracts near the Route 560 stops between White Center and Burien Transit Center contain minority communities, populations with limited English proficiency, and populations living below the poverty line. Without the 560 service change, current 560 riders living in these areas may take King County Metro Route 120 between White Center and Burien as an alternative service. Route 120 runs every 15 minutes weekdays and Saturdays and every 30 minutes at other times. For riders living in Alaska Junction and Fauntleroy, alternative services are Metro route 54 and 128 to White Center. Route 128 also serves Tukwila International Blvd Station, which is an one-station ride from SeaTac Airport.



A trip from West Seattle to Sea-Tac Airport or Bellevue would require a transfer with the service change. As a result, the cash fare would increase as the rider has to pay a separate fare on King County Metro and Sound Transit service. However, with an ORCA card, riders can transfer between the two services at no additional cost.

Please refer to Appendix D for maps showing the distribution of Title VI populations.

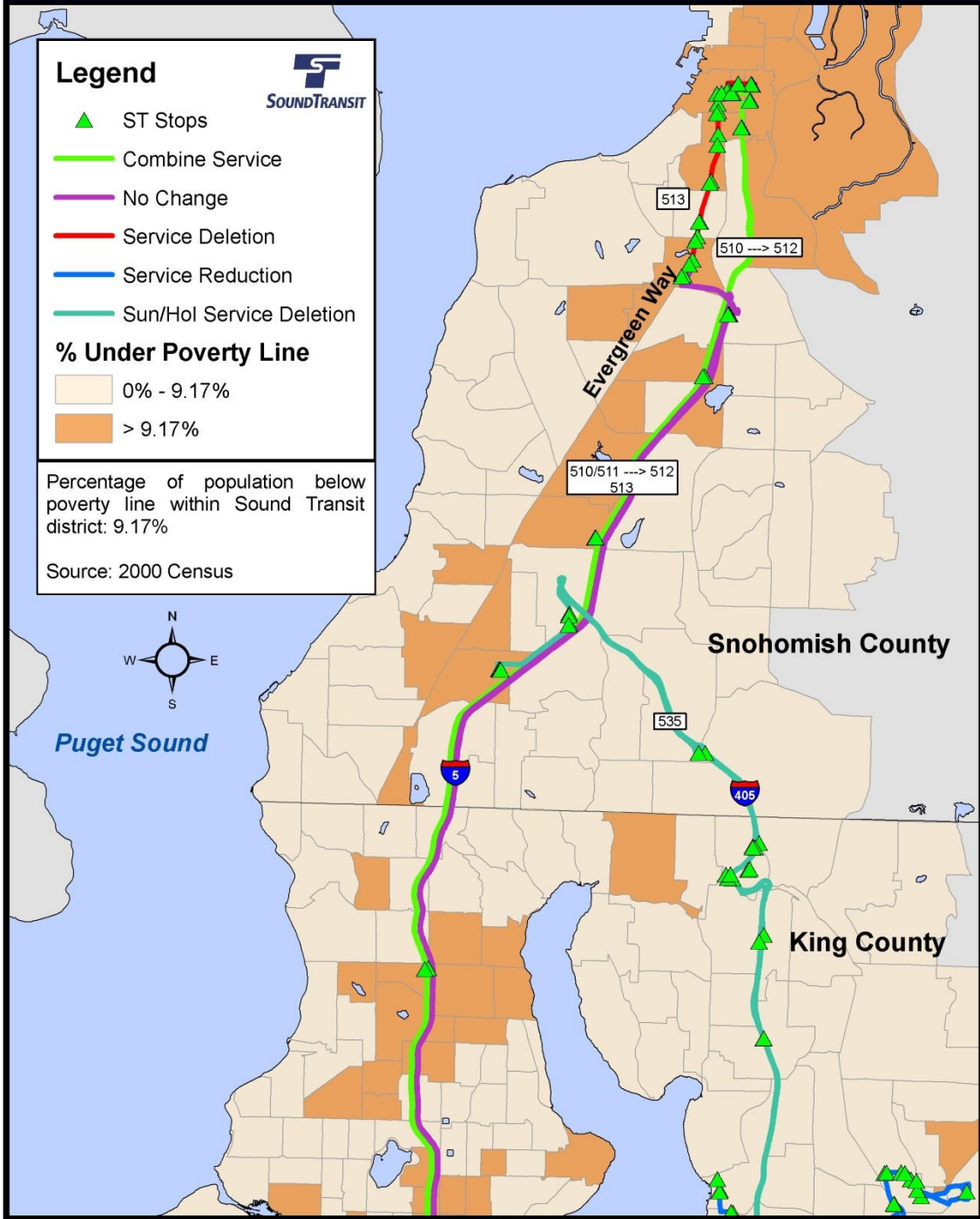
### **Route 599: Lakewood – Tacoma**

The service change for Route 599 will eliminate the entire route. Route 599 currently serves as a Sounder connector route connecting Lakewood Station to Tacoma Dome Station. However, this route is the least unproductive service in the entire ST Express system. Its performance has consistently fallen below Sound Transit's service standards.

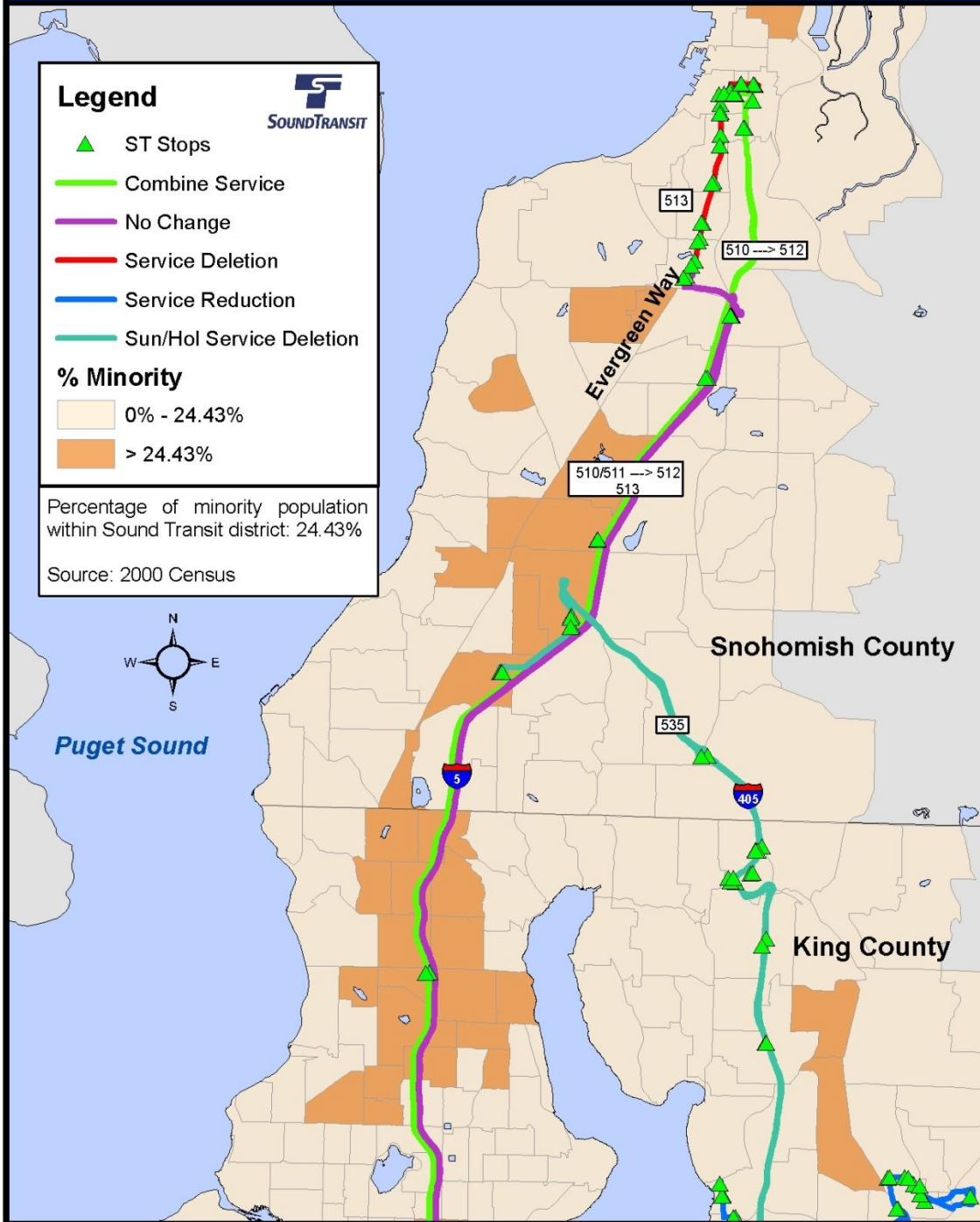
Several census tracts by Tacoma Dome Station and Lakewood Station contain minority communities, populations with limited English proficiency, and populations living below the poverty line. With the elimination of Route 599, about 70 daily riders are impacted by the change. Alternative service between Lakewood Station and Tacoma Dome Station is available, however. Current 599 riders may instead take ST Route 574 from SR-512 Park & Ride to Tacoma Dome Station. Route 574 runs early enough for riders who wish to transfer to any Sounder service at Tacoma Dome Station. In addition, Intercity Transit Route 603 connects Lakewood Station with Tacoma Dome Station.

Please refer to Appendix D for maps showing the distribution of Title VI populations.

