

**SOUND TRANSIT  
STAFF REPORT**

**RESOLUTION NO. R2008-18**

**2009 Service Implementation Plan**

<b>Meeting:</b>	<b>Date:</b>	<b>Type of Action:</b>	<b>Staff Contact:</b>	<b>Phone:</b>
Finance Committee	12/4/08	Discussion/Possible Action to Recommend Board Approval	Bonnie Todd, Director Transportation Services	(206) 398-5367
Board	12/11/08	Action	<b>Mike Bergman, Program Manager, Service Planning &amp; Development</b>	(206) 398-5358

<b>Contract/Agreement Type:</b>	✓	<b>Requested Action:</b>	✓
Competitive Procurement		Execute New Contract/Agreement	
Sole Source		Amend Existing Contract/Agreement	
Agreement with Other Jurisdiction(s)		Budget Amendment	
Real Estate		Property Acquisition	

**PROJECT NAME**

2009 Service Implementation Plan (Service Delivery)

**PROPOSED ACTION**

Adopting the 2009 Service Implementation Plan, authorizing the chief executive officer to implement the 2009 service changes, and approving the use of the preliminary 2010-2014 service changes for planning and forecasting purposes.

**KEY FEATURES OF PROPOSED ACTION**

- The Draft 2009 Service Implementation Plan (SIP) includes Sound Transit service changes recommended for implementation in 2009, together with preliminary service plans for 2010 through 2014. Board approval of the 2009 SIP authorizes the implementation of proposed 2009 service changes only. Preliminary service plans for 2010 through 2014 would be approved in-principle only, for planning and forecasting purposes.
- The Draft 2009 SIP assumes no Sound Transit 2 (ST2) program. With voter approval of ST2 on November 4, 2008, the first phase of ST2 express bus improvements planned for 2009 will be funded through a proposed amendment to the 2009 Budget presented to the Board as a separate action.
- This action is needed to authorize the initial level of Central Link light rail service, to implement a temporary bus route connecting the initial Link terminus to Sea-Tac Airport and to improve the efficiency of ST Express bus service.
- Proposed ST Express bus changes would modify routing in the Eastgate area to reduce travel time and increase service to Issaquah (Routes 554, 555 and 556).

**BUDGET IMPACT SUMMARY**

There is no action outside of the Board-adopted budget; there are no contingency funds required, no subarea impacts, or funding required from other parties other than what is already assumed in the financial plan.

## **BUDGET and FINANCIAL PLAN DISCUSSION**

The Proposed 2009 Budget has been amended since it was published in September 2008 to reflect updated assumptions in finance plan. The amended budget included a total transit operations budget in the amount of \$157,803,977, which would fund the service delivery of Sound Transit operations for ST Express bus, Sounder Commuter rail, Central Link light rail and Tacoma Link light rail, as well as the Accessible Services Program. This budget would fund the Sound Transit administration and management of service delivery, direct operating costs of facilities and stations, as well as the costs of the service itself.

The Proposed 2009 Budget for ST Express bus includes purchased transportation services from King County Metro, Pierce Transit and Community Transit, who directly operate ST bus service through the five-year service agreements previously approved by the Board in 2004. The total amount budgeted for ST Express is \$88,743,952 for 2009, with an additional contingency of \$2,659,221 should there be any unanticipated changes, such as fuel prices exceeding budgeted levels.

The Proposed 2009 Budget for Central Link light rail is \$21,812,135, which includes purchased transportation services from King County Metro, who directly operate ST light rail. The budget also includes an additional contingency of \$1,090,647 for any unanticipated costs.

The Proposed 2009 Budget for Sounder commuter rail is \$36,710,379, which includes costs for previously negotiated agreements with the BNSF Railway and Amtrak. The budget also includes a contingency of \$1,204,236 for unanticipated costs such as volatility in the fuel market.

The Proposed 2009 Budget for Tacoma Link light rail is \$4,188,684, plus a contingency of \$190,510 for a total of \$4,379,194. Tacoma Link is directly operated by Sound Transit.

The Proposed 2009 Budget for Accessible Services is \$1,120,634, plus a contingency of \$33,619 for a total of \$1,154,253.

All transit operations funds will be approved during the Agency budget process, with anticipated adoption of the Board budget resolution in December, 2008.

The 2009 transit operations budget is fully funded in the finance plan.

## **BUDGET TABLE**

The 2009 Service Implementation Plan is funded by the transit operations budgets for all Sound Transit modes including Sounder Commuter rail, ST Express, Tacoma Link Light rail, Central Link Light rail and Accessible Services. The budget table is on following page.

**Summary for Board Action (Year of Expenditure \$000)**

**Action Item: Adoption of the 2009 Service Implementation Plan.**

<b>Modal Budget</b>	<b>Proposed 2009 Budget (1)</b>
Sounder Commuter Rail	37,965
ST Express Bus	91,403
Tacoma Link Light Rail	4,379
Accessible Services Program	1,154
Central Link Light rail	22,903
<b>Total Transit Operations</b>	<b>157,804</b>

<b>Subarea Budget</b>	<b>Proposed 2009 Budget (1)</b>
Snohomish County	20,637
North King County	15,728
South King County	34,072
East King County	47,443
Pierce County	39,924
<b>Total Transit Operations</b>	<b>157,804</b>

**Notes**

- <sup>1</sup> The proposed action would authorize the 2009 Service Implementation Plan. The proposed 2009 budget was prepared on the basis of the service described in the 2009 SIP. This budget includes 2009 budget amendments which will be reflected in 2009 Adopted Budget. Budget authority would be granted with the
- <sup>2</sup> Committed to date per expenditures incurred through October 2008. There are no commitments against 2009 service agreements until adoption of the SIP.

**SMALL BUSINESS PARTICIPATION**

Not applicable to this action.

**PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION**

Each year, Sound Transit staff develops a draft Service Implementation Plan (SIP) for Board consideration. The Draft 2009 SIP describes the start-up of service on Central Link light rail in mid-2009, the extension of Link service to SeaTac Airport later in the year and proposed changes to ST Express bus routes. Board approval of the SIP authorizes the implementation of recommended service during calendar year 2009 and adopts the 2010-2014 proposals for planning and forecasting purposes only.

The Draft 2009 SIP assumes no Sound Transit 2 (ST2) program. With voter approval of ST2 on November 4, 2008, the first phase of ST2 express bus service improvements planned for 2009 will be funded in a budget amendment proposed to the Board as a separate action.

Sound Transit and King County Metro are working together on potential revisions to bus service that would support the opening of Airport Link and improve transit service throughout the South I-5 corridor. The changes, affecting both Metro and ST Express bus routes, would be implemented in February 2010, shortly

after the opening of the airport light rail extension. Since the 2010 ST Express changes are still under development, they are not included in the Draft 2009 SIP. The February 2010 ST Express proposals, together with initial ST2 bus service improvements, will be presented to the Board as a SIP amendment in April/May of 2009 following a public outreach process.

#### Proposed 2009 Service Changes for Board Consideration

- **Central Link Initial Segment:** Implement the initial segment of Central Link light rail between Westlake Station and Tukwila International Boulevard Station in mid-2009. Operate service 7 days a week, from approximately 5:00 a.m. to 1:00 a.m. Monday through Saturday and from approximately 6:00 a.m. to 12:00 midnight on Sundays and holidays. Operate service approximately every 15 minutes during early morning and late night hours, every 6-8 minutes during weekday peak hours, and every 10 minutes at other times.
- **Temporary Airport Shuttle Bus:** Upon start-up of the Central Link Initial Segment, implement a temporary shuttle bus route between Tukwila International Boulevard Station and Sea-Tac Airport, with no intermediate stops. The temporary bus route would operate every 10 to 15 minutes.
- **Airport Link:** Extend Link service to SeaTac/Airport Station in late 2009. Discontinue temporary airport shuttle bus from Tukwila International Boulevard Station when the Airport Link extension is operational.
- **Route 497 (Lakeland Hills-Auburn):** Together with Pierce Transit and the City of Auburn, initiate a new Sounder Connector bus service between the Lakeland Hills area and Auburn Station, with schedules designed to connect to and from Sounder commuter trains. The service would be operated by Pierce Transit and jointly funded by Sound Transit, the City of Auburn and Pierce Transit.
- **ST Express Route 554 (Issaquah-Seattle):** Revise routing in the Eastgate area to serve the Eastgate Freeway Station only, discontinuing stops on 142<sup>nd</sup> Place SE and at the Eastgate Park-and-Ride bus loop. Extend trips that now start or end at Eastgate to the Issaquah Transit Center, providing 15-minute midday service between Issaquah and Seattle.
- **ST Express Route 555 (Issaquah-Northgate):** Revise routing in the Eastgate area to serve a new bus stop set at SE Eastgate Way and Richards Road SE (one stop in each direction). Discontinue routing and bus stops on SE 36<sup>th</sup> Street. Revise routing between Eastgate and downtown Bellevue to use SE Eastgate Way, I-90, Bellevue Way SE and 112<sup>th</sup> Avenue SE in both directions. Add a bus stop set at the South Bellevue Park-and-Ride and at SE 15<sup>th</sup> Street and 112<sup>th</sup> Avenue SE.
- **ST Express Route 556 (Issaquah-Northgate via U District):** Revise routing in the Eastgate area to serve the Eastgate Freeway Station only, discontinuing stops on 142<sup>nd</sup> Place SE and the Eastgate Park-and-Ride bus loop. Revise routing between Eastgate and downtown Bellevue to use the Eastgate HOV direct access ramps, I-90, Bellevue Way SE and 112<sup>th</sup> Avenue SE. Add a bus stop set at the South Bellevue Park-and-Ride and at SE 15<sup>th</sup> Street and 112<sup>th</sup> Avenue SE.

The Draft SIP plan for implementation of Central Link service is consistent with the *Central Link Operations Plan-Initial Segment and Airport Link*, July 2008. Sound Transit has entered into an agreement with King County for Central Link operations and maintenance functions. The Operations Plan was developed to meet FTA requirements and to assist King County Metro in estimating the resources needed to operate and maintain Central Link service.

Service level assumptions for Central Link were developed early in the project and have undergone considerable analysis. Staff is recommending initial peak period headways of 6 to 8 minutes, based on projected demand, the results of joint bus-rail operations testing in the downtown Seattle transit tunnel and budgetary requirements.

For the first six months of operation, Central Link ridership growth will be somewhat constrained by the interim terminus just short of Sea-Tac Airport and by the gradual phase-in of connecting bus service. The Airport extension is expected to be operational by the end of 2009, and complementary changes to bus routes are proposed for implementation between September 2009 and June 2010. By mid-2010, ridership on Central Link is expected to reach approximately 26,600 weekday boardings.

For Sounder commuter rail, staff expects to implement the ninth round trip train on the South Line (Seattle-Tacoma) in June 2009. This change was approved in the 2008 SIP but implementation was delayed so that

additional track storage space could be developed in Tacoma for the additional train this service requires. No other service changes are proposed for Sounder during 2009.

Compared with previous years, proposed 2009 changes to ST Express bus routes are minimal and focused on reducing travel time and improving efficiency. Service changes proposed in the Eastgate area would reduce travel time on Routes 554, 555 and 556 and double the level of Route 554 midday service to Issaquah. A trade-off with the Route 554 and Route 556 change is longer walk distances between connecting local buses and ST Express routes at Eastgate Park-and-Ride.

No changes are proposed for Tacoma Link service in 2009.

### **PRIOR BOARD/COMMITTEE ACTIONS**

None.

### **CONSEQUENCES of DELAY**

Terms of the service agreements with the transit agency partners require that specifications for the June 2009 service change be finalized no later than January 15, 2009. If final Board action is delayed some service changes targeted for June implementation would be delayed until September 2009, the last designated service change of the year.

### **PUBLIC INVOLVEMENT**

During November 2008, Sound Transit conducted a public outreach process aimed at specific groups affected by the proposed 2009 service changes, including transit riders and community stakeholders. A key element of the outreach was *Regional Transit News* (RTN), a newsletter distributed at bus stops and transit centers, on board transit vehicles and at transportation information events. The fall 2008 RTN contains an explanation of each SIP service change proposed for 2009, including the start-up of Central Link. In addition to print copies, an electronic version of RTN was sent to Sound Transit's e-mail subscription lists, distributed through the Employee Transportation Network and posted on Sound Transit's web site. There was no questionnaire provided in the RTN but interested parties were encouraged to send comments via e-mail, letter or telephone using a toll-free number provided.

Besides *Regional Transit News*, Sound Transit staff collaborated with King County Metro to produce *Transit Connections*, a tabloid describing initial Central Link service. The Metro piece, which also described potential bus service changes that would coordinate with the opening of Central Link, was distributed by mail to households along the light rail alignment.

During mid-November, Sound Transit conducted a public open house on the SIP proposals at Union Station in Seattle. The open house included information on the proposed ST Express changes in the Eastgate area, the start-up of Central Link and proposed Link fare structures. Comment forms were available at both meetings to encourage public feedback. A public hearing on the Draft 2009 SIP is scheduled for December 4, 2008 at Union Station in Seattle.