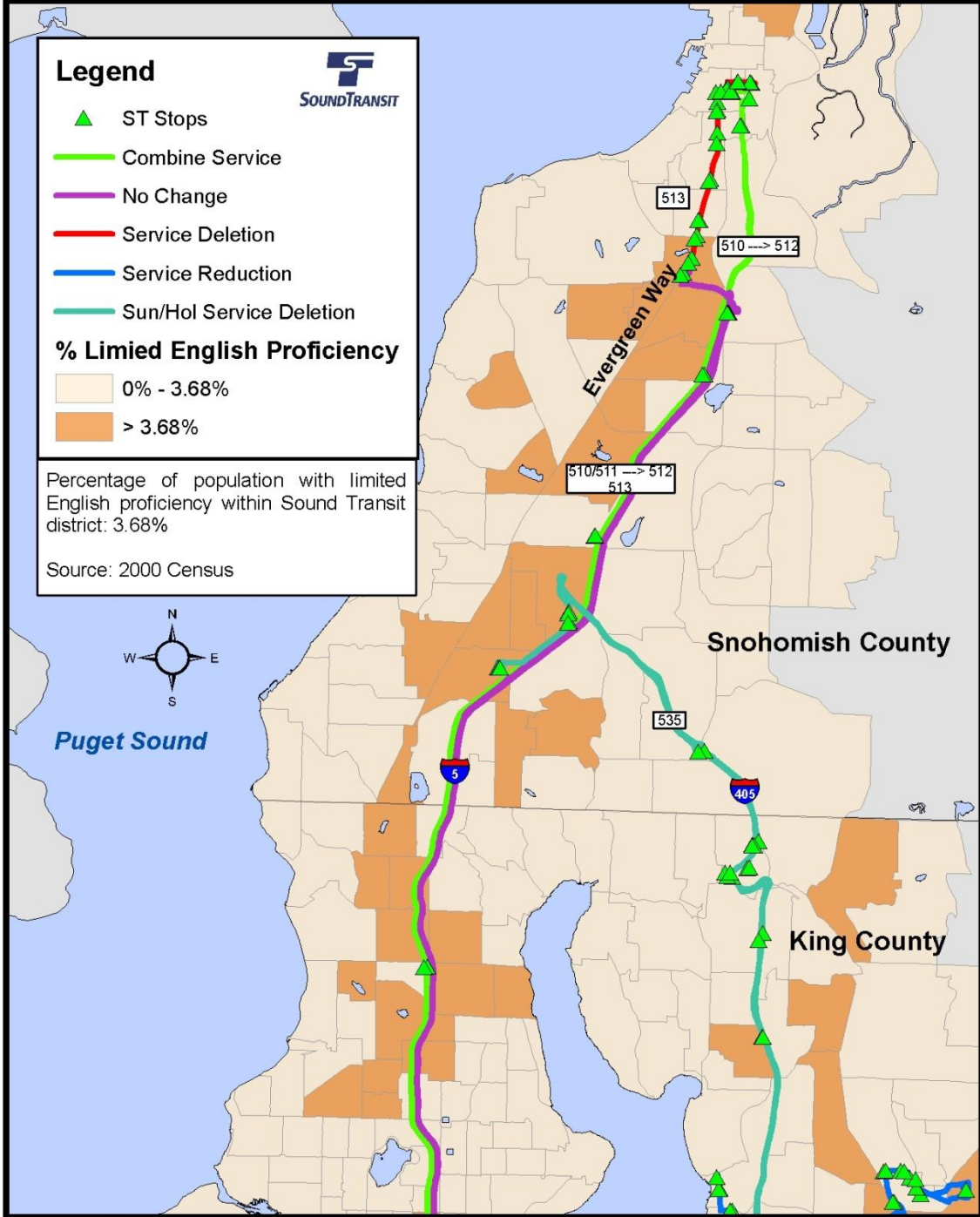
# North Sound Population Below Poverty Line