### **ENVIRONMENTAL COMPLIANCE**

SSK 11-25-08

### **LEGAL REVIEW**

JW 11/26/08

## **SOUND TRANSIT**

### **RESOLUTION NO. R2008-18**

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority adopting the 2009 Service Implementation Plan, authorizing the chief executive officer to implement the 2009 service changes, and approving the use of the preliminary 2010-2014 service changes for planning and forecasting purposes.

WHEREAS, a Regional Transit Authority, hereinafter referred to as Sound Transit, has been created for the Pierce, King, and Snohomish County region by action of their respective county councils pursuant to RCW 81.112.030; and

WHEREAS, on November 5, 1996, at a general election held within the Central Puget Sound Regional Transit Authority district, voters within the Sound Transit district approved local funding to implement the Sound Move regional transit system plan as the first phase of a regional high-capacity transportation system for the Central Puget Sound region; and

WHEREAS, Sound Move called for new high-speed regional express bus routes together with new commuter rail and light rail services to provide a high-capacity transit network for the region; and

WHEREAS, express bus, commuter rail and light rail services will be implemented in phases, providing a program for route implementation and service increases over time which meets the commitments a cost-effective manner; and

WHEREAS, on November 4, 2008, at a general election held within the Central Puget Sound Regional Transit Authority district, the voters approved local funding to implement the Sound Transit 2 Regional Transit System Plan improvements; and

WHEREAS, the Sound Transit Board approves regional express bus, commuter rail, and light rail services by annual adoption of a Service Implementation Plan (SIP); and

WHEREAS, proposed 2009 service changes included in the 2009 Service Implementation Plan are consistent with the 2009 Agency Budget and Long-Range Financial Plan; and

WHEREAS, the Sound Transit Board has further determined it is in the best interest of the citizens of the region to adopt the 2009 Service Implementation Plan; and

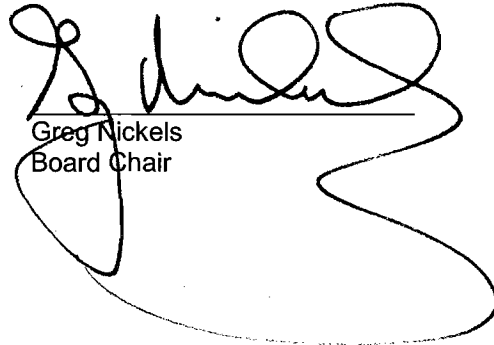
WHEREAS, the initial ST2 Express bus improvements are not included in the Draft 2009 SIP but will be proposed to the Board in the second quarter of 2009 as an amendment to the Adopted 2009 SIP.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that the 2009 Service Implementation Plan is adopted, the use of the preliminary 2010-2014 service changes for planning and forecasting purposes is approved, and the chief executive officer is authorized to implement the 2009 service changes included in the plan as described below:

1. **Central Link:** Implement the initial segment of Central Link light rail between Westlake Station and Tukwila International Boulevard Station in mid-2009. Operate service 7 days a week, from approximately 5:00 a.m. to 1:00 a.m. Monday through Saturday and from approximately 6:00 a.m. to 12:00 midnight on Sundays and holidays. Operate service approximately every 15 minutes during early morning and late night hours, every 6 to 8 minutes during weekday peak hours, and every 10 minutes at other times. In late 2009, extend light rail service from Tukwila International Boulevard Station to SeaTac/Airport Station.
2. **Temporary Airport Shuttle Bus:** Upon start-up of the Central Link initial segment, implement a temporary shuttle bus route between Tukwila International Boulevard Station and Sea-Tac Airport. Service will operate every 10 to 15 minutes. The shuttle bus route will be discontinued when light rail service begins to SeaTac/Airport Station.
3. **Lakeland Hills-Auburn Sounder Connector:** Together with Pierce Transit and the City of Auburn, initiate a new Sounder Connector bus service between the Lakeland Hills area and Auburn Station, with schedules designed for convenient connections to and from Sounder trains. The route will be operated by Pierce Transit and jointly funded by Sound Transit, the City of Auburn and Pierce Transit.
4. **ST Express Route 554 (Issaquah-Seattle):** Revise routing in the Eastgate area to serve the Eastgate Freeway Station only, discontinuing bus stops on 142<sup>nd</sup> Place SE and at the Eastgate Park-and-Ride bus loop. Extend trips that now start or end at Eastgate Park-and-Ride to the Issaquah Transit Center, providing 15-minute service between Issaquah and Seattle.
5. **ST Express Route 555 (Issaquah-Northgate):** Revise routing in the Eastgate area to serve a new bus stop set at SE Eastgate Way and Richards Road SE (one stop in each direction). Discontinue routing and stops on SE 36<sup>th</sup> Street. Revise routing between Eastgate Park-and-Ride and downtown Bellevue to use SE Eastgate Way, I-90, Bellevue Way SE and 112<sup>th</sup> Avenue SE in both directions. Add a bus stop set at the South Bellevue Park-and-Ride and at SE 15<sup>th</sup> Street and 112<sup>th</sup> Avenue SE.

6. **ST Express Route 556 (Issaquah-Northgate via University District):** Revise routing in the Eastgate area to serve the Eastgate Freeway Station only, discontinuing stops on 142<sup>nd</sup> Place SE and at the Eastgate Park-and-Ride bus loop. Revise routing between Eastgate and downtown Bellevue to use the Eastgate HOV direct access ramps, I-90, Bellevue Way SE and 112<sup>th</sup> Avenue SE. Add a bus stop set at the South Bellevue Park-and-Ride and at SE 15<sup>th</sup> Street and 112<sup>th</sup> Avenue SE.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on December 11, 2008.



Greg Nickels  
Board Chair

ATTEST:

Marcia Walker  
Marcia Walker  
Board Administrator



**2009  
DRAFT  
SERVICE  
IMPLEMENTATION  
PLAN**

**November 24, 2008**



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## Executive Summary:

The Service Implementation Plan (SIP) is Sound Transit's annual update on its express bus, commuter rail and light rail services. The SIP describes service additions and revisions planned for the upcoming budget year, together with preliminary proposals and financial estimates for the subsequent five-year period. 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.

**The Draft 2009 SIP was developed assuming no Sound Transit 2 ("ST2") program.** However, the service changes proposed in the SIP provide the baseline for future ST2 planning and implementation. Sound Transit Board action on the Draft SIP is tentatively scheduled for Dec. 11, 2008. With voter approval of ST2, funding for the first phase of ST2 express bus improvements will be included in a separate provisional amendment to the agency budget. In early 2009, staff will develop an updated 2009 SIP that incorporates specific ST2 express bus improvements, and will submit the update to the Board for their consideration in the April/May 2009 timeframe.

The most significant component of the Draft 2009 SIP is the opening of Central Link light rail, the largest single expansion of transit service in the region's history. Following almost six years of design, construction and testing, the successful launch of Link is a major goal for the agency in 2009. Other elements of the Draft 2009 SIP include proposed changes to ST Express bus routes in the Eastgate area and the implementation of a new Sounder connector bus route serving Auburn Station.

### ST Express Bus

During 2008, express bus service improvements were implemented to support two new park-and-ride facilities, Lakewood Station and South Everett Park-and-Ride. Additional buses delivered during the year increased the total fleet from 228 to 240 vehicles. In Pierce County, seven older 42-seat buses were replaced by new 57-seat models. Despite these improvements, unprecedented demand for transit service resulted in peak period overcrowding on several ST Express routes. In many cases, Sound Transit's service standards for passenger loading are exceeded, with many customers standing for 20 minutes or more. A key challenge for 2009 is addressing overcrowding on ST Express routes. Schedule efficiencies, optimizing bus assignments, sharing resources with Sound Transit's partner transit agencies and promoting ridership during off-peak times are some of the approaches that will be used to meet this challenge.

In East King County, changes to Eastgate-area routes are proposed to speed service, improve efficiency and provide more frequent midday service to the new Issaquah Transit Center. **Route 554 Issaquah-Seattle, Route 555 Issaquah-Northgate and Route 556 Issaquah-U District-Northgate** would be revised speed service. Travel time savings from this change would permit increased midday service on **Route 554** to Issaquah with no increase in cost.

Since most Sounder park-and-rides are at capacity, Sound Transit staff has continued to work closely with partner agencies to expand connections between buses and Sounder trains whenever possible. An example of this is the **Route 497 Lakeland Hills Shuttle**, a new Pierce Transit connector bus route between Auburn's Lakeland Hills neighborhood and Auburn Station planned to begin operation in February 2009. A true partnership, this route would provide guaranteed connections to and from Sounder trains and would be jointly funded by the City of Auburn,

Sound Transit and Pierce Transit during its first year of service. The partnership agreement will be submitted to the Sound Transit Board in a separate action. Sound Transit's share of the service funding is estimated to be approximately \$117,000.

Chapter 1 provides a list of proposed 2009 bus service changes requiring Sound Transit Board approval. A complete description of all ST Express bus routes and proposed bus service changes is included in Chapter 2.

## **Souder Commuter Rail**

Ridership on Souder commuter trains continued to build during 2008, significantly improving productivity and cost efficiency performance measures. The new Mukilteo Station opened on the **north line** (Everett-Seattle) on May 31, and a fourth round trip train was successfully implemented between Everett and Seattle in September. September also saw the launch of a seventh and eighth round trip on the **south line** (Tacoma-Seattle), coinciding with completion of the Tacoma-Seattle track and signal improvement project. Board approval of the 2008 SIP authorized the start-up of a ninth round trip train, but implementation was delayed by the need to expand yard storage space in Tacoma. The ninth round trip is now planned for June 2009, and the entire fleet of Souder cars and locomotives will be in service at that time. Other service changes planned for 2009 will focus on schedule refinement and optimizing connections with ferries on the north line. **Route 599 Lakewood-Tacoma Dome**, a temporary bus route implemented in September 2008 to provide guaranteed connections with south line trains at Tacoma, will continue as a way of building ridership for the planned extension of Souder service to Lakewood. This service is funded from the ST Express budget.

A complete description of Souder service changes for 2009 is included in Chapter 2.

## **Tacoma Link**

In February 2008, early morning and Sunday service was reduced on Tacoma Link to fund extended weeknight service. Light rail service now operates until 10 p.m. six nights a week. At first, Sunday boardings dropped significantly, and the initial night ridership was modest. More recent data shows that there has been an overall increase in ridership. More details on the results of the 2008 change are included in the Tacoma Link section of Chapter 2. No service changes are proposed for 2009.

## **Central Link**

Under construction since 2003, **Link** will open for passenger service in two phases. In mid-2009, service will begin operating between Westlake Station and Tukwila International Blvd. Station, about 1.7 miles north of Sea-Tac Airport. By the end of the year, light rail service will extend to the SeaTac/Airport Station. This station will be connected to the airport terminal via an overhead pedestrian bridge and walkway through the airport garage. The station is designed and situated to permit future extensions of light rail service farther south.

Before the extension to Sea-Tac opens, a temporary bus shuttle will transport light rail passengers to and from the airport. Once trains are running to the airport, the shuttle will be discontinued. The shuttle will operate under a purchased transportation service contract that will be presented to the Sound Transit Board as a separate motion.

The Link opening represents a huge increase in transit capacity in the corridor. Each two-car train can carry as many as 400 passengers seated and standing, and frequent service will minimize wait time at stations. Separated right-of-way and signals that provide priority over other traffic at

intersections will provide fast, dependable service all day and in all kinds of weather. Changes to King County Metro routes planned in coordination with the start-up of Link service are expected to reduce overcrowding and provide new cross-town bus connections that otherwise would not be possible. Ridership on the initial Westlake-Tukwila segment is projected at about 15,900 weekday boardings, increasing to about 26,000 boardings in 2010 following the opening of Airport Link and the full implementation of connecting bus service.

Chapter 2 includes proposed initial service levels for Link, including headways by time of day and hours of service. Board approval of the 2009 SIP would authorize these service levels to be implemented, consistent with the operations plan and costs described in Sound Transit's Proposed 2009 Budget.

### **Preliminary Service Plans for 2010 - 2014**

In addition to specific 2009 service proposals for Board consideration, the SIP describes preliminary 2010-2014 service plans. These out year plans were developed assuming no Sound Transit 2 (ST2) program, and implementation is driven by completion of the final *Sound Move* capital projects, planned changes to partner agency service and projected operations and maintenance funding available in each subarea. Service levels, ridership and fare revenue estimates shown in the SIP for 2010-2014 are used to develop the agency's Long-Range Financial Plan. Here is a preliminary summary of service proposals during this time period:

#### **2010**

- Implement non-stop express bus service between Federal Way and downtown Seattle during off-peak hours, replacing King County Metro Route 194 service.
- Modify Lakewood-SeaTac bus route (574) to connect with Link at SeaTac/Airport Station and increase service levels to offset the deletion of King County Metro Route 194 service between Federal Way and the airport.

#### **2011**

- Everett-Seattle (510) and Ash Way-Seattle (511) bus routes modified to serve the new Mountlake Terrace Freeway Station and park-and-ride garage.
- Revise West Seattle-Bellevue route (560) to avoid duplication with King County Metro's planned West Seattle "Rapid Ride" service.

#### **2012**

- Sounder commuter rail service extended from Tacoma Dome Station to South Tacoma and Lakewood; temporary bus routes 593 and 599 discontinued.

#### **2013**

- Coordinated improvements to East King County service with the start-up of King County Metro's Bellevue-Redmond "Rapid Ride," which could include enhanced service on ST Express Route 550 (Bellevue-Seattle).

Additional details on preliminary "out year" plans are included in Chapter 3.

## **Accessible Services**

With the commencement of Central Link service in 2009, Sound Transit will have a paratransit obligation under provisions of Federal regulations. This service, operated for Sound Transit under contract with King County Metro, will provide rides to eligible persons with disabilities within  $\frac{3}{4}$  mile of the Central Link alignment.

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 received New Freedom Program grants from the Puget Sound Regional Council to implement two projects from the Plan. The Volunteer Transportation Programs and the Bus Buddy/Travel Ambassador Programs will continue to be funded through December 2009. At that time the funding will be assumed by local special needs transportation coalitions.

Sound Transit will complete testing and report to Congress on the Remote Audible Infrared Signage program, which received an FTA grant of \$1.98 million.

## **Quick Guide to the 2009 SIP:**

*Chapter 1* summarizes the service changes proposed for implementation in 2009 that require Sound Transit Board action.

*Chapter 2* includes a description and performance summary of Sounder, Link and each ST Express route, with detailed background information for each 2009 SIP service change.

*Chapter 3* describes preliminary plans for 2010-2014.

*Chapter 4* includes estimates of ridership and fare revenue for all three transit modes through 2014, and a description of the modeling and assumptions used to develop the estimates.

# Chapter 1: Summary of 2009 Service Changes for Sound Transit Board Consideration

The following 2009 service changes are proposed for Sound Transit Board consideration. A detailed description of the changes and additional background information is included in Chapter 2. The proposed new Route 497 Sounder connector route will be submitted to the Board in a separate action.

## Link Light Rail

- Initiate Central Link light rail service between Westlake Station and Tukwila International Boulevard Station. Service would operate seven days a week from approximately 5:00 a.m. to 1:00 a.m. Monday through Saturday, and 6:00 a.m. to 12:00 midnight on Sundays. Trains would operate every 6 to 8 minutes during peak periods, every 10 minutes midday, Saturday and Sunday, and every 15 minutes before 6:00 a.m. and after 10:00 p.m.
- Effective with the Link start-up, initiate a temporary shuttle bus service between Tukwila International Boulevard Station and SeaTac Airport running every 10 to 15 minutes during all hours of Link operation.
- Extend Link light rail service from Tukwila International Boulevard Station to Sea-Tac/Airport Station in December 2009. Discontinue the temporary shuttle bus service when the extension is operational.

## ST Express Bus

### Route 554 Issaquah-Seattle

- Revise routing in the Eastgate area to serve the Eastgate Freeway Station stops only.
- Modify existing trips that now start or end at Eastgate Park-and-Ride so that they start or end at the Issaquah Transit Center instead, providing 15-minute service between Seattle and Issaquah Transit Center during the midday.

### Route 555 Northgate-Issaquah

- Revise routing in the Eastgate area to bus stops at SE Eastgate Way at Richards Road SE.
- Revise routing between the Eastgate Freeway Station and Bellevue Transit Center to use SE Eastgate Way, I-90, Bellevue Way SE, 112<sup>th</sup> Avenue SE and NE 6<sup>th</sup> Street.
- Add a pair of stops (one in each direction) at the South Bellevue Park-and-Ride.

### Route 556 Northgate-Issaquah Via U-District

- Revise routing in the Eastgate area to serve the Eastgate Freeway Station stops only.
- Revise routing between the Eastgate Freeway Station and Bellevue Transit Center to use I-90, Bellevue Way SE, 112<sup>th</sup> Avenue SE and NE 6<sup>th</sup> Street.
- Add a pair of stops (one in each direction) at the South Bellevue Park-and-Ride

**Souder Connector****Route 497 Lakeland Hills-Auburn Station**

- One-year partnership with Pierce Transit and the City of Auburn for Souder connector bus service from Lakeland Hills to Auburn Station.
- Sound Transit would reimburse Pierce Transit for 40 percent of the cost of the service.
- After one year, Pierce Transit and the City of Auburn have an agreement to continue the service with King County Metro as a part of their Transit Now Partnerships program.



## Chapter 2: 2008 Service Change Analysis

### Link Light Rail

#### Tacoma Link

##### Description

Tacoma Link connects the Tacoma Dome Station and 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. Ridership increased from 1st Quarter 2007 to 1<sup>st</sup> Quarter 2008, except on Sundays. Sunday service levels were reduced starting in February 2008 in order to fund extended weeknight service.

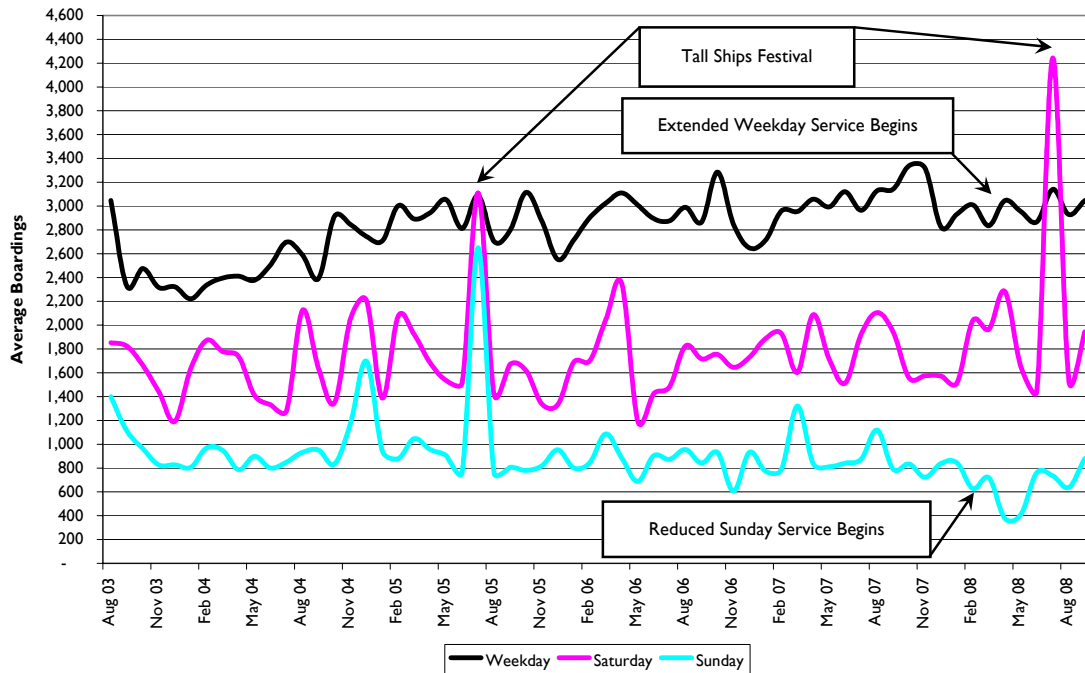
##### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,873	1,791	947
Passengers per Trip	14.55	15.99	10.38	9.21
Passengers per Service Hour	87.62	96.26	62.59	55.44

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,925	1,848	739
Passengers per Trip	14.99	16.11	10.81	10.70
Passengers per Service Hour	90.63	97.77	65.30	64.22

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 2%	Up 3%	Down 22%
Passengers per Trip	Up 3%	Up <1%	Up 4%	Up 16%
Passengers per Service Hour	Up 3%	Up 2%	Up 4%	Up 16%

### Tacoma Link



The sudden rise in weekend boardings on Tacoma Link in July 2005 and July 2008 is due to the Tall Ships visit over the Independence Day weekend.

Spring 2008	Overall	Weekday Early AM	Weekday AM Peak	Weekday Midday	Weekday PM Peak	Weekday Evening
Daily Boardings	2,961	64	618	1085	846	349
Passengers per Trip	32.54	21.44	41.19	30.13	46.98	18.36
Passengers per Service Hour	99.82	96.47	123.56	90.39	140.95	55.08
Cost per Boarding	\$3.16	\$3.27	\$2.55	\$3.49	\$2.24	\$5.72
Trip Assessment		2.00 Satisfactory	2.33 Unsatisfactory	2.67 Marginal	1.67 Satisfactory	2.33 Satisfactory

Spring 2008	Overall	Saturday Daytime	Saturday Evening	Sunday	Holiday
Daily Boardings	2,961	1,575	394	543	562
Passengers per Trip	32.54	13.02	7.72	10.87	11.24

Passengers per Service Hour	99.82	78.76	46.33	66.54	68.82
Cost per Boarding	\$3.16	\$4.00	\$6.80	\$4.74	\$4.58
Trip Assessment		2.67 Marginal	3.67 Unsatisfactory	3.33 Marginal	2.00 Satisfactory

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.

Percentage of Scheduled Trips Operated: 99.79%. Systemwide, an average of 98.50 percent of all scheduled trips should be operated as shown in the published timetable during each quarter and calendar year. Tacoma Link exceeds the standard.

On-Time Performance: 99.80%. Systemwide, an average 98.50 percent of all scheduled trips should operate on schedule as shown in the published timetable during each quarter and calendar year. Tacoma Link exceeds the standard.

### Service Change Concepts

Sound Transit Board approval of the 2008 SIP authorized the extension of Tacoma Link weeknight service from 8:00 p.m. to 10:00 p.m., financed primarily by reducing Sunday service levels. This change was implemented in February 2008 with one train providing 20-minute service after 8:00 p.m. on weekdays. Sunday service, which had operated from 10:00 a.m. to 8:00 p.m. with 10-minute service for part of the day, was reduced to one train operating every 20 minutes between 10:00 a.m. and 6:00 p.m.

Ridership trends since the change must be viewed with caution since events at the Tacoma Convention Center and Tacoma Dome can impact the averages. Also, Link service is extended until 11:30 p.m. on nights when major events are scheduled at the Tacoma Dome, including Sunday nights. Nevertheless, the presence of automatic passenger counters on each train, which count each boarding, allow a much larger data sample to be collected compared with bus or Sounder service. Sunday ridership, which averaged 845 boardings in January 2008 before the service change, declined precipitously at first, with an average of only 378 boardings during April 2008. Since that time, Sunday ridership has made a gradual recovery, increasing to an average of 880 boardings in September 2008, slightly higher than before the service change. Weeknight ridership after 8:00 p.m. cannot be termed a major success, with an average of only 56 boardings during September, but since Sunday ridership has recovered from its initial decline total Tacoma Link ridership has increased overall compared with the same period during 2007.

At this time, no changes are proposed for Tacoma Link light rail during 2009. Sound Transit staff will continue to monitor ridership trends closely.

## Central Link Light Rail

### Description

Central Link is on track for opening in mid-2009. The initial segment of Central Link will operate between Westlake Station and Tukwila International Boulevard Station with ten intermediate stations serving the SODO district, Beacon Hill and Rainier Valley. Initial service will be provided with two-car trains having a capacity of 400 passengers, seated and standing. This represents a huge increase in transit capacity for the corridor. Central Link will offer residents and visitors fast, dependable light rail service all day, seven days a week in all weather and traffic conditions. In late 2009, plans call for Central Link to extend to the SeaTac/Airport Station, expected to be a major ridership generator. Until the airport extension is completed, a frequent shuttle bus route will connect the Tukwila International Boulevard Station with the existing airport bus stop at the arrivals level. The tables that follow describe proposed service levels and projected travel times.

### Performance Assessment

Weekday ridership is projected to average about 15,900 passenger boardings during the first six months of operation. By mid-2010, this is expected to increase to about 26,600 weekday boardings following the completion of Airport Link and the full implementation of connecting bus service. By way of comparison, the combined total of all other Sound Transit modes generated about 59,000 weekday boardings during the 3<sup>rd</sup> Quarter of 2008.

### **Service Change Concepts**

Planned service levels for Central Link would offer frequent trains all day, seven days a week. Train departures from each terminal would begin at about 5:00 a.m. on weekdays and Saturdays and at about 6:00 a.m. on Sundays and holidays. The last trains would depart each terminal at about 1:00 a.m. on weekdays and Saturdays and at about 12:00 midnight on Sundays and holidays. Trains would share use of the Downtown Seattle Transit Tunnel (DSTT) with King County Metro and Sound Transit buses. Trains would reverse direction using a crossover track in the Pine Street stub tunnel and would not serve the DSTT's Convention Place Station. The light rail Operations and Maintenance Facility (OMF) is located on South Forest Street in Seattle's SODO district. Trains departing from or returning to the OMF would operate in service and make stops at all regular stations. This would provide residents of southeast Seattle with early morning service to the airport. Service frequencies and travel times between stations are in the tables below.