# North Sound Minority Population Distribution

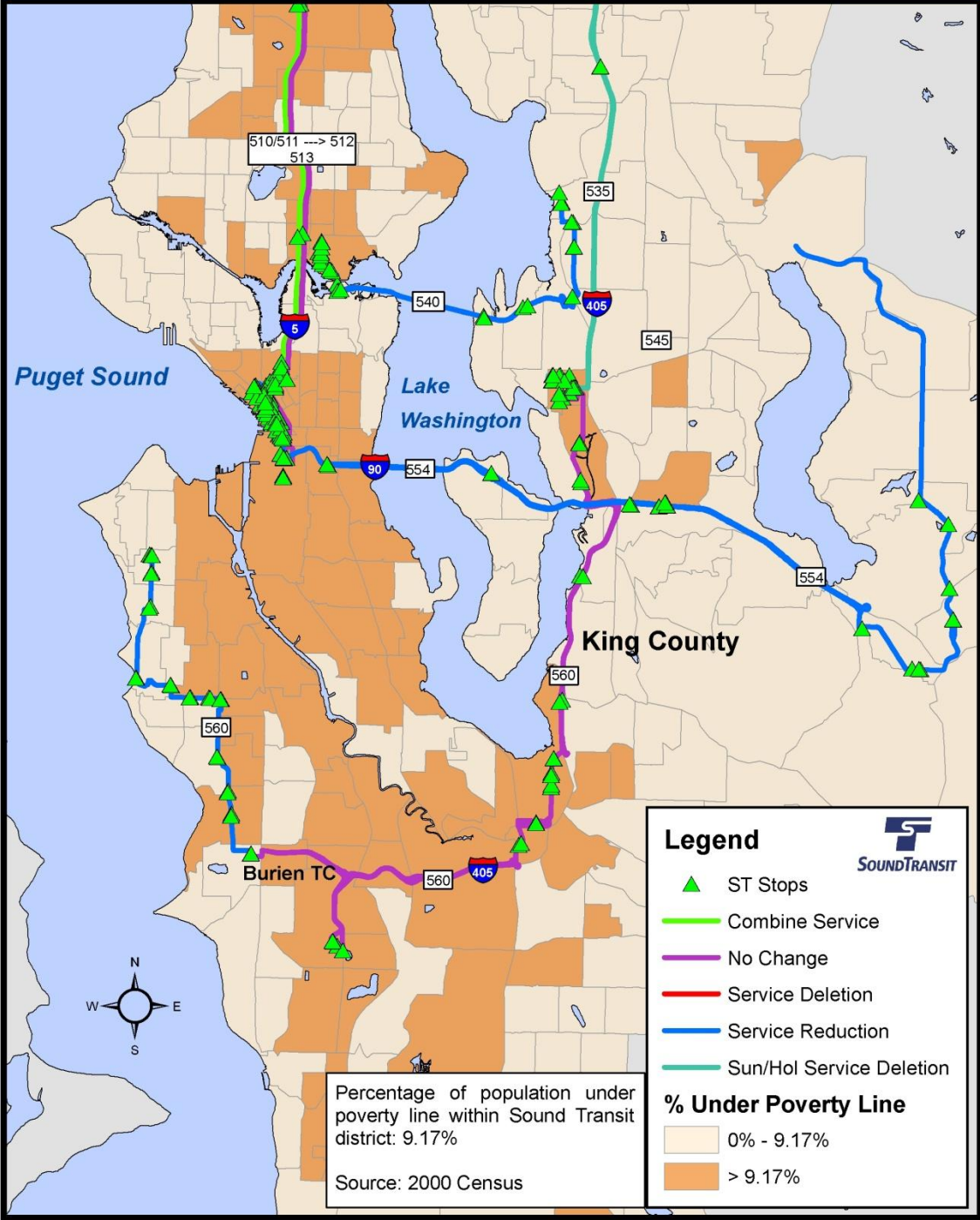


# North Sound Limited English Proficiency Population Distribution

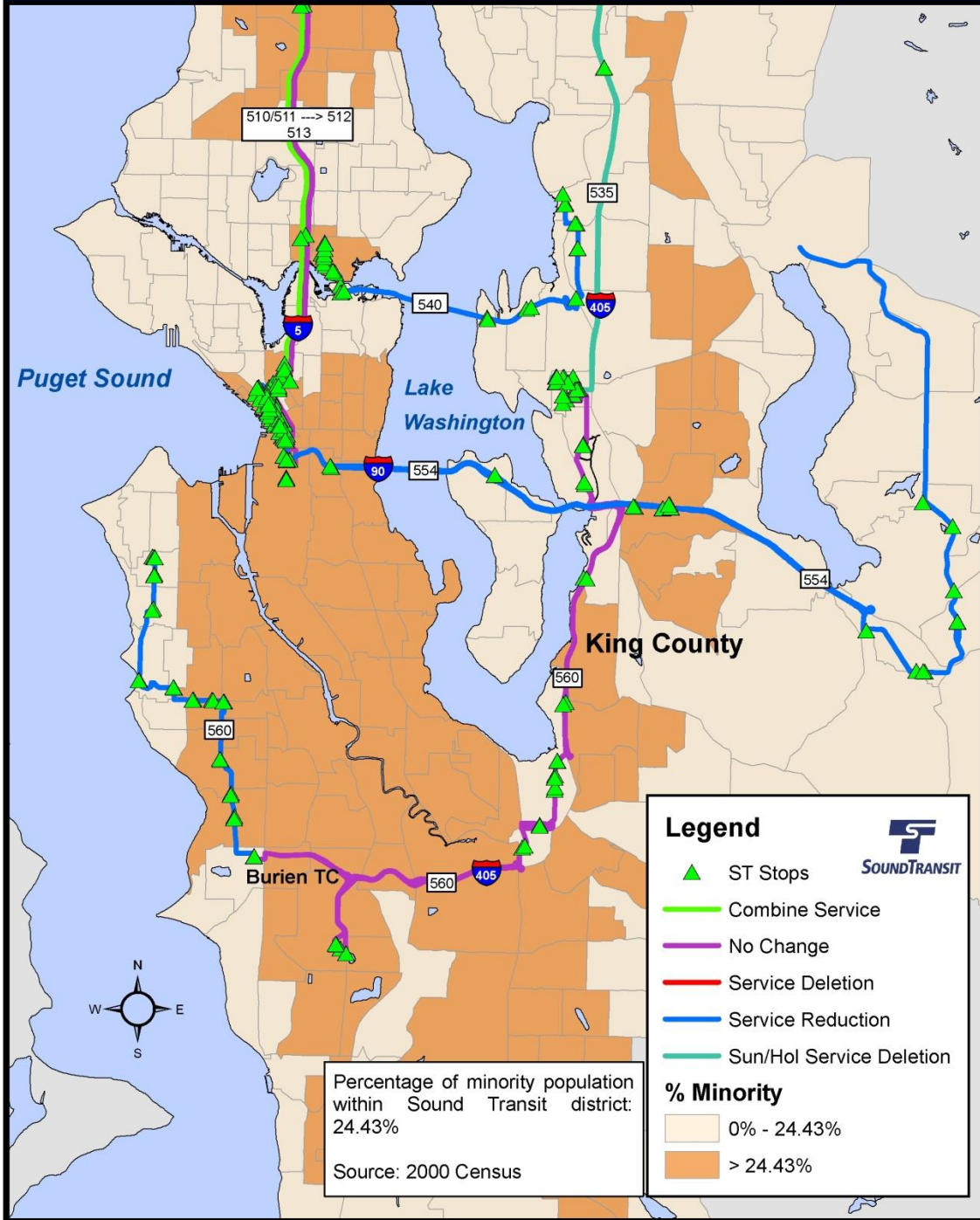




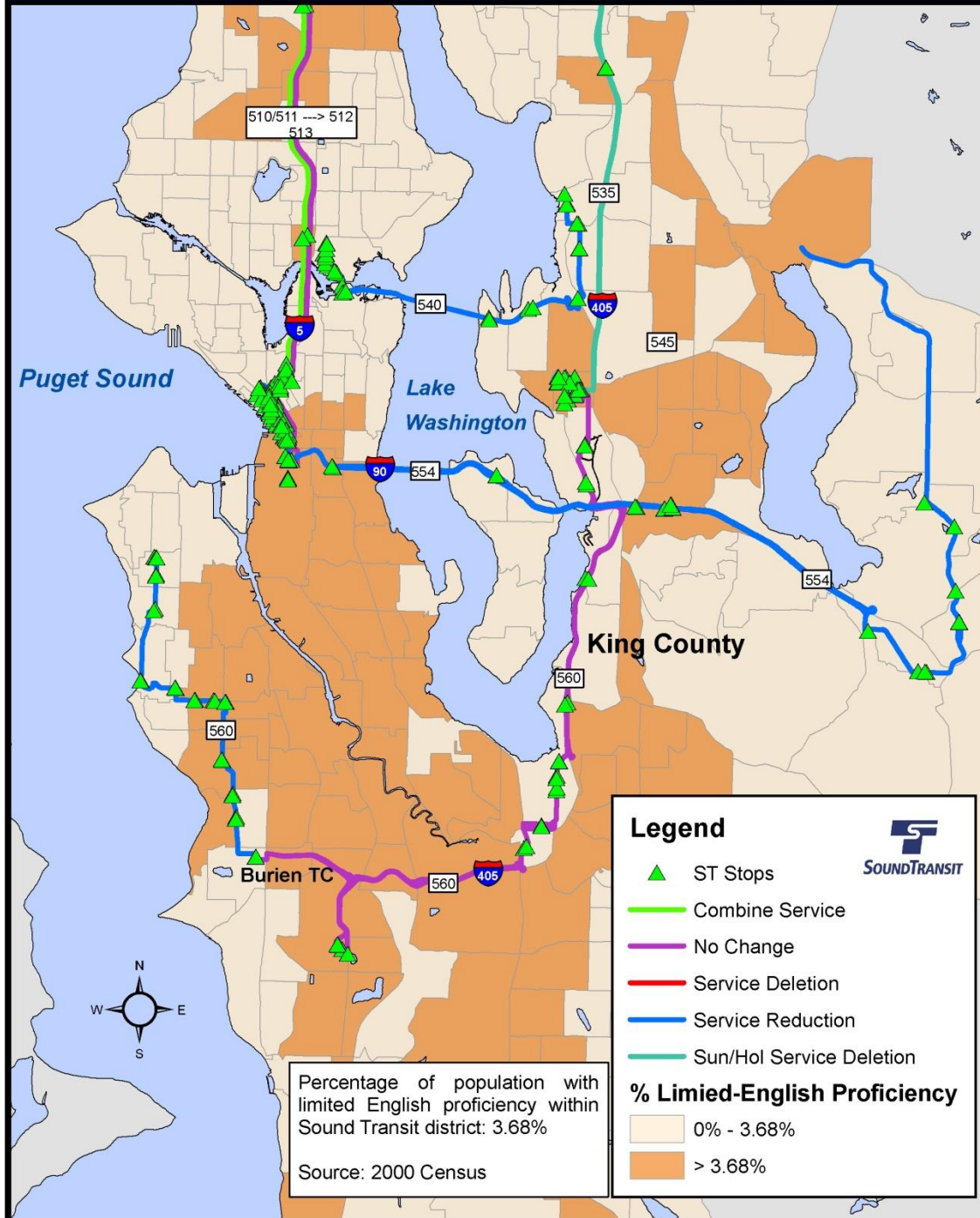
# Central Sound Population Below Poverty Line



# Central Sound Minority Population Distribution

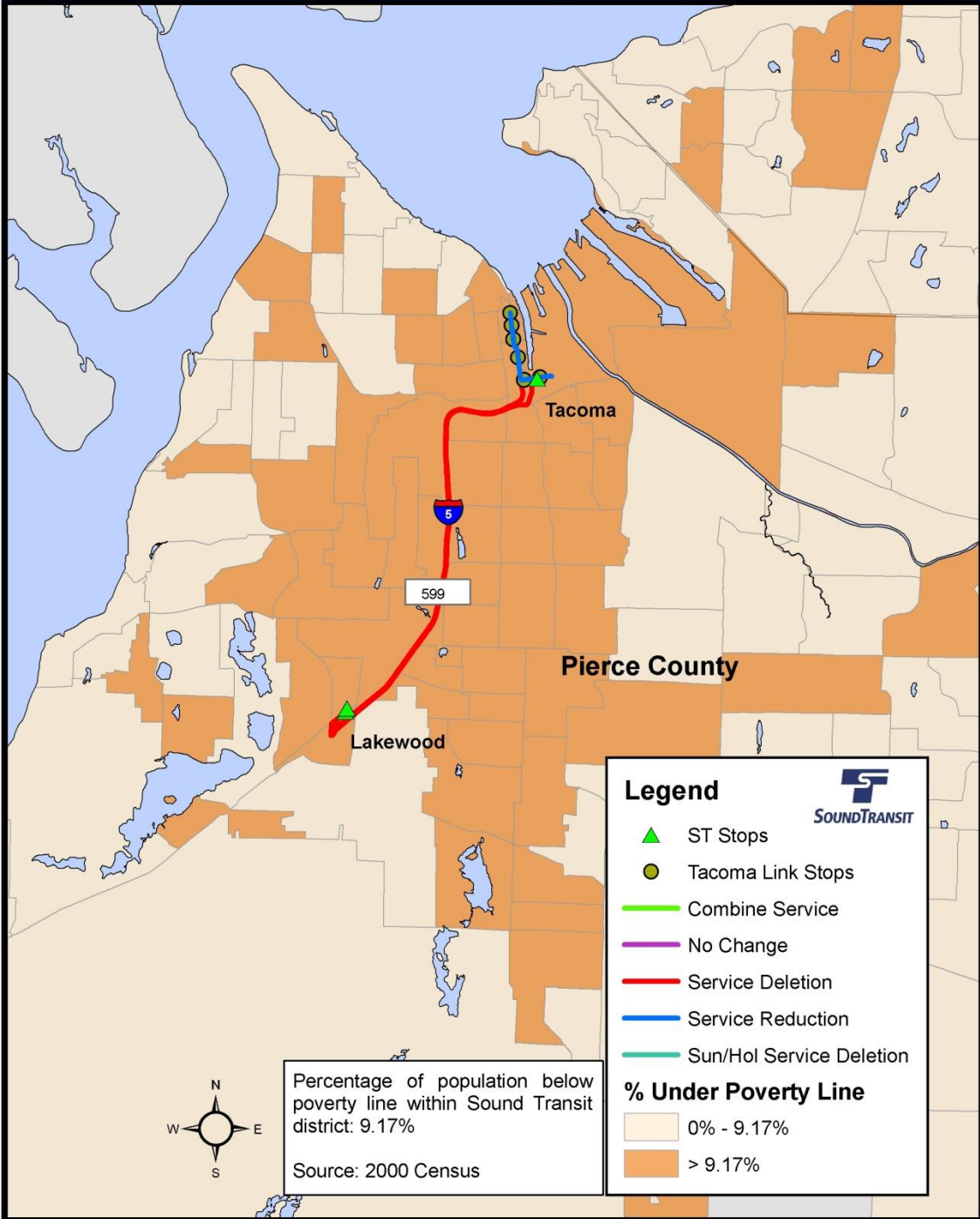


# Central Sound Limited English Proficiency Population Distribution



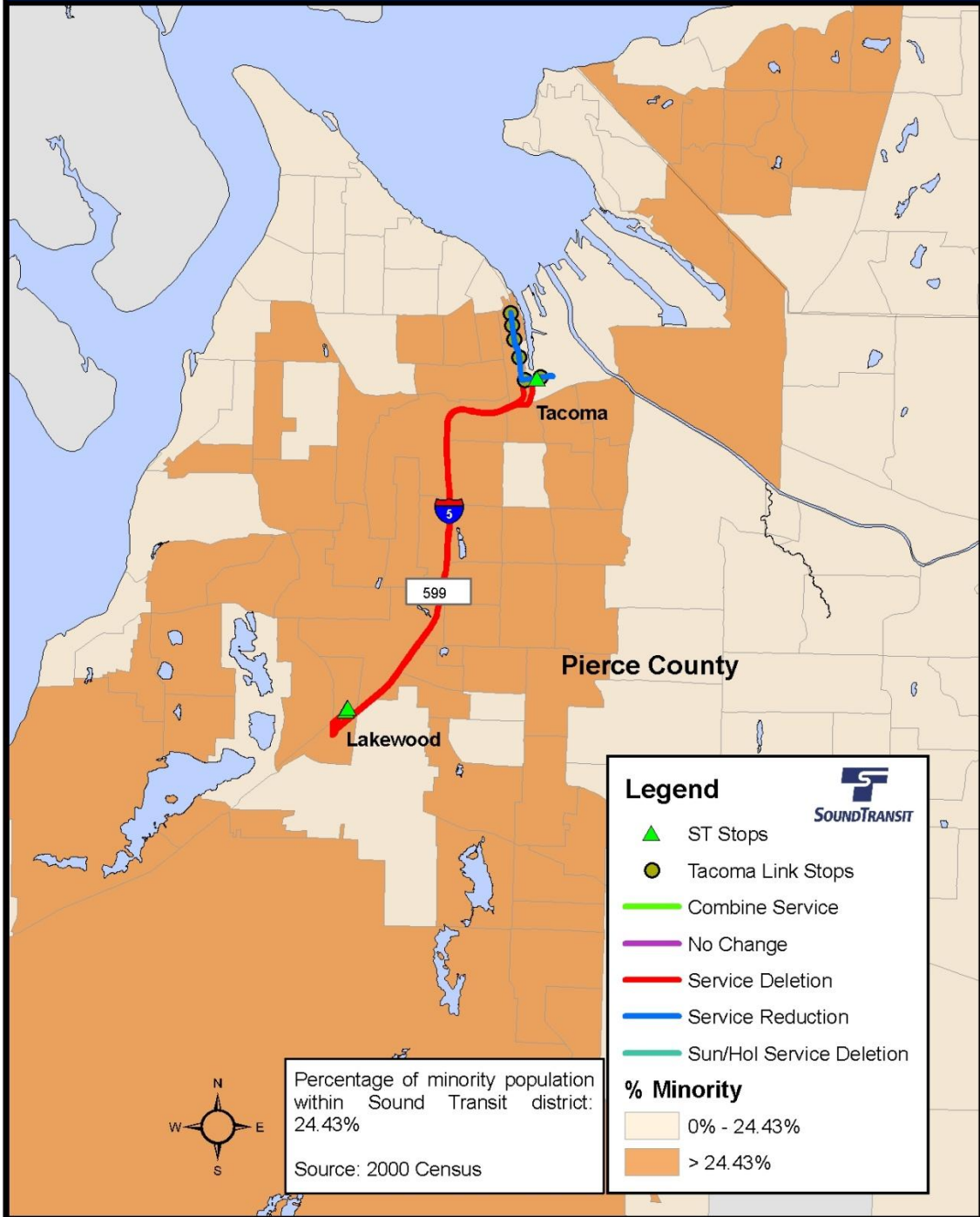


# Sound Transit Population Below Poverty Line

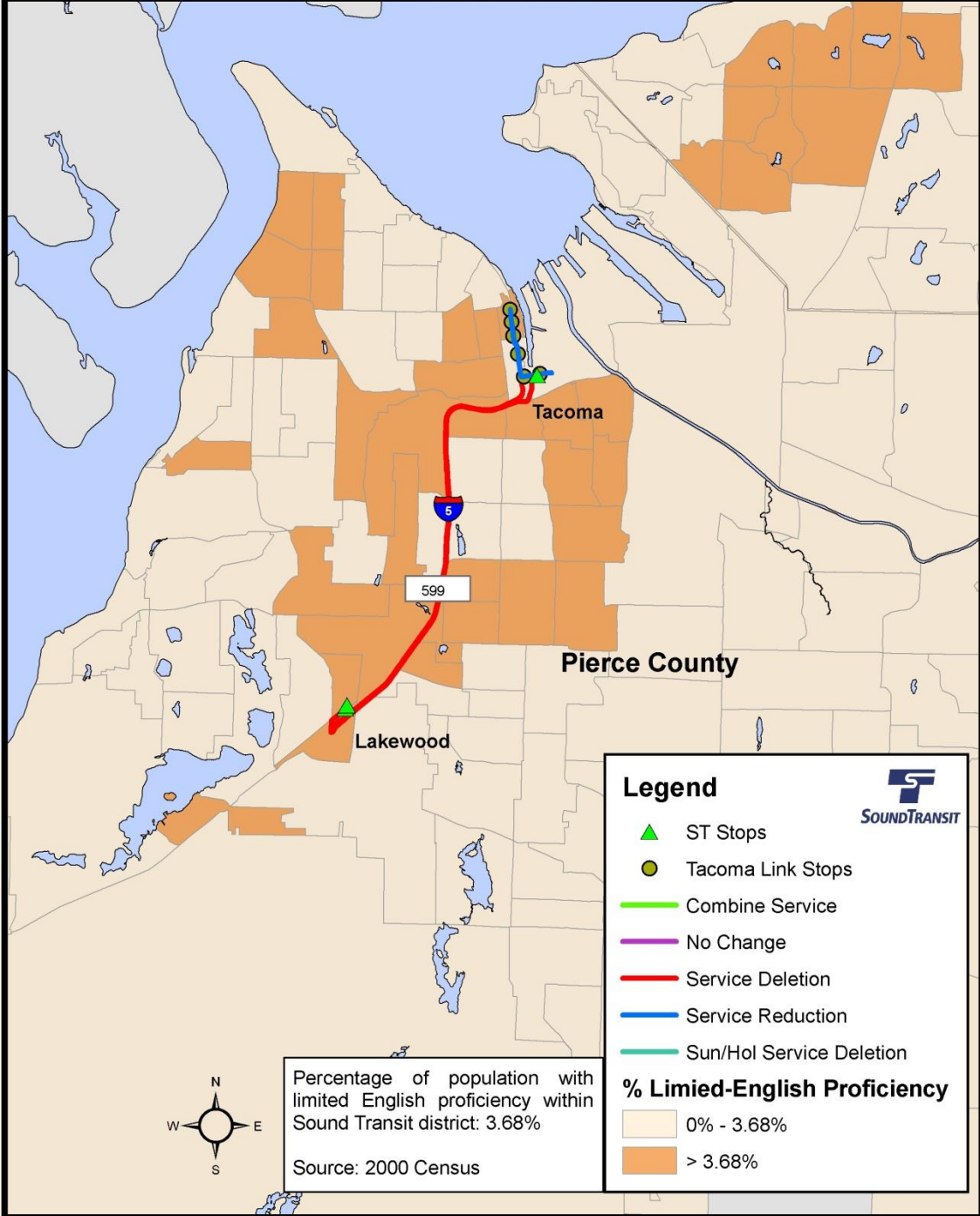




# Sound Transit Minority Population Distribution



## South Sound Limited English Proficiency Population Distribution



## APPENDIX E: Transit Facility/Stop and Route Passenger Data

Below are total weekday passenger activity data (i.e. boardings and alightings) in both directions for many major transit facilities served by multiple Sound Transit services, with information from the spring 2010 service change period. (Note that the data presented are only for Sound Transit modes and do not include any local transit services serving these locations.)

Note that service in downtown Seattle is served by 14 ST Express routes, two Sounder lines and Central Link among dozens of stops and stations. Below are boarding information for downtown stops adjacent to Central Link stations, otherwise refer to the relevant route list for other locations in downtown Seattle. Similar situations exist for service to the University District, downtown Tacoma, central Everett, and Renton. (However, data are included for Montlake Freeway Station, Tacoma Dome Station, Everett Station, and Renton Transit Center).

Following the facility summaries are passenger activity information for Central Link light rail, Tacoma Link light rail, Sounder commuter rail, and ST Express regional bus (in numerical route order).

### TRANSIT FACILITY PASSENGER DATA

#### Ash Way Park-and-Ride

Route	Boardings	Alightings
511	446	478
532	206	196
TOTAL	652	674

#### Auburn Station

Route	Boardings	Alightings
566	161	158
578	100	118
Sounder*	870	870
TOTAL*	1,130	1,150

\* Sounder ridership (and Total) estimated to nearest ten.

#### Bellevue Transit Center

Route	Boardings	Alightings
532	539	541
535	497	523
550	762	980
555	166	134
556	157	178
560	355	332
566	625	755
TOTAL	3,101	3,443

### **Bothell Park-and-Ride**

Route	Boardings	Alightings
522	135	143
535	72	78
TOTAL	207	221

### **Brickyard Park-and-Ride**

Route	Boardings	Alightings
532*	5	4
535	76	71
TOTAL	81	75

\* Route 532 serves Brickyard only in the reverse-peak direction, mornings northbound and evenings southbound.

### **Canyon Park Freeway Station**

Route	Boardings	Alightings
532	221	220
535	142	113
TOTAL	363	333

### **Eastgate Freeway Station/Eastgate Park-and-Ride**

Route	Boardings	Alightings
554	550	586
555	19	18
556	45	52
TOTAL	614	656

Routes 554 and 556 serve Eastgate Freeway Station, while Route 555 serves Eastgate Park-and-Ride

### **Everett Station**

Route	Boardings	Alightings
510	717	630
532	134	90
Sounder*	240	240
TOTAL*	1,090	960

\* Sounder ridership (and Total) estimated to nearest ten.

### **Evergreen Point Freeway Station**

Route	Boardings	Alightings
540	90	66
545	102	178
555	6	20
556	30	17
TOTAL	228	281

### **Federal Way Transit Center**

Route	Boardings	Alightings
574	425	428
577	632	531
578	301	324
TOTAL	1,358	1,283

### **I-90/Rainier Ave Freeway Station**

Route	Boardings	Alightings
550	176	168
554	82	108
TOTAL	258	276

### **Issaquah Highlands Park-and-Ride**

Route	Boardings	Alightings
554	149	192
555	11	7
556	83	79
TOTAL	243	278

### **Issaquah Transit Center**

Route	Boardings	Alightings
554	348	368
555	19	25
556	88	99
TOTAL	455	492

### **Kent Station**

Route	Boardings	Alightings
566	368	250
Sounder*	1,070	1,070
TOTAL*	1,440	1,320

\* Sounder ridership (and Total) estimated to nearest ten.

### **King Street Hub**

Route	Boardings	Alightings
510	197	175
511	247	196
513	11	10
522	161	115
545	357	318
550	858	874
554	311	272
577	61	204
578	75	5
590	116	181
592	66	76
593	30	28
594	83	192
595	15	15
Central Link	1,762	1,947
Sounder South*	3,440	3,440
Sounder North*	570	570
TOTAL*	8,360	8,620

\* Sounder ridership (and Total) estimated to nearest ten.

For Route 550 and Central Link, uses International District/Chinatown Station. For all other routes, uses stops closest to S Jackson St.

### Lakewood Station

Route	Boardings	Alightings
592	165	131
594	73	62
599	30	43
TOTAL	268	236

### Lynnwood Transit Center

Route	Boardings	Alightings
511	869	919
535	247	234
TOTAL	1,116	1,153

### Mercer Island Park-and-Ride

Route	Boardings	Alightings
550	715	672
554	231	180
TOTAL	946	852

### Montlake Freeway Station

Route	Boardings	Alightings
540*	31	55
545	623	479
555	28	62
556*	3	13
TOTAL	685	609

\* Montlake Blvd at SR-520 and at E Shelby St.

### Overlake Transit Center

Route	Boardings	Alightings
545*	1,267	1,377
566*	298	227
TOTAL	1,565	1,604

\* Includes SR-520 freeway stops.

### Pioneer Square Station

Route	Boardings	Alightings
Central Link	1,244	1,275
550	561	608
TOTAL	1,805	1,883

Downtown Seattle Transit Tunnel only, does not include ST Express on surface streets.

### Puyallup Station

Route	Boardings	Alightings
578	86	103
Souder*	850	850
TOTAL*	940	950

\* Souder ridership (and Total) estimated to nearest ten.