Central Link Planned Frequencies

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

Central Link Travel Times (in minutes)

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

***Interim Airport Shuttle Bus***

During the interim period between the opening of the initial segment and the extension of light rail to SeaTac/Airport Station, a temporary shuttle bus route is planned to connect Tukwila International Boulevard Station with the airport. The shuttle bus route is a requirement of the Federal Transit Administration. Planned frequencies would be every 10 minutes except when light rail operates at 15-minute frequencies. The Airport Shuttle Bus will be funded from the Central Link operations budget

Interim Airport Shuttle Planned Frequencies

Weekday Time Period	Time Between Buses (minutes)
4:30 a.m. – 5:50 a.m.	15
5:50 a.m. – 9:30 p.m.	10
9:30 p.m. – 1:45 a.m.	15
Saturday Time Period	Time Between Buses (minutes)
4:30 a.m. – 9:00 a.m.	15
9:00 a.m. – 10:30 p.m.	10
10:00 p.m. – 1:45 a.m.	15
Sunday/Holiday Time Period	Time Between Buses (minutes)
5:00 a.m. – 9:00 a.m.	15
9:00 a.m. – 9:30 p.m.	10
9:30 p.m. – 12:45 a.m.	15

Bus travel time between Tukwila International Blvd Station and Sea-Tac Airport is eight to 11 minutes each way. This service would require four buses for most of the day. Estimated service hours (not including deadhead time to and from garage) would be 74 daily hours on weekdays to provide 236 trips, 65 daily hours on Saturdays to provide 224 trips and 60 daily hours for 204 trips. During the time the shuttle would operate, King County Metro will continue bus service on Route 194 directly between downtown Seattle and the airport. Thus, it is expected that most downtown-to-airport passengers will continue to use King County Metro service during this time.

The Airport Shuttle will be operated for Sound Transit under a purchased transportation service contract. The service contract will be presented to the Sound Transit Finance Committee and Board as a stand-alone action item separate from the SIP.



## Sounder Commuter Rail

### Everett – Seattle (North Line)

#### Description

The Sounder North Line began operation in December 2003 with one round trip. It operates along the BNSF Railway tracks between Everett and Seattle, with intermediate station stops at Mukilteo and Edmonds. The Mukilteo Station opened in May 2008. Sound Transit added a second round trip in June 2005, a third round trip in September 2007 and a fourth round trip in September 2008, bringing North Line service up to its maximum level under the operating agreement with BNSF Railway. Exclusive to the North Line, Sound Transit has a cooperative program with WSDOT and Amtrak that allows Puget Pass holders to ride Amtrak Cascade trains between Seattle and Everett at no additional cost. This program, called “Rail Plus,” provides North Line pass holders additional schedule choices outside of the time periods when Sounder trains operate. The North Line performance assessment below includes Rail Plus boardings. Average North Line weekday boardings are up 16 percent in 1<sup>st</sup> Quarter 2008 over 1<sup>st</sup> Quarter 2007.

#### Performance Assessment

1st Quarter 2007	Weekday	Special Event
Daily Boardings	831	2,339
Passengers per Train Trip	207.65	584.75
Passengers per Car Trip	68.68	129.94

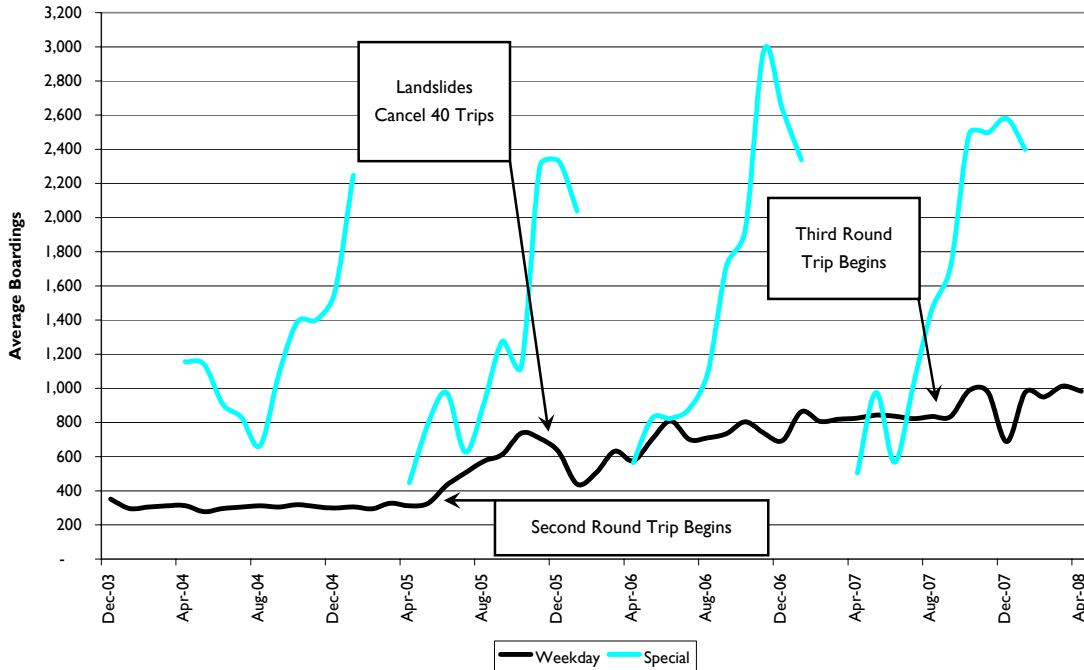
1st Quarter 2008	Weekday	Special Event
Daily Boardings	964	2,398*
Passengers per Train Trip	165.40	599.50
Passengers per Car Trip	54.94	149.88

\*One Saturday Seahawks Playoff game

2007-2008 Comparison	Weekday	Special Event
Daily Boardings	Up 16%	Up 10%
Passengers per Train Trip	Down 20%	Up 10%
Passengers per Car Trip	Down 20%	Up 4%



### Sounder North (Everett-Seattle)



Ridership responded favorably in 2005 to the second trip implemented in September of that year; however, in early 2006 average weekday ridership declined due to numerous landslides that blocked tracks and resulted in 40 cancelled trips between Everett and Seattle. Ridership trends have continued upwards since the third round-trip began in September 2007 and as gasoline prices have increased. As expected, productivity declined initially following implementation of the third round trip, but more recent monthly data shows indicators steadily improving as ridership has increased. June 2008 productivity exceeded the numbers achieved during the 1st quarter 2007. Event trains operating to Mariner and Seahawk games continue to show remarkable success.

### Service Change Concepts

No service changes are proposed in 2009. For a map of this route, please refer to the Get Ready to Ride guide. Staff will continue to monitor ferry-train connections will make minor time adjustments as necessary.

## Tacoma-Seattle (South Line)

### Description

The Sounder South Line began operation in September 2000 with two round trips. It uses BNSF Railway and Tacoma Rail tracks between Tacoma 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 track and signal improvements have been completed along the line. A third round trip was implemented in February 2003, followed by a fourth round trip in September 2005. A major change occurred in September 2007 when Sound Transit added two more round trips, including a reverse direction peak trip. Most recently, Sound Transit added the seventh and eighth round trips in September 2008, including a second reverse direction peak trip. Commuters have responded enthusiastically to the ramp-up of service, with average weekday ridership increasing from about 3,000 boardings in 2003 to over 8,000 boardings during the first quarter of 2008. More recent data from monthly counts shows South Line weekday ridership at over 9,000 boardings.

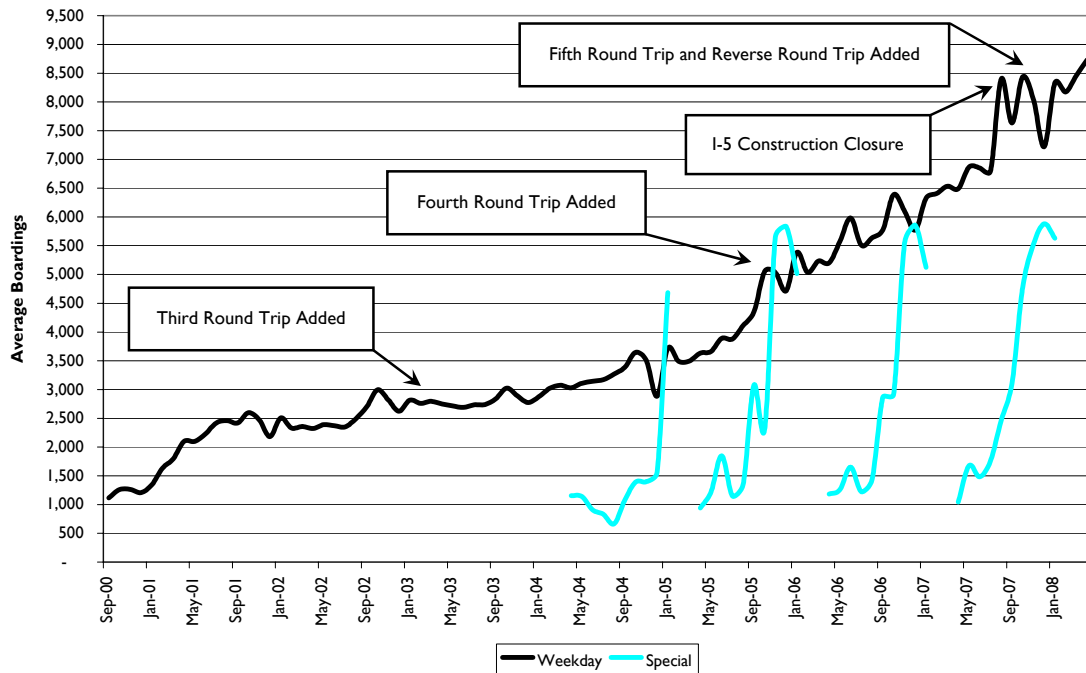
### Performance Assessment

1st Quarter 2007	Weekday	Special Event
Passengers/Day	6,423	5,124
Passengers/Train Trip	801.30	854.00
Passengers/Car Trip	122.74	134.84

1st Quarter 2008	Weekday	Special Event
Passengers/Day	8,324	5,632
Passengers/Train Trip	700.94	938.67
Passengers/Car Trip	110.61	140.80

2007-2008 Comparison	Weekday	Special Event
Daily Boardings	Up 30%	N/A
Passengers per Train Trip	Down 13%	N/A
Passengers per Car Trip	Down 10%	N/A

### Sounder South (Tacoma-Seattle)



While total ridership has steadily increased, the addition of the reverse peak trips in September 2007 initially resulted in decreased productivity. These trips have been averaging only about 120 boardings per train. However, operating the reverse peak service allows trains to be positioned for a productive second peak direction trip, and makes efficient use of the car and locomotive fleet. More recently, the ridership spurt that started in mid-2008 has increased overall productivity close to 2007 levels, indicating that peak direction trips are probably operating close to fully-seated loads with standees between Kent and Tukwila.

### Service Change Concepts

Sound Transit Board approval of the 2008 SIP authorized the implementation of a ninth round trip on the South Line, the maximum service level permitted under the current service agreement with BNSF. Implementation of the ninth round trip requires an additional train that would be stored in Tacoma overnight and on weekends. Tacoma Rail's "L" Street yard, located near the Tacoma Dome Station and used for Sounder train storage since 2003, is not large enough to accommodate the additional train. Thus, implementation of the ninth round trip has been delayed until the yard is expanded, a project expected to be completed during the first quarter of 2009. Sound Transit now expects to add the ninth peak-directional round trip with the regular June 1, 2009 service change (see draft schedule below). This start-up date was selected so that necessary schedule adjustments can be made to connecting bus routes.

Since most Sounder park-and-ride facilities are at capacity, good connections between buses and trains are particularly important to continue Sounder ridership growth. Sound Transit is working closely with partner agencies to expand bus-train connections whenever possible. An example of this is the Lakeland Hills Shuttle, a new bus route between Auburn's Lakeland Hills neighborhood and Auburn Station that will begin operation in February 2009. A true partnership service, the route will be operated by Pierce Transit and jointly funded by the City of Auburn,

Sound Transit and Pierce Transit during its first year of service, and will make guaranteed connections to and from Sounder trains.

With implementation of the ninth round trip, South Line schedules will be adjusted so that trains operate closer together during the “peak of the peak” (6-7 A.M. northbound and 4-5 P.M. southbound). This will reduce overcrowding when demand is heaviest and allow the service to accommodate more riders. However, it also moves the last P.M. departure from Seattle 30 minutes earlier, to 6:15 p.m. from 6:45 p.m. The earlier time slot will be more convenient for some riders and less so for others. To gauge the impact of this time change, Sound Transit staff will survey riders of the current 6:45 p.m. train to help determine schedule preferences and whether bus service is a reasonable alternative for commuters who need a later departure.

**Service Change Highlights**

- Add a ninth round trip with a departure from Tacoma at 6:00 and from Seattle at 15:15.
- Adjust the southbound departure at 15:35 to depart at 15:50.
- Adjust the southbound departure at 17:55 to depart at 17:40.
- Adjust the southbound departure at 18:45 to depart at 18:15
- Adjust the northbound departure at 5:00 to depart at 4:55.
- Adjust the northbound departure at 5:40 to depart at 5:35.
- Adjust the northbound departure at 6:20 to depart at 6:25.
- Adjust the northbound departure at 16:45 to depart at 16:25.
- Adjust the northbound departure at 17:35 to depart at 17:00.

**South Line Draft Proposed Schedule – June 2009  
(Subject to change)**

**Southbound**

Train No.	1501	1503	1505	1507	1509	1511	1513	1515	1517
Seattle	6:10	6:50	15:15	15:50	16:20	16:45	17:12	17:40	18:15
Tukwila	6:22	7:02	15:27	16:02	16:32	16:57	17:24	17:52	18:27
Kent	6:29	7:09	15:34	16:09	16:39	17:04	17:32	17:59	18:34
Auburn	6:36	7:16	15:41	16:16	16:46	17:11	17:39	18:06	18:41
Sumner	6:45	7:25	15:50	16:25	16:56	17:21	17:49	18:16	18:50
Puyallup	6:49	7:29	15:54	16:29	17:00	17:25	17:53	18:20	18:54
Tacoma	7:08	7:48	16:14	16:49	17:19	17:44	18:11	18:39	19:14

**Northbound**

Train No.	1500	1502	1504	1506	1508	1510	1512	1514	1516
Tacoma	4:55	5:35	6:00	6:25	6:50	7:20	8:00	16:25	17:00
Puyallup	5:07	5:47	6:12	6:37	7:02	7:32	8:12	16:37	17:12
Sumner	5:12	5:52	6:17	6:42	7:07	7:37	8:17	16:42	17:17
Auburn	5:20	6:01	6:26	6:51	7:16	7:45	8:25	16:50	17:25
Kent	5:27	6:09	6:34	6:59	7:24	7:52	8:32	16:57	17:32
Tukwila	5:34	6:16	6:41	7:06	7:31	7:59	8:39	17:04	17:39
Seattle	5:54	6:34	6:59	7:24	7:49	8:19	8:59	17:23	17:58

## ST Express Bus

The Sound Transit Board approved updated Service Standards and Performance Measures for ST Express in 2006. 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 will be 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 system structure and trip patterns of ST Express. Each route will 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.

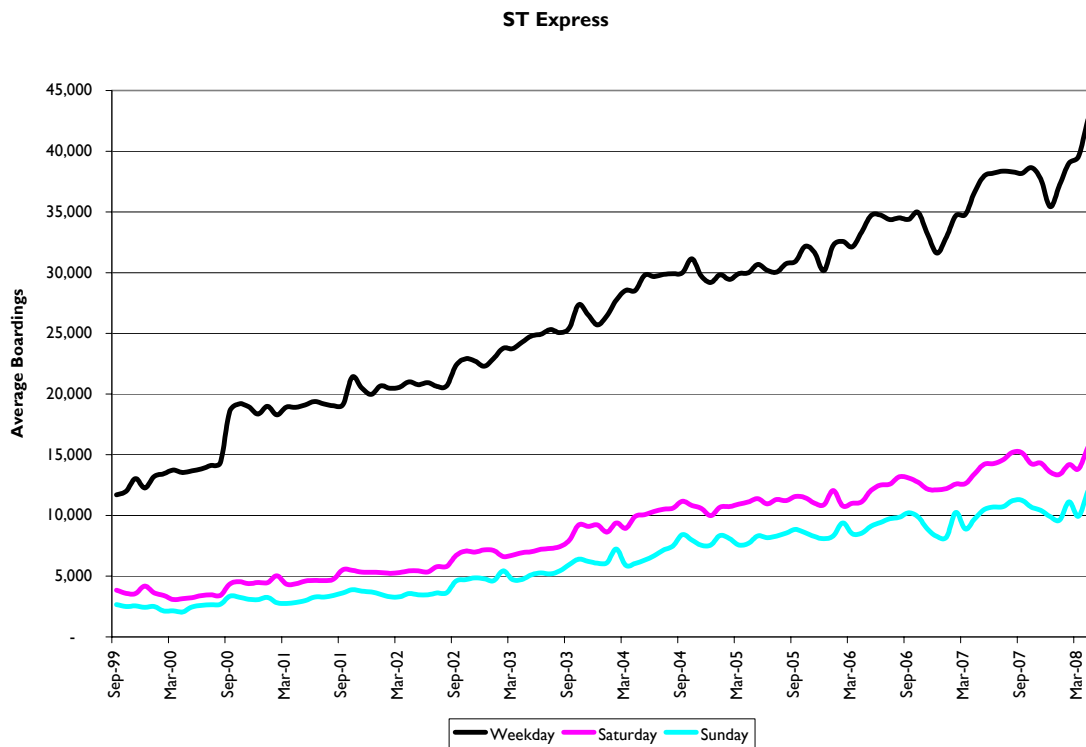
The following tables indicate the level of systemwide performance for each ST Express performance measure:

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		33,733	12,684	9,558
Passengers per Trip	26.68	28.28	21.25	16.24
Passengers per Revenue Hour	20.50	21.47	17.63	13.10
Purchased Transportation Cost per Boarding	\$ 6.00	\$ 5.82	\$ 6.50	\$ 8.46

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		38,559	13,911	10,738
Passengers per Trip	29.06	30.71	23.62	18.13
Passengers per Revenue Hour	22.69	23.96	18.80	14.03
Purchased Transportation Cost per Boarding	\$ 5.75	\$ 5.55	\$ 6.36	\$ 8.27

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 14%	Up 10%	Up 12%
Passengers per Trip	Up 9%	Up 9%	Up 11%	Up 12%
Passengers per Revenue Hour	Up 11%	Up 12%	Up 7%	Up 7%
Purchased Transportation Cost per Boarding	Down 4%	Down 5%	Down 2%	Down 2%

Productivity improved for all performance measures between 2007 and 2008. While additional service was implemented in accordance with the 2007 and 2008 Service Implementation Plans, the main drivers of additional ridership during this time period have been increased residential and employment density in regional centers served by ST Express and higher gasoline prices. During late 2007 into mid-2008, gasoline prices reached \$3 and then \$4 per gallon, increasing the direct costs of long-haul auto trips that are comparable to the ST Express network. This drove a huge influx of new riders onto transit in the Puget Sound region and around the country. While much of the growth in ridership and productivity was due to factors out of the control of Sound Transit, the region clearly benefited from the ST Express network already in place and its ability to maximize the benefits of the HOV lane system.



The following tables define the ranges for each measure to determine the productivity for each ST Express route.

Overall Service	Boardings per Trip	Boardings per Revenue Hour	Transportation Cost per Boarding
Good	> 36.33	> 28.36	< \$4.31
Satisfactory	29.06 – 36.33	22.69 – 28.36	\$4.31 - \$5.75
Marginal	21.80 – 29.06	17.02 – 22.69	\$5.75 - \$7.19
Unsatisfactory	< 21.80	< 17.02	> \$7.19

Weekday Service	Boardings per Trip	Boardings per Revenue Hour	Transportation Cost per Boarding
Good	> 38.39	> 29.95	< \$4.16
Satisfactory	30.71 – 38.39	23.96 – 29.95	\$4.16 - \$5.55
Marginal	23.03 – 30.71	17.97 – 23.96	\$5.55 - \$6.94
Unsatisfactory	< 23.03	< 17.97	> \$6.94

Saturday Service	Boardings per Trip	Boardings per Revenue Hour	Transportation Cost per Boarding
Good	> 29.53	> 23.50	< \$4.77
Satisfactory	23.62 – 26.56	18.80 – 23.50	\$4.77 - \$6.36
Marginal	17.72 – 23.62	14.10 – 18.80	\$6.36 - \$7.95
Unsatisfactory	< 17.72	< 14.10	> \$7.95

Sunday and Holiday Service	Boardings per Trip	Boardings per Revenue Hour	Transportation Cost per Boarding
Good	> 22.66	> 17.58	< \$6.20
Satisfactory	18.13 – 22.66	14.03 – 17.58	\$6.20 - \$8.27
Marginal	13.60 – 18.13	10.52 – 14.03	\$8.27 - \$10.34
Unsatisfactory	< 13.60	< 10.52	> \$10.34

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 497: Lakeland Hills – Auburn Station**

**Description**

Planning for this service began under the provisions of King County Metro’s Service Partnership Program. License plate surveys and other data showed that many existing and potential transit commuters live in Lakeland Hills, a large residential area of Auburn that straddles the King County-Pierce County boundary. The area currently has no local transit service, and commuter ridership growth has been constrained because of limited parking available at Auburn Station. Route 497 would operate directly between Lakeland Hills and Auburn Station, with one-way service to the station in the a.m. peak and from the station to Lakeland Hills in the p.m. peak. The intent of the new service is to provide area residents with convenient access to Sounder commuter rail, Sound Transit express bus service, and Metro bus service at Auburn Station. A true partnership, Route 497 service would be funded jointly by King County Metro, the City of Auburn and Pierce Transit.

King County Metro is unable to fund their portion of the partnership until February 2010. The 2009 Service Implementation Plan proposes that Sound Transit fund what would otherwise be King County’s contribution for the first year of service beginning in February 2009, in order to provide immediate alternatives for commuters seeking to access commuter rail and express bus services at Auburn Station. Service would begin with 12 weekday trips between Lakeland Hills and Auburn Station in February 2009, increasing to 14 trips when the final round trip on Sounder is implemented in June 2009.

Sound Transit would provide 40 percent of the cost of the service from February 2009 through February 2010. The remaining funding would be provided by the City of Auburn and Pierce Transit. Pierce Transit would also provide the buses necessary to operate this route. The following table provides a breakdown of the funding by agency. Sound Transit’s participation would end in February 2010 when King County Metro would assume its funding role in the partnership agreement.

Preliminary Cost Estimate						
Route	Day	Time	Description	# of Trips	Est’d Hours	Total Cost
497	M-F	5:00 – 8:00 16:00 – 18:30	Lakeland Hills – Auburn Station	14	3,848	\$292,178.64
			Sound Transit contribution			\$116,871.46
			City of Auburn contribution			\$116,871.46
			Pierce Transit contribution			\$58,435.73 + 2 buses



# NEW ROUTE 497



## Route 510/513: Everett – Seattle

### 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 St. (the 145th Street and 45th Street 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 service levels have remained largely unchanged since its inception, 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 AM peak trips were also added to accommodate overloads.

In September 2008, a major service restructure was implemented with the opening of the South Everett Park-and-Ride. This facility, located in the median of I-5 and with over 400 parking stalls, is served by Route 510 while Route 513 continues to serve 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. Even with these improvements, the new South Everett facility has completely filled with commuter vehicles and some Route 510 trips continue to be overloaded during peak periods.

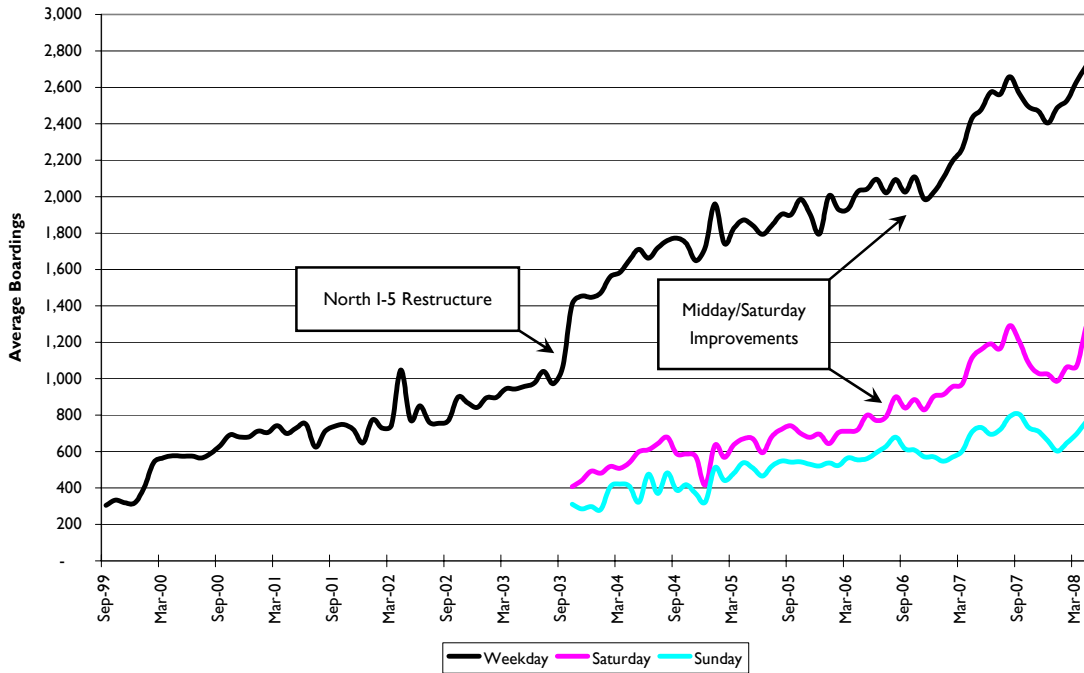
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,187	949	571
Passengers per Trip	25.87	28.50	15.55	15.86
Passengers per Revenue Hour	21.57	23.18	14.32	14.73
Purchased Transportation Cost per Boarding	\$ 6.37	\$ 5.91	\$10.05	\$ 8.97
Route Assessment	2.67 Marginal	2.33 Satisfactory	3.67 Unsatisfactory	2.67 Marginal

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,548	1,042	649
Passengers per Trip	29.85	33.12	17.08	18.03
Passengers per Revenue Hour	25.06	27.16	15.68	16.70
Purchased Transportation Cost per Boarding	\$ 5.92	\$ 5.47	\$ 9.52	\$8.72
Route Assessment	2.33 Satisfactory	2.00 Satisfactory	3.67 Unsatisfactory	2.67 Marginal

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 17%	Up 10%	Up 14%
Passengers per Trip	Up 15%	Up 16%	Up 10%	Up 14%
Passengers per Revenue Hour	Up 16%	Up 17%	Up 9%	Up 13%
Purchased Transportation Cost per Boarding	Down 7%	Down 7%	Down 5%	Down 3%

**Routes 510/513 (Everett-Seattle)**



Ridership trends are strong and productivity has recovered from the addition of service in September 2006. Trends were down in late 2007, but have recovered their previous levels in 2008. Productivity on Saturdays is relatively low compared to other routes because of the numbers of passengers per trip and the cost per boarding.