### **Renton Transit Center**

Route	Boardings	Alightings
560	247	242
566	387	391
TOTAL	634	633

### **SeaTac/Airport Station**

Route	Boardings	Alightings
Central Link	3,557	2,751
574	36	192
TOTAL	3,593	2,943

### **Sea-Tac Airport (Terminal)**

Route	Boardings	Alightings
560	110	128
574	578	482
TOTAL	688	610

### **SODO Station**

Route	Boardings	Alightings
590	38	52
592	17	22
593	7	8
594	29	40
595	6	5
Central Link	642	614
TOTAL	739	741

### **South Bellevue Park-and-Ride**

Route	Boardings	Alightings
550	659	646
555	4	4
556	27	18
560	89	72
TOTAL	779	740

### **South Everett Freeway Station**

Route	Boardings	Alightings
510	459	450
532	78	76
TOTAL	537	526

### **SR-512 Park-and-Ride**

Route	Boardings	Alightings
574	192	158
592	227	275
594	174	134
TOTAL	593	567

### Stadium Station

Route	Boardings	Alightings
510	60	65
511	53	37
513	4	3
522	23	91
545	45	105
590	41	27
592	22	16
593	7	4
594	64	71
595	3	4
Central Link	552	715
TOTAL	874	1,138

### Sumner Station

Route	Boardings	Alightings
578	61	75
Sounder*	790	790
TOTAL*	850	870

\* Sounder ridership (and Total) estimated to nearest ten.

### Tacoma Dome Station

Route	Boardings	Alightings
574	286	260
578	7	10
586	178	198
590	820	725
593	151	155
594	274	336
599	43	30
Tacoma Link	952	886
Sounder*	770	770
TOTAL*	3,480	3,370

\* Sounder ridership (and Total) estimated to nearest ten.

### Totem Lake Freeway Station

Route	Boardings	Alightings
532	139	158
535	158	168
TOTAL	297	326

### University Street Station

Route	Boardings	Alightings
Central Link	1,406	1,438
550	732	664
TOTAL	2,138	2,102

Downtown Seattle Transit Tunnel only, does not include ST Express on surface streets.



## UW Bothell/Cascadia Community College

Route	Boardings	Alightings
522	146	161
535	167	156
TOTAL	313	317

## Westlake Hub

Route	Boardings	Alightings
510	272	448
511	357	490
513	17	21
522	427	509
545	912	784
550	929	988
554	159	128
577	114	89
578	120	47
590	133	63
592	75	43
593	32	13
594	154	51
595	17	13
Central Link	3,976	3,958
TOTAL	7,694	7,645

For Route 550 and Central Link, uses Westlake Station. For all other routes, generally uses one stop per direction closest to 4th Ave & Pine St.

## TRANSIT ROUTE PASSENGER DATA

All data from spring 2010 service change (i.e. February 6th or 7th, 2010 to June 12th or 13th, 2010) except Sounder from surveys in November 2009.

### Central Link light rail

Northbound	Boardings	Alightings
SeaTac/Airport Station	3,557	0
Tukwila/International Blvd Station	1,358	291
Rainier Beach Station	631	195
Othello Station	764	240
Columbia City Station	752	220
Mount Baker Station	636	445
Beacon Hill Station	695	351
SODO Station	337	306
Stadium Station	256	406
International District/Chinatown Station	758	1,229
Pioneer Square Station	225	1,081
University Street Station	107	1,354
Westlake Station	0	3,958

Southbound	Boardings	Alightings
Westlake Station	3,976	0
University Street Station	1,299	84
Pioneer Square Station	1,019	194
International District/Chinatown Station	1,004	718
Stadium Station	296	309
SODO Station	305	308
Beacon Hill Station	359	892
Mount Baker Station	512	579
Columbia City Station	206	753
Othello Station	234	813
Rainier Beach Station	170	692
Tukwila/International Blvd Station	258	1,546
SeaTac/Airport Station	0	2,751

### Tacoma Link light rail

Northbound	Boardings	Alightings
Tacoma Dome Station	952	0
South 25 <sup>th</sup> St	243	58
Union Station/South 19 <sup>th</sup> St	204	378
Convention Center/South 15 <sup>th</sup> St	97	420
Theater District/South 9 <sup>th</sup> St	0	655

Southbound	Boardings	Alightings
Theater District/South 9 <sup>th</sup> St	498	0
Convention Center/South 15 <sup>th</sup> St	415	41
Union Station/South 19 <sup>th</sup> St	322	150
South 25 <sup>th</sup> St	159	332
Tacoma Dome Station	0	886

## Sounder commuter rail

### South Line

	ORIGIN		DESTINATION		
	Estimated Trip Origin	Estimated Boardings	Estimated Trip Destination	Estimated Alightings	Estimated Station Daily Boardings
Tacoma	17%	720	1%	50	<b>770</b>
Puyallup	20%	830	<1%	20	<b>850</b>
Sumner	18%	770	<1%	20	<b>790</b>
Auburn	18%	750	3%	120	<b>870</b>
Kent	20%	840	5%	230	<b>1,070</b>
Tukwila	6%	250	11%	450	<b>700</b>
Seattle	2%	90	79%	3,350	<b>3,440</b>

### North Line

	ORIGIN		DESTINATION		
	Estimated Trip Origin	Estimated Boardings	Estimated Trip Destination	Estimated Alightings	Estimated Station Daily Boardings
Everett	41%	240	--	--	<b>240</b>
Mukilteo	21%	120	0%	0	<b>120</b>
Edmonds	38%	220	3%	20	<b>240</b>
Seattle	--	--	97%	570	<b>570</b>

## ST Express regional bus

Page 11 of the Sound Transit Board’s adopted “*Service Standards and Performance Measures*” 2010 Edition states that “at a minimum, each [ST Express] stop should have at least 25 daily boardings.” In the tables that follow, stops shaded in pink do not meet the stop guidelines for either direction. Stops highlighted in yellow do not meet the standards in the current direction but do meet the standards in the reverse direction.

### Route 510

Northbound	Boardings	Alightings
SODO Busway at S Royal Brougham Way	60	0
4th Ave S at S Royal Brougham Way	29	0
4th Ave S at S Jackson St	192	16
4th Ave S at S Washington St	33	5
4th Ave at Cherry St	134	30
4th Ave at Seneca St	221	34
4th Ave at Union St	185	23
Olive Way at 6th Ave	211	19
Howell St at 9th Ave^	107	4
Olive Way at Terry Ave*	85	7
I-5 at NE 45th St*	91	11
I-5 at NE 145th St*	25	13
South Everett Freeway Station	35	428
Broadway at 38th St	8	105
Everett Station	12	609
Pacific Ave at Rockefeller Ave	1	41
Wetmore Ave at Wall St	2	42
Hewitt Ave at Lombard St	1	12
Hewitt Ave at Virginia Ave	0	28

\* - Not served in peak-period, peak-direction

^ - Only served in peak-period, peak-direction

Southbound	Boardings	Alightings
Hewitt Ave at Virginia Ave	31	0
Hewitt Ave at Lombard Ave	16	0
Wetmore Ave at Wall St	51	1
Pacific Ave at Rockefeller Ave	38	0
Everett Station	705	21
Broadway at 38th St SE	84	7
South Everett Freeway Station	424	22
I-5 at NE 145th St*	20	25
I-5 at NE 45th St*	26	104
Stewart St at Yale Ave	28	133
Stewart St at 9th Ave	10	76
Stewart St at 7th Ave	11	107
5th Ave at Pine St	61	429
5th Ave at Seneca St	19	165
5th Ave at Marion St	10	177
5th Ave at Jefferson St	12	61
5th Ave S at Jackson St	5	159
6th Ave S at S Royal Brougham Way	0	65

\* - Not served in peak-period, peak-direction

## Route 511

Northbound	Boardings	Alightings
SODO Busway at S Royal Brougham Way	53	0
4th Ave S at S Royal Brougham Way	23	2
4th Ave S at S Jackson St	240	14
4th Ave S at S Washington St	39	3
4th Ave at Cherry St	158	44
4th Ave at Seneca St	246	41
4th Ave at Union St	223	34
Olive Way at 6th Ave	265	26
Howell St at 9th Ave^	68	5
Olive Way at Terry Ave*	121	12
I-5 at NE 45th St*	132	31
I-5 at NE 145th St*	23	27
Lynnwood Transit Center	23	899
Ash Way Park & Ride	0	478

\* - Not served in peak-period, peak-direction

^ - Only served in peak-period, peak-direction

Southbound	Boardings	Alightings
Ash Way Park & Ride	446	0
Lynnwood Transit Center	846	20
I-5 at NE 145th St*	23	25
I-5 at NE 45th St*	31	135
Stewart St at Yale Ave	28	104
Stewart St at 9th Ave	10	40
Stewart St at 7th Ave	11	84
5th Ave at Pine St	92	464
5th Ave at Seneca St	19	180
5th Ave at Marion St	14	201
5th Ave at Jefferson St	12	66
5th Ave S at S Jackson St	7	182
6th Ave S at S Royal Brougham Way	0	37

\* - Not served in peak-period, peak-direction

## Route 513

Northbound	Boardings	Alightings
SODO Busway at S Royal Brougham Way	4	0
4th Ave S at S Royal Brougham Way	4	0
4th Ave S at Jackson St	11	3
4th Ave S at Washington St	1	1
4th Ave at Cherry St	15	0
4th Ave at Seneca St	20	2
4th Ave at Union St	25	2
Olive Way at 6th Ave	11	0
Howell St at 9th Ave	20	1
Howell St at Yale Ave	9	1
Eastmont Park & Ride	1	53
Evergreen Way at 79th Pl SE	0	11
Evergreen Way at 75th St SE	0	3
Evergreen Way at Madison St	0	5
Evergreen Way at Berkshire Dr	0	3
Evergreen Way at 50th St SE	0	5
Rucker Ave at 40th St	0	5
Rucker Ave at 35th St	1	11
Rucker Ave at 33rd St	0	3
Wetmore Ave at Wall St	0	6
Hewitt Ave at Lombard Ave	0	3
Hewitt Ave at Virginia Ave	0	6

Southbound	Boardings	Alightings
Hewitt Ave at Virginia Ave	1	0
Hewitt Ave at Lombard Ave	0	0
Wetmore Ave at Wall St	4	0
Rucker Ave at Pacific Ave	3	0
Rucker Ave at 35th St	18	0
Rucker Ave at 42nd St	9	0
Evergreen Way at 50th St SE	6	0
Evergreen Way at Pecks Dr	2	0
Evergreen Way at Madison St	2	0
Evergreen Way at 75th St SE	3	0
Evergreen Way at 79th Pl SE	5	0
Eastmont Park & Ride	64	1
Stewart St at Yale Ave	2	27
Stewart St at 9th Ave	0	5
Stewart St at 7th Ave	1	16
5th Ave at Pine St	6	21
5th Ave at Seneca St	3	20
5th Ave at Marion St	0	21
5th Ave at Jefferson St	1	9
5th Ave S at Jackson St	0	7
6th Ave S at S Royal Brougham Way	0	3