**Additional Data Pertinent to Route**

Service on this corridor is provided by Routes 510 and 513.

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Route 510 (Service seven days a week)				
Daily Boardings		2,147	1,042	649
Passengers per Trip	28.04	31.15	17.08	18.03
Passengers per Revenue Hour	23.91	26.00	15.68	16.70
Route 513 (Peak period, peak direction service only)				
Daily Boardings		401	No weekend service	
Passengers per Trip	50.10	50.10		
Passengers per Revenue Hour	35.69	35.69		

The following table looks at each direction by time period on weekdays, recorded from the Automatic Passenger Counters for the September 2007 service change. The information below includes boardings within the Ride Free Area. The following two tables show the stop level boarding activity.

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Route 510					
Pass/Trip	29.10	30.73	57.25	38.84	13.92
Pass/Rev Hr	26.34	26.59	42.04	33.29	13.48
Route 513					
Pass/Trip			63.76		
Pass/Rev Hr			42.04		
Routes 510/513					
Pass/Trip	29.10	30.73	59.62	38.84	13.92
Pass/Rev Hr	26.34	26.59	42.04	33.29	13.48
<b>Southbound</b>					
Route 510					
Pass/Trip	52.62	30.24	24.95	20.52	18.49
Pass/Rev Hr	42.72	24.77	20.05	17.93	16.55
Route 513					
Pass/Trip	55.34				
Pass/Rev Hr	42.84				
Routes 510/513					
Pass/Trip	53.30	30.24	24.95	20.52	18.49
Pass/Rev Hr	42.75	24.77	20.05	17.93	16.55

### ***Stop Level Boardings and Alightings***

#### **Route 510/513 Stop Level Boardings and Alightings – Northbound**

	Route 510		Route 513		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Busway at S Royal Brougham Way	44	0	6	0	50	0
4 <sup>th</sup> Ave S at S Royal Brougham Way	29	1	6	0	35	1
4 <sup>th</sup> Ave S at S Jackson St	204	16	19	2	223	18
4 <sup>th</sup> Ave S at S Washington St	4	2	0	0	4	2
4 <sup>th</sup> Ave at Cherry St	115	55	39	2	154	57
4 <sup>th</sup> Ave at Seneca St	130	47	60	1	190	48
4 <sup>th</sup> Ave at Union St	233	61	52	3	285	64
Olive Way at 6 <sup>th</sup> Ave	144	28	39	1	183	29
Olive Way at Terry Ave	60	8			60	8
Howell St at 9 <sup>th</sup> Ave	38	4	19	4	57	8
Howell St at Yale Ave	8	36	6	0	14	36
I-5 at NE 45 <sup>th</sup> St	85	21			85	21
I-5 at NE 145 <sup>th</sup> St	25	17			25	17
Eastmont P&R	67	319	7	150	74	469
Evergreen Way at 79 <sup>th</sup> Pl			1	14	1	14
Evergreen Way at 75 <sup>th</sup> St			0	6	0	6
Evergreen Way at			0	7	0	7

Madison St						
Evergreen Way at Berkshire Dr			1	4	1	4
Evergreen Way at 50 <sup>th</sup> St			1	7	1	7
Rucker Ave at 40 <sup>th</sup> St			0	5	0	5
Rucker Ave at 35 <sup>th</sup> St			0	0	0	0
Rucker Ave at 33 <sup>rd</sup> St			0	0	0	0
Pacific Ave at Wetmore Ave			0	1	0	1
Broadway at 38 <sup>th</sup> St	9	51			9	51
Everett Station	10	451	0	47	10	498
Pacific Ave at Rockefeller Ave	1	27	1	2	2	29
Wetmore Ave at Wall St	2	34			2	34
Hewitt Ave at Lombard St	4	13			4	13
Hewitt Ave at Virginia Ave	0	18			0	18

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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 510/513 Stop Level Boardings and Alightings – Southbound

	Route 510		Route 513		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Hewitt Ave at Virginia Ave	23	0			23	0
Hewitt Ave at Lombard Ave	9	1			9	1
Wetmore Ave at Wall St	41	1			41	1
Pacific Ave at Rockefeller Ave	42	0	3	0	45	0
Everett Station	505	15	27	0	532	15
Broadway at 38 <sup>th</sup> St	34	0			34	0
Pacific Ave at Hoyt Ave			0	0	0	0
Rucker Ave at Pacific Ave			1	0	1	0
Rucker Ave at 35 <sup>th</sup> St			1	0	1	0
Rucker Ave at 42 <sup>nd</sup> St			8	0	8	0
Evergreen Way at 50 <sup>th</sup> St			8	0	8	0
Evergreen Way at Pecks Dr			6	1	6	1
Evergreen Way at Madison St			3	0	3	0
Evergreen Way at 75 <sup>th</sup> St			6	0	6	0
Evergreen Way at 79 <sup>th</sup> Pl			18	1	18	1
Eastmont P&R	332	41	127	5	459	46
I-5 at NE 145 <sup>th</sup> St	30	26			30	26
I-5 at NE 45 <sup>th</sup> St	32	77			32	77
Stewart St at Yale Ave	18	91	2	35	20	126
Stewart St at 9 <sup>th</sup> Ave	12	56	1	10	13	66
Stewart St at 7 <sup>th</sup> Ave	8	51	1	20	9	71
5 <sup>th</sup> Ave at Pine St	83	250	7	32	90	282
5 <sup>th</sup> Ave at Pike St	27	101	3	22	30	123
5 <sup>th</sup> Ave at Seneca St	17	113	1	24	18	137
5 <sup>th</sup> Ave at Spring St	12	109	1	19	13	128
5 <sup>th</sup> Ave at Marion St	2	62	0	10	2	72
5 <sup>th</sup> Ave at Cherry St	7	58	0	19	7	77
5 <sup>th</sup> Ave at Jefferson St	3	34	2	7	5	41
5 <sup>th</sup> Ave S at S Jackson St	5	120	0	16	5	136

6 <sup>th</sup> Ave S at S Royal Brougham Way	0	34	0	5	0	39
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Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service

Ridership Impacts	Depending on the location of the new terminal for Route 513, approximately 10 to 18 passengers may need to transfer from SWIFT or local service or find an alternative to a single seat ride. This would be roughly 5 to 9 percent of the boardings on Route 513. It is also less than 1 percent of the total ridership between Everett and Seattle (Routes 510 and 513).

Standards and Performance Measures. Stops highlighted in yellow do meet the standards in the reverse direction.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 510	114% Above Average	122% Above Average	107% Above Average	150% Well Above Average
Route 513	191% Well Above Average	191% Well Above Average	No weekend service	
Routes 510/513 Combined	128% Well Above Average	130% Well Above Average	107% Above Average	150% Well Above Average

**Service Change Concepts**

No changes are proposed for Routes 510/513 in 2009. Since the opening of the South Everett Park and Ride in September 2008 and the shift of Route 510 to the new facility, commuter vehicles have completely filled the South Everett lot while the older Eastmont Park and Ride now has surplus capacity. If funding becomes available for additional service in the Snohomish subarea, staff recommends that additional Route 513 service be given priority so that more riders can be accommodated at the Eastmont facility. The additional trips may take the form of Route 513 turnback trips that would start or end at Eastmont.

## Route 511: Ash Way – Seattle

### 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.

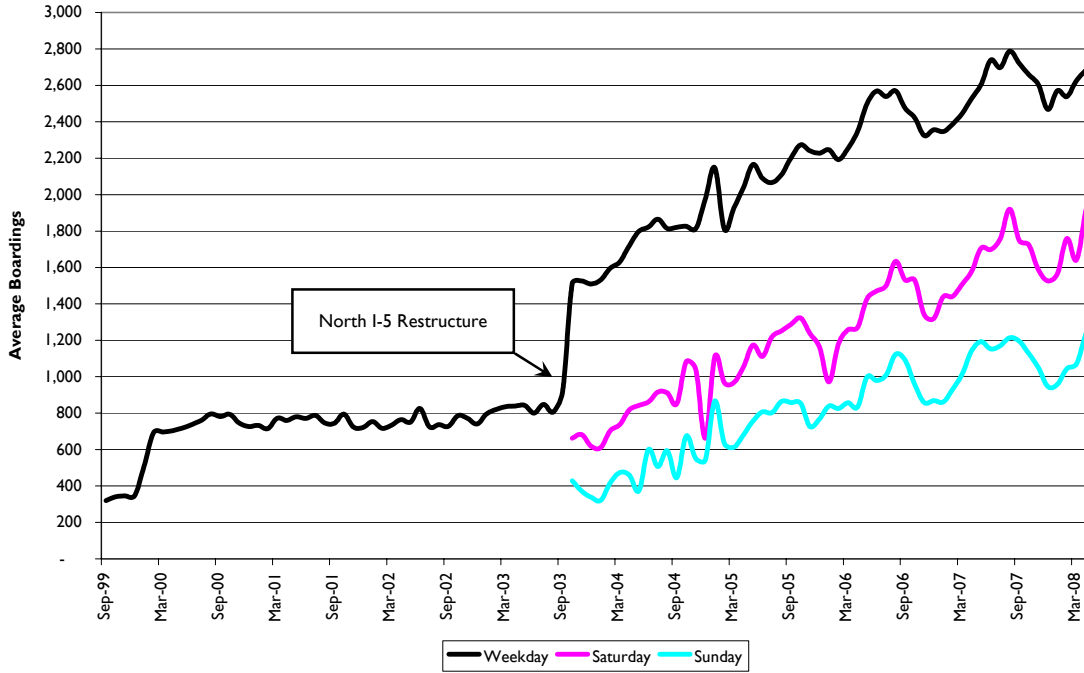
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,393	1,466	930
Passengers per Trip	30.25	33.78	24.43	15.49
Passengers per Revenue Hour	37.33	40.86	32.05	20.34
Purchased Transportation Cost per Boarding	\$ 4.36	\$ 4.02	\$ 5.11	\$ 7.54
Route Assessment	1.33 Good	1.33 Good	1.67 Satisfactory	2.00 Satisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,578	1,654	1,023
Passengers per Trip	32.62	36.38	27.57	17.05
Passengers per Revenue Hour	40.24	43.99	36.01	22.28
Purchased Transportation Cost per Boarding	\$4.31	\$3.98	\$4.69	\$7.53
Route Assessment	1.33 Good	1.33 Good	1.33 Good	2.00 Satisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boarding		Up 8%	Up 13%	Up 10%
Passengers per Trip	Up 8%	Up 8%	Up 13%	Up 10%
Passengers per Revenue Hour	Up 8%	Up 8%	Up 12%	Up 10%
Purchased Transportation Cost per Boarding	Down 1%	Down 1%	Down 8%	Down <1%

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



Boardings and productivity are up significantly for the first quarter of 2008 over the first quarter of 2007. While ridership tends to increase in spring and summer, and decrease in fall, the general trend is a growing market on this route.