## Route 522

Northbound	Boardings	Alightings
SODO Busway at S Holgate St	65	0
SODO Busway at S Royal Brougham Way	23	5
4th Ave S at S Royal Brougham Way	13	2
4th Ave S at S Jackson St (Island)	154	22
3rd Ave at James St	188	16
3rd Ave at Madison St	268	62
3rd Ave at Union St	357	108
Pike St at 6th Ave	408	52
Lake City Way NE at NE 125th St	58	140
Lake City Way NE at NE 130th St	51	81
Lake City Way NE at NE 137th St	5	78
Bothell Way NE at NE 145th St	22	127
Bothell Way NE at NE 153rd St	8	35
Bothell Way NE at NE 165th St	1	24
Bothell Way NE at NE 170th St	8	66
Bothell Way NE at Ballinger Way NE	8	13
NE Bothell Way at 61st Ave NE	8	63
NE Bothell Way at 68th Ave NE	32	84
NE Bothell Way at 73rd Ave NE (Kenmore Park & Ride)	16	190
NE Bothell Way at 80th Ave NE	11	36
Bothell Way NE at NE 180th St	7	54
Main St at 103rd Ave NE (Bothell Park & Ride)	10	136
UW Bothell/Cascadia CC	32	131
Beardslee Blvd at NE 195th St	5	37
SR-522 at 132nd Ave NE	2	20
Woodinville-Snohomish Rd at NE 195th St	1	22
NE 178th Pl at 138th Pl NE	4	44
Woodinville Park & Ride	0	114

Southbound	Boardings	Alightings
Woodinville Park & Ride	120	0
NE 178th Pl at NE 180th Pl	18	1
Woodinville-Snohomish Rd at NE Woodinville Way	19	1
SR-522 at 132nd Ave NE	7	0
Beardslee Blvd at Ross Rd	26	2
UW Bothell/Cascadia CC	114	30
Woodinville Dr at Kaysner Way (Bothell Park & Ride)	125	7
Bothell Way NE at Ormbrek St	55	9
NE Bothell Way at 80th Ave NE	35	16
Kenmore Park & Ride	198	26
NE Bothell Way at 68th Ave NE	73	21
NE Bothell Way at 61st Ave NE	88	13
Bothell Way NE at NE 170th St	65	12
Bothell Way NE at NE 165th St	30	2
Bothell Way NE at NE 153rd St	29	5
Lake City Way NE at NE 145th St	137	24
Lake City Way NE at NE 137th St	72	7
Lake City Way NE at NE 130th St	93	43
Lake City Way NE at NE 125th St	199	96
Union St at 6th Ave	22	355

Union St at 4th Ave	19	457
2nd Ave at Seneca St	8	94
2nd Ave at Marion St	8	95
2nd Ave at James St	4	74
2nd Ave Ext S at S Jackson St	7	93
6th Ave S at S Royal Brougham Way	0	86

### Route 532

Northbound	Boardings	Alightings
NE 10th St at 102nd Ave NE	34	0
NE 10th St at Bellevue Way NE	3	2
Bellevue Transit Center	533	14
Totem Lake Freeway Station	67	87
I-405 at NE 160th St (Brickyard Park & Ride)*	3	0
I-405 at NE 195th St*	0	6
Canyon Park Freeway Station	39	188
Ash Way Park & Ride	19	181
South Everett Freeway Station	4	70
Broadway at 38th St	0	16
Broadway at 33rd St	7	54
Everett Station	0	90

\* Mornings only (reverse-peak direction)

Southbound	Boardings	Alightings
Everett Station	134	0
Broadway at 34th St	7	0
Broadway at 38th St	29	1
South Everett Freeway Station	74	6
Ash Way Park & Ride	187	15
Canyon Park Freeway Station	182	32
I-405 at NE 195th St*	12	1
I-405 at NE 160th St (Brickyard Park & Ride)*	2	4
Totem Lake Freeway Station	72	71
Bellevue Transit Center	6	527
NE 8th St at 106th Ave NE	1	28
NE 8th St at 102nd Ave NE	3	7
NE 10th St at 102nd Ave NE	0	18

\* Afternoons only (reverse-peak direction)

### Route 535

Northbound	Boardings	Alightings
NE 10th St at 102nd Ave NE	30	0
NE 10th St at Bellevue Way NE	0	2
Bellevue Transit Center	490	18
Totem Lake Freeway Station	72	98
I-405 at NE 160th St (Brickyard Park & Ride)	26	47
Beardslee Blvd & Sunrise Dr (Bothell Park & Ride)	11	69
UW Bothell/Cascadia CC	75	87
I-405 at NE 195th St	6	14
Canyon Park Freeway Station	40	78
Alderwood Mall Blvd at 184th St SW	5	92
18600 Alderwood Mall Pkwy	3	20
Lynnwood Transit Center	0	234



Southbound	Boardings	Alightings
Lynnwood Transit Center	247	0
18600 Alderwood Mall Pkwy	23	4
Alderwood Mall Blvd at 184th St SW	79	3
Canyon Park Freeway Station	102	35
Beardslee Blvd at NE 195th St	15	9
UW Bothell/Cascadia CC	92	69
Kaysner Way at Woodinville Dr (Bothell Park & Ride)	61	9
I-405 at NE 160th St (Brickyard Park & Ride)	50	24
Totem Lake Freeway Station	86	70
Bellevue Transit Center	7	505
NE 8th St at 106th Ave NE	1	10
NE 8th St at 102nd Ave NE	3	11
NE 10th St at 102nd Ave NE	0	17

### Route 540

Eastbound	Boardings	Alightings
15th Ave NE at NE 43 <sup>rd</sup> St	105	0
15th Ave NE at NE Campus Pkwy	148	5
15th Ave NE at NE 40 <sup>th</sup> St	58	1
15th Ave NE at NE Pacific St	27	1
NE Pacific St at 15th Ave NE	67	6
NE Pacific St at NE Pacific Pl	156	19
Montlake Blvd E at SR-520	28	32
Evergreen Point Freeway Station	20	39
Yarrow Point Freeway Station	2	7
South Kirkland Park & Ride	21	314
108th Ave NE at NE 58th St	1	13
NE 68th St at 108th Ave NE	4	53
State St at 2nd Ave S	1	39
Kirkland Transit Center	0	106

Westbound	Boardings	Alightings
Kirkland Transit Center	90	0
State St at 4th Ave S	31	1
NE 68th St at 108th Ave NE	41	1
108th Ave NE at NE 58th St	10	1
South Kirkland Park & Ride	323	13
Yarrow Point Freeway Station	8	3
Evergreen Point Freeway Station	70	27
Montlake Blvd E at E Shelby St	3	23
NE Pacific St at NE Pacific Pl	18	169
NE Pacific St at 15th Ave NE	4	50
15th Ave NE at NE Pacific St	1	32
15th Ave NE at NE 40th St	7	178
15th Ave NE at NE 41st St	0	110

## Route 545

Eastbound	Boardings	Alightings
SODO Busway at S Holgate St	148	0
SODO Busway at S Royal Brougham Way	45	7
4th Ave S at S Royal Brougham Way	32	6
4th Ave S at S Jackson St	334	51
4th Ave at James St	183	75
4th Ave at Madison St	250	101
4th Ave at University St	243	67
4th Ave at Pike St	790	137
Olive Way at 8th Ave	153	26
Olive Way at Terry Ave	265	29
Bellevue Ave at E Olive St*	302	10
Montlake Freeway Station	572	61
Evergreen Point Freeway Station	34	43
Yarrow Point Freeway Station	7	17
SR-520 at NE 40th St (Overlake Transit Center)	111	1,268
SR-520 at NE 51st St	23	260
West Lake Sammamish Pkwy NE at Leary Way	6	102
NE 85th St at 154th Ave NE	3	103
NE 85th St at 161st Ave NE	7	135
Redmond Park & Ride	27	450
Cleveland St at 166th Ave NE	6	103
NE 76th St at 177th Pl NE	7	133
Bear Creek Park & Ride	0	352

\* Stop served until 10:45 a.m.

Westbound	Boardings	Alightings
Bear Creek Park & Ride	310	0
NE 76th St at 177th Pl NE	45	5
NE Redmond Way at NE 79th Pl	66	7
Redmond Park & Ride	499	34
NE 85th St at 160th Ave NE	182	11
154th Ave NE at NE 85th St	82	5
West Lake Sammamish Pkwy NE at Leary Way	124	9
SR-520 at NE 51st St	267	25
Overlake Transit Center*	519	35
SR-520 at NE 40th St	637	74
Yarrow Point Freeway Station	23	12
Evergreen Point Freeway Station	68	135
Montlake Freeway Station	51	418
Stewart St at Yale Ave	51	374
Stewart St at 9th Ave	25	156
Stewart St at 7th Ave	32	192
5th Ave at Pine St	122	647
5th Ave at Seneca St	41	283
5th Ave at Marion St	28	304
5th Ave at Jefferson St	27	129
5th Ave S at S Jackson St	23	267
6th Ave S at S Royal Brougham Wy	0	98

\* Stop served after 12:00 p.m.

## Route 550

Eastbound	Boardings	Alightings
Convention Place Station	427	0
Westlake Station	866	32
University Street Station	673	41
Pioneer Square Station	472	81
International District/Chinatown Station	608	278
I-90/Rainier Freeway Station	149	41
Mercer Island Park & Ride	137	568
South Bellevue Park & Ride	102	537
Bellevue Way SE at SE 16th St	15	66
Bellevue Way SE at SE 10th St	18	33
Bellevue Way SE at SE 3rd St	41	83
Bellevue Way NE at Main St	19	119
NE 4th St at 105th Ave NE	30	470
Bellevue Transit Center	70	921
NE 12th St at 110th Ave NE	0	344

Westbound	Boardings	Alightings
110th Ave NE at NE 12th St	353	0
Bellevue Transit Center	692	59
NE 4th St at 108th Ave NE	335	11
Bellevue Way NE at NE 4th St	256	13
Bellevue Way NE at NE 1st St	54	10
Bellevue Way SE at Main St	114	10
Bellevue Way SE at SE 3rd St	99	22
Bellevue Way SE at SE 11th St	33	12
Bellevue Way SE at SE 16th St	56	17
South Bellevue Park & Ride	557	109
Mercer Island Park & Ride	578	104
I-90/Rainier Freeway Station	27	127
International District/Chinatown Station	250	596
Pioneer Square Station	89	527
University Street Station	59	623
Westlake Station	63	956
Convention Place Station	0	419

## Route 554

Eastbound	Boardings	Alightings
Lenora St at 4th Ave	108	0
2nd Ave at Stewart St	134	4
2nd Ave at University St	181	5
2nd Ave at Spring St	35	1
2nd Ave at Cherry St	124	4
S Washington St at 4th Ave S	68	6
5th Ave S at S Jackson St	285	21
I-90/Rainier Freeway Station	65	5
Mercer Island Park & Ride	74	74
Eastgate Freeway Station	98	476
Issaquah Transit Center	44	337
E Sunset Way at Rainier Blvd S	7	95
Issaquah Highlands Park & Ride	9	192
Issaquah-Pine Lake Rd at Issaquah-Fall City Rd*	0	1
Issaquah-Pine Lake Rd at SE 37th Pl*	0	2
South Sammamish Park & Ride*	0	4

228th Ave SE & SE 8th St*	0	1
228th Ave NE & NE 8th St*	0	1
228th Ave NE & NE 25th Way*	0	2
NE Redmond Way at 185th Ave NE*	0	0

\* Stops served by five night trips only.