**Additional Data Pertinent to Route**

The following table looks at each direction by time period on weekdays, recorded from the Automatic Passenger Counters for the September 2007 service change. The information below includes boardings within the Ride Free Area. The following two tables show the stop level boarding activity in each direction. Stop level information for Routes 510 and 513 is shown in the tables to show total boarding and alighting levels at stops that Routes 510, 511 and 513 have in common. Finally, passenger miles per revenue hour are shown for weekdays, Saturdays and Sundays.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	29.35	37.83	63.76	36.06	29.21
Pass/ Rev Hr	41.35	43.89	67.31	44.02	40.76
<b>Southbound</b>					
Pass/Trip	61.71	35.78	32.55	21.49	21.33
Pass/ Rev Hr	76.43	44.02	38.81	28.82	29.77



### ***Stop Level Boardings and Alightings***

#### **Route 511 Stop Level Boardings and Alightings – Northbound**

	Route 510/513		Route 511		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Busway at S Royal Brougham Way	50	0	32	0	82	0
4 <sup>th</sup> Ave S at S Royal Brougham Way	35	1	9	0	44	1
4 <sup>th</sup> Ave S at S Jackson St	223	18	217	2	440	20
4 <sup>th</sup> Ave S at S Washington St	4	2	14	3	18	5
4 <sup>th</sup> Ave at Cherry St	154	57	185	48	339	105
4 <sup>th</sup> Ave at Seneca St	190	48	202	59	392	107
4 <sup>th</sup> Ave at Union St	285	64	305	65	590	129
Olive Way at 6 <sup>th</sup> Ave	183	29	227	22	410	51
Olive Way at Terry Ave	60	8	88	15	148	23
Howell St at 9 <sup>th</sup> Ave	57	8	38	1	95	9
Howell St at Yale Ave	14	36			14	36
I-5 at NE 45 <sup>th</sup> St	85	21	110	23	195	44
I-5 at NE 145 <sup>th</sup> St	25	17	13	24	38	41
Lynnwood Transit Center			18	835	18	835
Ash Way P&R			0	360	0	360

#### **Route 511 Stop Level Boardings and Alightings – Southbound**

	Route 510/513		Route 511		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Ash Way P&R			403	0	403	0
Lynnwood Transit Center			748	22	748	22
I-5 at NE 145 <sup>th</sup> St	30	26	14	8	44	34
I-5 at NE 45 <sup>th</sup> St	32	77	26	96	58	173
Stewart St at Yale Ave	20	126	20	92	40	218
Stewart St at 9 <sup>th</sup> Ave	13	66	5	36	18	102
Stewart St at 7 <sup>th</sup> Ave	9	71	6	64	15	135
5 <sup>th</sup> Ave at Pine St	90	282	48	279	138	561
5 <sup>th</sup> Ave at Pike St	30	123	17	150	47	273
5 <sup>th</sup> Ave at Seneca St	18	137	29	122	47	259
5 <sup>th</sup> Ave at Spring St	13	128	13	98	26	226
5 <sup>th</sup> Ave at Marion St	2	72	1	71	3	143
5 <sup>th</sup> Ave at Cherry St	7	77	5	84	12	161
5 <sup>th</sup> Ave at Jefferson St	5	41	6	46	11	87
5 <sup>th</sup> Ave S at S Jackson St	5	136	4	159	9	295
6 <sup>th</sup> Ave S at S Royal Brougham Way	0	39	0	19	0	58

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

### ***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 511	136% Well Above Average	148% Well Above Average	156% Well Above Average	129% Well Above Average

**Service Change Concepts**

Route 511 is one of Sound Transit's most successful bus routes, and no changes are proposed for 2009. The route is a strong candidate for more service if additional funding is identified.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

## Route 522: Woodinville – Seattle

### Description

The Woodinville to Seattle Express began service in September 2002. It generally 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. Three additional peak period round trips were added in September 2008 to address overcrowded conditions. These trips are currently operated with King County Metro equipment, but will use Sound Transit vehicles shortly after the delivery of two new ST Express articulated buses in early 2009.

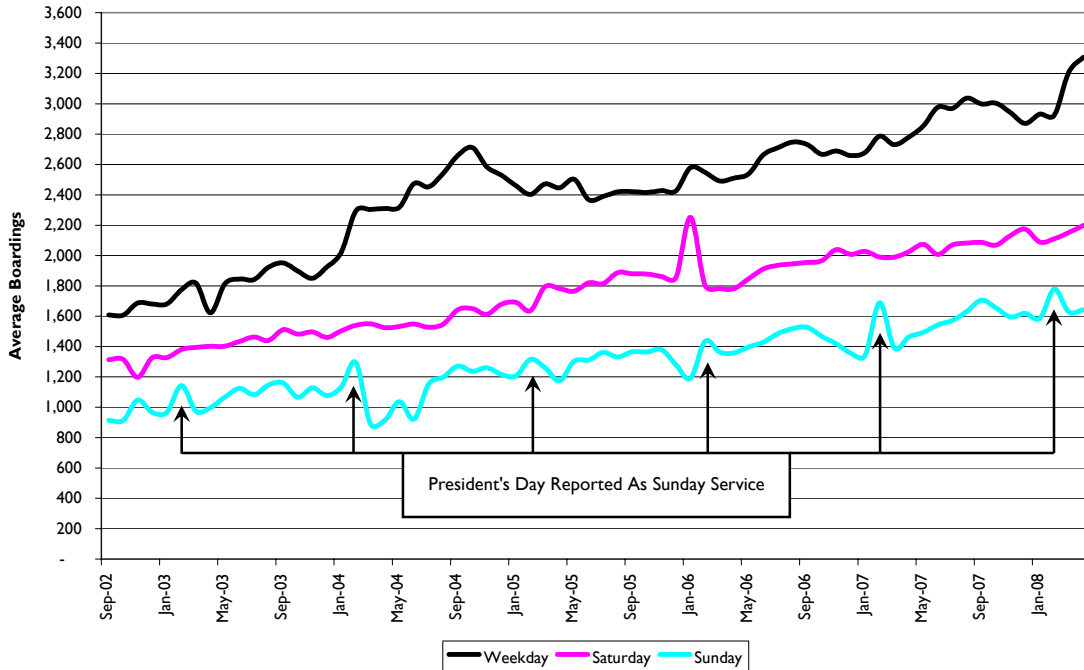
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,729	2,001	1,480
Passengers per Trip	31.42	33.32	30.32	22.01
Passengers per Revenue Hour	22.30	23.42	22.14	16.06
Purchased Transportation Cost per Boarding	\$ 4.99	\$ 4.87	\$ 4.67	\$ 6.45
Route Assessment	2.00 Satisfactory	2.00 Satisfactory	1.00 Good	1.67 Satisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,974	2,119	1,783
Passengers per Trip	34.55	36.85	32.11	24.79
Passengers per Revenue Hour	24.45	26.10	22.79	17.47
Purchased Transportation Cost per Boarding	\$4.76	\$4.56	\$4.80	\$6.22
Route Assessment	2.00 Satisfactory	2.00 Satisfactory	1.67 Satisfactory	1.67 Satisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 9%	Up 6%	Up 20%
Passengers per Trip	Up 10%	Up 11%	Up 6%	Up 13%
Passengers per Revenue Hour	Up 10%	Up 11%	Up 3%	Up 9%
Purchased Transportation Cost per Boarding	Down 5%	Down 6%	Up 3%	Down 4%

**Route 522 (Woodinville-Seattle)**



Average weekday boardings on Routes 522 are up over 1st quarter of 2007. Likewise, all productivity measures have improved except the purchased transportation cost per boarding on Saturdays which is down slightly. The increase in Sunday boardings during each February is due to the additional service that Sound Transit operates on President’s Day. Sound Transit operates a Sunday schedule on this day, but adds trips to operate every 15-minutes during the peak period in response to the reduced holiday service operated in this corridor by King County Metro.

**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 September 2007 service change and includes boardings within the Ride Free Area.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	28.88	32.85	46.89	38.67	27.00
Pass/ Rev Hr	27.89	30.39	38.36	39.66	29.82
<b>Southbound</b>					
Pass/Trip	48.86	32.62	38.00	19.00	13.80
Pass/ Rev Hr	47.94	29.41	29.67	19.86	12.90

**Stop Level Boardings and Alightings**

**Route 522 Stop Level Boardings and Alightings – Northbound**

	Route 522	
	Boardings	Alightings
SODO Busway at S Holgate St	68	0
SODO Busway at S Royal Brougham Way	13	2
4 <sup>th</sup> Ave S at S Royal Brougham Way	11	0
4 <sup>th</sup> Ave S at S Jackson St	158	20
3 <sup>rd</sup> Ave at James St	202	20
3 <sup>rd</sup> Ave at Madison St	210	56
3 <sup>rd</sup> Ave at Union St	395	163
Pike St at 6 <sup>th</sup> Ave	334	63
Lake City Way NE at NE 125 <sup>th</sup> St	50	147
Lake City Way NE at NE 130 <sup>th</sup> St	64	82
Lake City Way NE at NE 137 <sup>th</sup> St	8	77
Bothell Way NE at NE 145 <sup>th</sup> St	31	122
Bothell Way NE at NE 155 <sup>th</sup> St	5	26
Bothell Way NE at NE 165 <sup>th</sup> St	1	16
Bothell Way NE at NE 170 <sup>th</sup> St	7	50
Bothell Way NE at Ballinger Way NE	5	14
NE Bothell Way at 61 <sup>st</sup> Ave NE	6	55
NE Bothell Way at 68 <sup>th</sup> Ave NE	47	84
NE Bothell Way at 73 <sup>rd</sup> Ave NE	18	156
NE Bothell Way at 80 <sup>th</sup> Ave NE	15	27
Bothell Way NE at NE 180 <sup>th</sup> St	10	59
Main St at 103 <sup>rd</sup> Ave NE	12	131
UW-Bothell/Cascadia CC	39	106
Beardslee Blvd at NE 195 <sup>th</sup> St	4	28
SR-522 at 132 <sup>nd</sup> Ave NE	2	23
Woodinville-Snohomish Rd at NE 195 <sup>th</sup> St	2	34
Mill Pl at 138 <sup>th</sup> Pl NE	4	42
Woodinville P&R	0	117

**Route 522 Stop Level Boardings and Alightings – Southbound**

	Route 522	
	Boardings	Alightings
Woodinville P&R	119	0
Mill Pl at NE 180 <sup>th</sup> Pl	19	2
Woodinville-Snohomish Rd at NE Woodinville Way	32	3
SR-522 at 132 <sup>nd</sup> Ave NE	9	1
Beardslee Blvd at Ross Rd	17	5
UW-Bothell/Cascadia CC	98	31
Bothell P&R	129	10
Bothell Way NE at Ormbrek St	60	11
NE Bothell Way at 80 <sup>th</sup> Ave NE	29	15
Kenmore P&R	200	27
NE Bothell Way at 68 <sup>th</sup> Ave NE	82	29
NE Bothell Way at 61 <sup>st</sup> Ave NE	61	7
Bothell Way NE at Ballinger Way NE	33	8
Bothell Way NE at NE 170 <sup>th</sup> St	61	8
Bothell Way NE at NE 165 <sup>th</sup> St	19	1
Bothell Way NE at NE 155 <sup>th</sup> St	27	7

Lake City Way NE at NE 145 <sup>th</sup> St	139	37
Lake City Way NE at NE 137 <sup>th</sup> St	78	9
Lake City Way NE at NE 130 <sup>th</sup> St	102	62
Lake City Way NE at NE 125 <sup>th</sup> St	189	79
Union St at 6 <sup>th</sup> Ave	24	355
Union St at 4 <sup>th</sup> Ave	20	390
2 <sup>nd</sup> Ave at Seneca St	11	162
2 <sup>nd</sup> Ave at Marion St	10	92
2 <sup>nd</sup> Ave at James St	4	69
2 <sup>nd</sup> Ave Extension S at S Jackson St	7	94
6 <sup>th</sup> Ave S at S Royal Brougham Way	0	64

Stops in the SODO area changed in February 2007 so that Route 522 and Route 545 could share a common terminal in the south end of downtown Seattle. Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 522	79% Below Average	88% Below Average	81% Below Average	79% Below Average

**Service Change Concepts**

No changes in 2009 are planned at this time.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

**Route 532: Everett – Bellevue**

**Description**

The Everett to Bellevue Express began service in September 1999 as two routes, 530 and 532. The former Route 530 operated generally along the I-5 and I-405 corridors, with intermediate stops at Eastmont Park-and-Ride, Ash Way Park-and-Ride, Canyon Park-and-Ride, UW-Bothell/Cascadia Community College, Brickyard Park-and-Ride, Kingsgate/Totem Lake, and Houghton Park-and-Ride. Route 530 was unique in that it operated only during the midday and in the off-peak direction during rush hours. There was no weekend service provided. Route 532 was similar to Route 530, except that it operated during peak periods and in the peak direction only and bypassed the Bothell Park-and-Ride, UW-Bothell/Cascadia Community College and Houghton Park-and-Ride. 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 532 began serving the Brickyard Road Freeway Station, which it continues to do in the off-peak direction. In September 2006, a major restructure was implemented that eliminated Route 530 and that provides peak period service in both directions between Everett and Bellevue on Route 532. Besides the stop at Brickyard, off-peak direction trips on Route 532 (operating northbound in the morning and southbound in the afternoon) make an additional stop at North Creek (NE 195th Street).