Westbound	Boardings	Alightings
NE Redmond Way at 185th Ave NE*	0	0
228th Ave NE & NE 25th Way*	1	0
228th Ave NE & NE Inglewood Hill Rd*	2	0
228th Ave SE & SE 8th St*	0	0
South Sammamish Park & Ride*	3	0
Issaquah-Pine Lake Rd at SE 37th Pl*	0	0
Issaquah-Pine Lake Rd at Issaquah-Fall City Rd*	0	0
Issaquah Highlands Park & Ride	140	0
W Sunset Way at 1st Pl NW	117	15
Issaquah Transit Center	304	31
Eastgate Freeway Station	452	110
Mercer Island Park & Ride	157	106
I-90/Rainier Freeway Station	17	103
5th Ave S at S Jackson St	26	251
4th Ave S at S Washington St	4	29
4th Ave at Cherry St	26	175
4th Ave at Seneca St	11	157
4th Ave at Union St	5	148
4th Ave at Stewart St	25	124
Lenora St at 5th Ave	0	43

\* Stops served by two morning trips only.

## Routes 555/556

	Route 555		Route 556		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Eastbound						
Northgate Transit Center	144	0	16	0	160	0
NE 50th St at University Way NE			1	1	1	1
15th Ave NE at NE 45th St			11	1	11	1
15th Ave NE at NE 43rd St			20	1	20	1
15th Ave NE at NE Campus Pkwy			50	2	50	2
15th Ave NE at NE 40th St			17	1	17	1
15th Ave NE at NE Pacific St			9	0	9	0
NE Pacific St at 15th Ave NE			28	2	28	2
NE Pacific St at NE Pacific Pl			48	2	48	2
Montlake Blvd E at SR-520			3	12	3	12
Montlake Freeway Station	23	12			23	12
Evergreen Point Freeway Station	4	11	1	16	5	27
Yarrow Point Freeway Station	8	28	5	5	13	33
Bellevue Transit Center	23	98	113	55	136	153
112th Ave SE at SE 4th St	1	3	2	2	3	5
112th Ave SE at SE 15th St	1	4	3	4	4	8
South Bellevue Park & Ride	3	2	1	17	4	19
SE Eastgate Way & Richards Rd	3	8			3	8
Eastgate Park & Ride	4	15			4	15
142nd Pl SE at SE 32nd St (Bellevue College)	0	6			0	6
Eastgate Freeway Station			8	45	8	45
Issaquah Transit Center	3	23	4	97	7	120
Issaquah Highlands Park & Ride	0	7	0	79	0	86

	Route 555		Route 556		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Westbound						
Issaquah Highlands Park & Ride	11	0	83	0	94	0
Issaquah Transit Center	16	2	84	2	100	4
Eastgate Freeway Station			37	7	37	7
142nd Pl SE at SE 32nd St (Bellevue College)	1	0			1	0
Eastgate Park & Ride	15	3			15	3
I-90 at Richards Rd	7	2			7	2
South Bellevue Park & Ride	1	2	26	1	27	3
112th Ave SE at SE 15th St	7	1	1	2	8	3
112th Ave SE at SE 4th St	2	1	0	1	2	2
Bellevue Transit Center	143	36	44	123	187	159
Yarrow Point Freeway Station	1	1	1	0	2	1
Evergreen Point Freeway Station	2	9	29	1	31	10
Montlake Freeway Station	5	50			5	50
Montlake Blvd E at E Shelby St			0	1	0	1
NE Pacific St at NE Pacific Pl.			5	57	5	57
NE Pacific St at 15th Ave. NE			1	20	1	20

15th Ave NE at NE Pacific St.			0	8	0	8
15th Ave NE at NE 40th St.			3	48	3	48
15th Ave NE at NE 41st St.			0	9	0	9
15th Ave NE at NE 42nd St.			0	11	0	11
15th Ave NE at NE 45th St.			1	6	1	6
NE 50th St at University Way NE			2	4	2	4
Northgate Transit Center	0	102	0	20	0	122

## Route 560

Eastbound	Boardings	Alightings
Alaska Junction	69	0
California Ave SW at SW Dawson St	13	1
Fauntleroy Way SW at California Ave SW	25	3
Fauntleroy Ferry Terminal	32	12
35th Ave SW at SW Barton St	19	5
SW Roxbury St at 28th Ave SW	29	4
SW Roxbury St at 20th Ave SW	3	1
White Center Transfer Point	69	17
16th Ave SW at SW 116th St	18	5
Ambaum Blvd SW at SW 128th St	25	9
Ambaum Blvd SW at SW 136th St	25	10
Burien Transit Center	279	181
Sea-Tac Airport	47	30
Rainier Ave S at S 7th St	13	54
Renton Transit Center	107	97
Park Ave N at N 6th St	12	10
Park Ave N at N 8th St	10	13
Park Ave N at N Park Dr	12	5
I-405 at N 30th St (Kennydale Freeway Station)	42	19
I-405 at 112th Ave SE (Newport Hills Park & Ride)	14	9
South Bellevue Park & Ride	27	53
112th Ave SE at SE 15th St	12	19
112th Ave SE at SE 4th St	9	22
Bellevue Transit Center	0	332

Westbound	Boardings	Alightings
Bellevue Transit Center	355	0
112th Ave SE at SE 4th St	32	7
112th Ave SE at SE 15th St	10	8
South Bellevue Park & Ride	62	19
I-405 at 112th Ave SE (Newport Hills Park & Ride)	14	17
I-405 at N 30th St (Kennydale Freeway Station)	20	41
Park Ave N at Lake Washington Blvd	19	26
Park Ave N at N 6th St	11	10
Renton Transit Center	140	145
Rainier Ave S at SW 7th St	133	150
Sea-Tac Airport	63	98
Burien Transit Center	86	154
Ambaum Blvd SW at SW 136th St	7	26
Ambaum Blvd SW at SW 128th St	10	16
Ambaum Blvd SW at SW 116th St	6	18
White Center Transfer Point	16	75
SW Roxbury St at 20th Ave SW	1	5
SW Roxbury St at 27th Ave SW	4	24

SW Barton St at 35th Ave SW	5	19
SW Wildwood Pl at 45th Ave SW	1	5
Fauntleroy Ferry Terminal	6	31
California Ave SW at Fauntleroy Way SW	3	23
California Ave SW at SW Dawson St	3	24
Alaska Junction	0	67

## Routes 566

Northbound	Boardings	Alightings
Auburn Station	161	0
Auburn Park & Ride	23	2
W Smith St at 4th Ave N	14	9
Kent Station	311	43
Central Ave N at S 228th St	31	14
Rainier Ave S at S 7th St	58	43
Renton Transit Center	256	114
Park Ave N at N 6th St	52	22
Park Ave N at N 8th St	25	17
Park Ave N at N Park Dr	23	15
Bellevue Transit Center	142	612
SR-520 at NE 40th St	12	169
Overlake Transit Center	0	47

Southbound	Boardings	Alightings
Overlake Transit Center	171	0
SR-520 at NE 40th St	115	11
Bellevue Transit Center	483	143
Park Ave N at Lake Washington Blvd	8	22
Park Ave N at N 8th St	19	34
Park Ave N at N 6th St	9	54
Renton Transit Center	131	277
Rainier Ave S at SW 7th St	32	41
Central Ave N at S 228th St	7	29
Kent Station	57	207
4th Ave N at W Smith St	7	21
Auburn Park & Ride	4	47
Auburn Station	0	158

## Route 574

Northbound	Boardings	Alightings
Lakewood Transit Center	266	0
SR-512 Park & Ride	176	23
E 'D' St at E 25th St	3	18
Tacoma Dome Station	237	46
Federal Way Transit Center	305	157
Star Lake Freeway Station	37	25
Kent-Des Moines Freeway Station	34	57
S 188th St at Military Rd S	5	14
S 188th St at 42nd Ave S	5	8
International Blvd at S 188th St	6	48
International Blvd at S 176th St (SeaTac/Airport Station)	4	191
Sea-Tac Airport	0	482

Southbound	Boardings	Alightings
Sea-Tac Airport	578	0
International Blvd at S 176th St (SeaTac/Airport Station)	32	1
International Blvd at Airport Entrance	3	1
S 188th St at International Blvd	31	6
S 188th St at 42nd Ave S	4	7
S 188th St at 46th Ave S	12	11
Kent-Des Moines Freeway Station	47	24
Star Lake Freeway Station	24	33
Federal Way Transit Center	120	271
Tacoma Dome Station	49	214
E 'D' St at E 26th St	2	3
SR-512 Park & Ride	16	135
Lakewood Transit Center	0	187

## Route 577

Northbound	Boardings	Alightings
Federal Way Transit Center	632	0
Seneca St at 5th Ave	49	226
4th Ave at University St	11	163
Pine St at 4th Ave	13	87
2nd Ave at Pike St	1	17
2nd Ave at Seneca St	3	24
2nd Ave at Marion St	13	53
2nd Ave at James St	11	31
2nd Ave Ext S at S Jackson St	0	133

Southbound	Boardings	Alightings
Blanchard St at 8th Ave	16	0
Lenora St at 4th Ave	58	3
2nd Ave at Lenora St	107	4
2nd Ave at Pike St	101	2
2nd Ave at Seneca St	116	3
2nd Ave at Marion St	113	6
2nd Ave at James St	57	10
2nd Ave Ext S at S Jackson St	61	71



Federal Way Transit Center	0	531
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### Route 578

Northbound	Boardings	Alightings
Commerce St at S 10th St*	27	0
Commerce St at S 12th St*	3	0
Pacific Ave at S 14th St*	8	0
Pacific Ave at UW Campus*	8	1
S 24th St at Pacific Ave*	1	0
Tacoma Dome Station*	7	3
River Rd at 4th St NW*	1	6
Puyallup Station	50	38
Sumner Station	31	39
Auburn Station	56	47
Federal Way Transit Center	245	44
4th Ave at University St	4	192
Olive Way at 6th Ave	2	43
Howell St at 9th Ave	0	20

\* - Only served on some morning trips.

Southbound	Boardings	Alightings
Lenora St at 4th Ave	30	1
2nd Ave at Lenora St	16	0
2nd Ave at Pike St	118	4
2nd Ave at Seneca St	37	2
2nd Ave at Marion St	38	2
2nd Ave at James St	26	2
2nd Ave Ext S at S Jackson St	75	5
Federal Way Transit Center	56	280
Auburn Station	44	71
Sumner Station	30	36
Puyallup Station	36	65
River Rd at 4th St NW*	2	1
Tacoma Dome Station*	0	7
Pacific Ave at S 24th St*	0	1
Pacific Ave at UW Campus*	0	5
Pacific Ave at S 14th St*	0	9
Commerce St at S 12th St*	0	10
Commerce St at S 10th St*	1	9

\* - Only served on some afternoon trips.

### Route 586

Northbound	Boardings	Alightings
Commerce St at S 10th St	24	0
Commerce St at S 12th St	0	0
Pacific Ave at S 14th St	0	0
Pacific Ave at UW Campus	12	0
S 24th St at Pacific Ave	8	0
Tacoma Dome Station	167	2
NE 45th St at Roosevelt Way NE	2	21
NE 45th St at University Way NE	3	36
15th Ave at NE 43rd St	2	25
15th Ave at NE Campus Pkwy	5	70

15th Ave at NE 40th St	1	8
15th Ave at NE Pacific St	1	8
NE Pacific St at NE Pacific Place	0	54

Southbound	Boardings	Alightings
NE 45th St at Roosevelt Way NE	17	0
NE 45th St at University Way NE	45	0
15th Ave at NE 43rd St	31	0
15th Ave at NE Campus Pkwy	71	1
15th Ave at NE 40th St	9	0
15th Ave at NE Pacific St	11	0
NE Pacific St at NE Pacific Place	39	3
Tacoma Dome Station	11	196
Pacific Ave at S 24th St	0	4
Pacific Ave at UW Campus	1	13
Pacific Ave at S 15th St	0	1
Commerce St at S 12th St	0	6
Commerce St at S 10th St	0	14

## Route 590

Northbound	Boardings	Alightings
Commerce St at S 10th St	101	0
Commerce St at S 12th St	5	0
Pacific Ave at S 14th St	3	0
Pacific Ave at UW Campus	16	1
S 24th St at Pacific Ave	23	1
Tacoma Dome Station	786	28
SODO Busway at S Spokane St	6	59
SODO Busway at S Lander St (SODO Station)	9	49
SODO Busway at S Holgate St	3	17
SODO Busway at S Royal Brougham Way (Stadium Station)	3	23
4th Ave S at S Royal Brougham Way	0	1
4th Ave S at Jackson St	64	171
4th Ave S at Washington St	3	47
4th Ave at Cherry St	11	229
4th Ave at Seneca St	5	165
4th Ave at Union St	7	142
Olive Way at 6th Ave	2	58
Howell St at 9th Ave	0	47

Southbound	Boardings	Alightings
Stewart St at 9th Ave	86	0
Lenora St at 4th Ave	56	3
2nd Ave at Stewart St	131	5
2nd Ave at University St	147	7
2nd Ave at Spring St	90	5
2nd Ave at Cherry St	86	4
2nd Ave Extension S at S Washington St	52	10
SODO Busway at S Royal Brougham Way (Stadium Station)	38	4
SODO Busway at S Holgate St	14	2
SODO Busway at S Lander St (SODO Station)	29	3
SODO Busway at S Spokane St	26	2

Tacoma Dome Station	34	697
Pacific Ave at S 24th St	0	5
Pacific Ave at UW Campus	1	8
Pacific Ave at S 15th St	0	6
Commerce St at S 12th St	0	10
Commerce St at S 10th St	0	22

### Route 592

Northbound	Boardings	Alightings
DuPont Station	63	0
Lakewood Station	160	7
SR-512 Park & Ride	215	13
SODO Busway at S Spokane St	2	21
SODO Busway at S Lander St (SODO Station)	5	20
SODO Busway at S Holgate St	2	11
SODO Busway at S Royal Brougham Way (Stadium Station)	2	15
4th Ave S at S Royal Brougham Way	0	1
4th Ave S at Jackson St	43	65
4th Ave S at Washington St	1	14
4th Ave at Cherry St	5	134
4th Ave at Seneca St	3	85
4th Ave at Union St	2	56
Olive Way at 6th Ave	1	38
Howell St at 9th Ave	0	23

Southbound	Boardings	Alightings
Stewart St at 9th Ave	55	0
Lenora St at 4th Ave	31	4
2nd Ave at Stewart St	74	5
2nd Ave at University St	88	5
2nd Ave at Spring St	63	4
2nd Ave at Cherry St	45	4
2nd Ave Extension S at S Washington St	23	11
SODO Busway at S Royal Brougham Way (Stadium Station)	20	1
SODO Busway at S Holgate St	9	1
SODO Busway at S Lander St (SODO Station)	12	2
SODO Busway at S Spokane St	20	2
SR-512 Park & Ride	12	262
Lakewood Station	5	124
DuPont Station	0	32

### Route 593

Northbound	Boardings	Alightings
South Tacoma Station (S Adams St at S 60th St)	11	0
E 'D' St at E 25th St	0	1
Tacoma Dome Station	145	1
SODO Busway at S Spokane St	1	5
SODO Busway at S Lander St (SODO Station)	1	7
SODO Busway at S Holgate St	1	5
SODO Busway at S Royal Brougham Way (Stadium Station)	1	3
4th Ave S at S Royal Brougham Way	0	0

4th Ave S at Jackson St	20	24
4th Ave S at Washington St	1	9
4th Ave at Cherry St	4	56
4th Ave at Seneca St	2	34
4th Ave at Union St	1	22
Olive Way at 6th Ave	1	12
Howell St at 9th Ave	0	9

Southbound	Boardings	Alightings
Stewart St at 9th Ave	20	0
Lenora St at 4th Ave	12	2
2nd Ave at Stewart St	31	1
2nd Ave at University St	39	1
2nd Ave at Spring St	21	1
2nd Ave at Cherry St	22	1
2nd Ave Extension S at S Washington St	10	4
SODO Busway at S Royal Brougham Way (Stadium Station)	6	1
SODO Busway at S Holgate St	4	0
SODO Busway at S Lander St (SODO Station)	6	1
SODO Busway at S Spokane St	8	1
Tacoma Dome Station	6	154
E 26th St at E 'D' St	1	0
South Tacoma Station (S Adams St at S 60th St)	0	19

## Route 594

Northbound	Boardings	Alightings
Lakewood Station	73	0
SR-512 Park & Ride	168	6
Commerce St at S 10th St	179	16
Commerce St at S 12th St	13	1
Pacific Ave at S 14th St	14	0
Pacific Ave at UW Campus	55	3
S 24th St at Pacific Ave	26	2
Tacoma Dome Station	250	14
SODO Busway at S Spokane St	5	34
SODO Busway at S Lander St (SODO Station)	6	38
SODO Busway at S Holgate St	5	26
SODO Busway at S Royal Brougham Way (Stadium Station)	5	68
4th Ave S at S Royal Brougham Way	0	2
4th Ave S at Jackson St	16	186
4th Ave S at Washington St	2	26
4th Ave at Cherry St	7	79
4th Ave at Seneca St	4	110
4th Ave at Union St	6	140
Olive Way at 6th Ave	1	44
Howell St at 9th Ave	0	32

Southbound	Boardings	Alightings
Stewart St at 9th Ave	69	0
Lenora St at 4th Ave	38	3
2nd Ave at Stewart St	153	7
2nd Ave at University St	153	8

2nd Ave at Spring St	67	3
2nd Ave at Cherry St	55	4
2nd Ave Extension S at S Washington St	67	6
SODO Busway at S Royal Brougham Way (Stadium Station)	59	3
SODO Busway at S Holgate St	17	1
SODO Busway at S Lander St (SODO Station)	23	2
SODO Busway at S Spokane St	26	2
Tacoma Dome Station	24	322
Pacific Ave at S 24th St	2	30
Pacific Ave at UW Campus	4	37
Pacific Ave at S 15th St	0	11
Commerce St at S 12th St	1	31
Commerce St at S 10th St	14	127
SR-512 Park & Ride	6	128
Lakewood Station	0	62

### Route 595

Northbound	Boardings	Alightings
Purdy Park & Ride	38	0
Kimball Dr Park & Ride	45	0
Narrows Park & Ride	13	0
TCC Transit Center	29	5
SODO Busway at S Spokane St	1	9
SODO Busway at S Lander St (SODO Station)	1	5
SODO Busway at S Holgate St	1	5
SODO Busway at S Royal Brougham Way (Stadium Station)	0	4
4th Ave S at S Royal Brougham Way	0	0
4th Ave S at Jackson St	5	14
4th Ave S at Washington St	0	4
4th Ave at Cherry St	3	31
4th Ave at Seneca St	2	28
4th Ave at Union St	1	15
Olive Way at 6th Ave	0	12
Howell St at 9th Ave	0	7

Southbound	Boardings	Alightings
Stewart St at 9th Ave	22	0
Lenora St at 4th Ave	10	0
2nd Ave at Stewart St	17	1
2nd Ave at University St	29	2
2nd Ave at Spring St	12	1
2nd Ave at Cherry St	10	1
2nd Ave Extension S at S Washington St	10	1
SODO Busway at S Royal Brougham Way (Stadium Station)	3	0
SODO Busway at S Holgate St	6	0
SODO Busway at S Lander St (SODO Station)	5	0
SODO Busway at S Spokane St	6	1
TCC Transit Center	4	35
Narrows Park & Ride	1	11
Kimball Dr Park & Ride	0	46
Purdy Park & Ride	0	38

**Route 599**

Northbound	Boardings	Alightings
Lakewood Station	30	0
Tacoma Dome Station	0	30

Southbound	Boardings	Alightings
Tacoma Dome Station	43	0
Lakewood Station	0	43