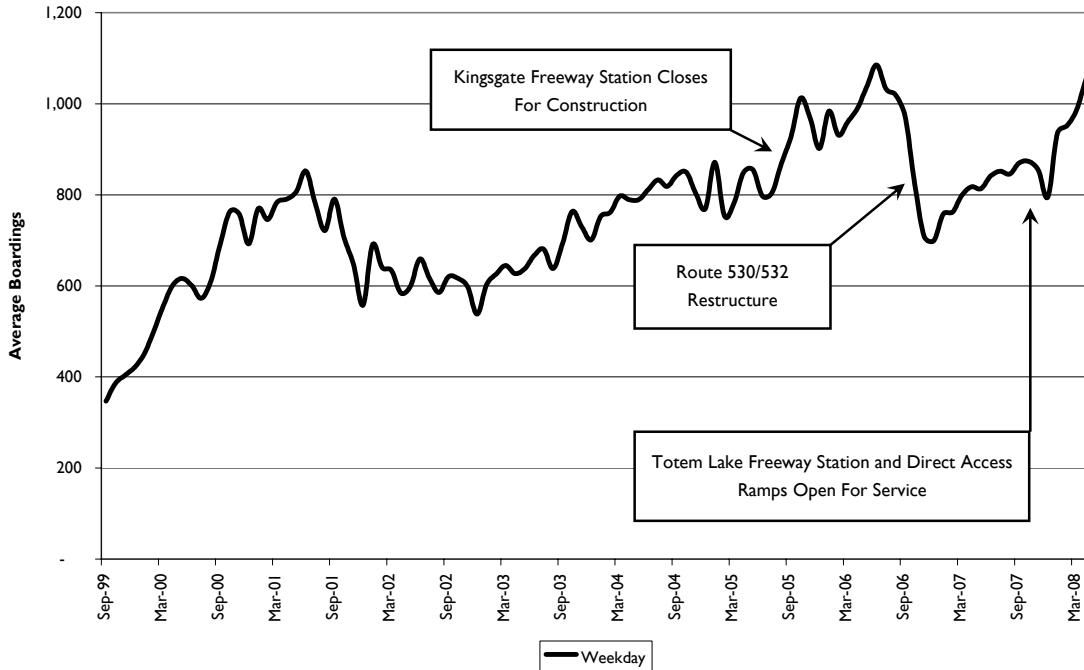
**Performance Assessment**

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		774	No weekend service	
Passengers per Trip	26.76	26.76		
Passengers per Revenue Hour	24.52	24.52		
Purchased Transportation Cost per Boarding	\$ 6.14	\$ 6.14		
Route Assessment	2.33 Satisfactory	2.67 Marginal		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		957	No weekend service	
Passengers per Trip	33.02	33.02		
Passengers per Revenue Hour	29.59	29.59		
Purchased Transportation Cost per Boarding	\$5.39	\$5.39		
Route Assessment	1.67 Satisfactory	2.00 Satisfactory		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 24%	No weekend service	
Passengers per Trip	Up 23%	Up 23%		
Passengers per Revenue Hour	Up 21%	Up 21%		
Purchased Transportation Cost per Boarding	Down 12%	Down 12%		

**Route 532 (Everett-Bellevue)**



Average weekday boardings initially declined after the route restructure and discontinuation of Route 530, but have since rebounded to levels seen before the restructure. Unrelated to the reopening of Totem Lake, ridership skyrocketed in 2008 because of high gas prices and employment growth in downtown Bellevue. Peak hour, peak direction trips continue to be overcrowded with many trips approaching about 140% of seated capacity. Standees, passed-up passengers and resulting customer comments are frequent occurrences and in just two years' time, this route has gone from underperforming to very crowded conditions.

**Additional Data Pertinent to Route**

The following table looks at each direction by time period on weekdays, recorded from the Automatic Passenger Counters for the September 2007 service change. The following two tables show the stop level boarding activity. In the northbound direction, one trip operates during the midday departing at 14:48 and one trip in the evening departing at 18:18.

***Passenger Activity by Time Period and Trip***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	13.75	36.36	44.11	28.47	No night service
Pass/ Rev Hr	13.98	38.27	42.60	30.50	
<b>Southbound</b>					
Pass/Trip	40.28	No midday service	12.57	No evening service	No night Service
Pass/ Rev Hr	39.68		11.12		



Route 532 Trip Level information – Northbound

Bellevue Transit Center	Everett Station	Average Boardings	Average Maximum Load	Average Vehicle Load
14:48	15:45	36	34	80%
15:18	16:21	41	37	64%
15:48	16:52	61	57	100%
16:18	17:22	55	46	109%
16:33	17:37	46	42	89%
16:48	17:52	39	35	79%
17:03	18:05	44	38	90%
17:18	18:17	38	35	84%
17:48	18:45	30	29	69%
18:18	19:14	28	27	65%

Route 532 Trip Level information – Southbound

Everett Station	Bellevue Transit Center	Average Boardings	Average Maximum Load	Average Vehicle Load
4:46	5:41	25	24	58%
5:15	6:10	49	43	103%
5:41	6:39	57	54	126%
6:05	7:05	61	53	124%
6:20	7:21	47	45	106%
6:32	7:33	31	27	65%
6:44	7:48	37	34	80%
7:06	8:13	38	32	56%
7:46	8:51	31	27	61%
8:13	9:16	25	16	36%

**Stop Level Boardings and Alightings**

Route 532 Stop Level Boardings and Alightings – Northbound

	Route 532	
	Boardings	Alightings
Bellevue Transit Center	382	0
I-405 at Totem Lake Freeway Station	18	14
I-405 at NE 160 <sup>th</sup> St (Brickyard P&R) (morning peak service only)	10	1
I-405 at NE 195 <sup>th</sup> St (morning peak service only)	0	5
Canyon Park Freeway Station	29	130
Ash Way P&R	22	141
Eastmont P&R	10	44
Broadway at 38 <sup>th</sup> St	1	11
Everett Station	0	115
Pacific Ave at Rockefeller Ave (morning peak service only)	0	3
Wetmore Ave at Wall St (morning peak service only)	0	4
Hewitt Ave at Lombard Ave	0	0

(morning peak service only)		
Hewitt Ave at Virginia Ave (Morning peak service only)	0	4

Route 532 Stop Level Boardings and Alightings – Southbound

	Route 532	
	Boardings	Alightings
Hewitt Ave at Virginia Ave (afternoon peak service only)	6	0
Hewitt Ave at Lombard Ave (afternoon peak service only)	0	0
Wetmore Ave at Wall St (afternoon peak service only)	4	0
Pacific Ave at Rockefeller Ave (afternoon peak service only)	3	0
Everett Station	113	1
Broadway at 38 <sup>th</sup> St	10	1
Eastmont P&R	65	7
Ash Way P&R	141	28
Canyon Park Freeway Station	105	24
I-405 at NE 195 <sup>th</sup> St (afternoon peak service only)	6	0
I-405 at NE 160 <sup>th</sup> St (Brickyard P&R) (afternoon peak service only)	2	10
I-405 at Totem Lake Freeway Station	12	47
Bellevue Transit Center	0	347

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

The route segment between Everett Station and downtown Everett, operated only on reverse-peak trips, was discontinued in September 2008 due to low ridership. A new terminus location in downtown Bellevue was initiated in February 2008 east of Bellevue Transit center, resulting in three additional inbound stops after the Transit Center and two additional outbound stops before the Transit Center.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 532	124% Above Average	124% Above Average	No Saturday service	No Sunday service

**Service Change Concepts**

No changes are planned for this route in 2009. Since some trips continue to be overloaded with a passengers standing for long periods, high priority should be given to added service if resources become available in the future.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

## Route 535: Lynnwood – Bellevue

### 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, Kingsgate/Totem Lake, and Houghton Park-and-Ride. Service operates 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. 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. As well, service to the Houghton Park-and-Ride was discontinued at the same time as the restructure.

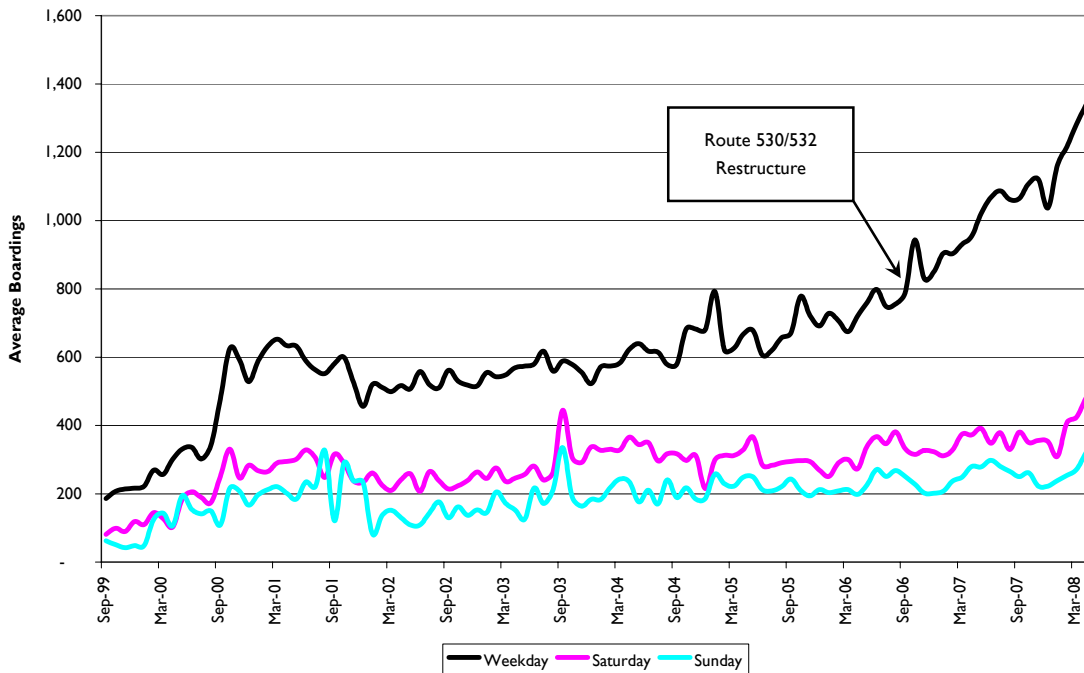
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		913	341	229
Passengers per Trip	13.26	13.87	11.76	7.91
Passengers per Revenue Hour	17.43	18.11	16.08	10.82
Purchased Transportation Cost per Boarding	\$ 8.88	\$ 8.46	\$10.64	\$14.45
Route Assessment	3.67 Unsatisfactory	3.67 Unsatisfactory	3.67 Unsatisfactory	3.67 Unsatisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,219	384	254
Passengers per Trip	17.29	18.47	13.23	8.77
Passengers per Revenue Hour	21.68	23.01	17.21	11.37
Purchased Transportation Cost per Boarding	\$7.49	\$6.93	\$10.30	\$15.71
Route Assessment	3.67 Unsatisfactory	3.67 Unsatisfactory	3.33 Marginal	3.67 Unsatisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 36%	Up 13%	Up 11%
Passengers per Trip	Up 30%	Up 33%	Up 13%	Up 11%
Passengers per Revenue Hour	Up 24%	Up 27%	Up 7%	Up 5%
Purchased Transportation Cost per Boarding	Down 16%	Down 18%	Down 3%	Up 9%

**Route 535 (Lynnwood-Bellevue)**



While overall Route 535 productivity has been low compared with other ST Express routes, recent ridership growth has been exceptional and the only decrease in productivity has been in the cost per boarding measure on Sundays. 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, recorded from the Automatic Passenger Counters for the September 2007 service change. The following two tables show the stop level boarding activity. Stop level information for Routes 532 and 535 is shown in the tables to show total boarding and alighting levels at stops that these routes have in common.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	10.75	13.46	35.15	22.19	11.30
Pass/ Rev Hr	14.29	17.28	40.43	28.33	15.77
<b>Southbound</b>					
Pass/Trip	32.43	13.40	13.56	8.14	6.98
Pass/ Rev Hr	48.11	21.17	21.04	13.39	11.97

**Stop Level Boardings and Alightings**

**Route 535 Stop Level Boardings and Alightings – Northbound**

	Route 532		Route 535		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Bellevue Transit Center	382	0	420	0	802	0
I-405 at Totem Lake Freeway Station	18	14	19	24	37	38
I-405 at NE 160 <sup>th</sup> St (Brickyard P&R)*	10	1	27	46	37	47
Beardslee Blvd at Sunrise Dr			8	68	8	68
UW-Bothell/Cascadia CC			53	59	53	59
I-405 at NE 195 <sup>th</sup> St*	0	5	9	12	9	17
Canyon Park Freeway Station	29	130	38	90	67	220
Alderwood Mall Blvd at 184 <sup>th</sup> St SW			10	70	10	70
18600 Alderwood Mall Blvd			9	17	9	17
Lynnwood Transit Center			0	207	0	207

\* - Route 532 stops at Brickyard and NE 195<sup>th</sup> St northbound in the morning peak only.

**Route 535 Stop Level Boardings and Alightings – Southbound**

	Route 532		Route 535		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Lynnwood Transit Center			215	0	215	0
18600 Alderwood Mall Blvd			38	6	38	6
Alderwood Mall Blvd at 184 <sup>th</sup> St SW			39	2	39	2
Canyon Park Freeway Station	105	24	112	25	217	49
Beardslee Blvd at Ross Rd <sup>†</sup>	6	0	10	16	16	16
UW-Bothell/Cascadia CC			62	45	62	45
Bothell P&R			47	9	47	9
I-405 at NE 160 <sup>th</sup> St (Brickyard P&R) <sup>†</sup>	2	10	38	23	40	33
I-405 at Totem Lake Freeway Station	12	47	19	14	31	61
Bellevue Transit Center	0	347	0	440	0	787

† - Route 532 stops at Brickyard and NE 195<sup>th</sup> St southbound in the morning peak only, Beardslee & Ross stop is on the I-405 onramp at NE 195<sup>th</sup> St.

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

**Passenger Miles per Revenue Hour**

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 535	73% Well Below Average	77% Below Average	69% Well Below Average	63% Well Below Average

**Service Change Concepts**

No changes are proposed for this route during 2009.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

## Route 540: Kirkland – U. District

### Description

The Kirkland to U. District Express began service in September 2000, originally traveling as far east as Bear Creek Park-and-Ride in Redmond. It currently operates along 108th Avenue NE and the SR-520 corridor to the University 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 85<sup>th</sup> Street. All weekend service was discontinued at that time due to low productivity.

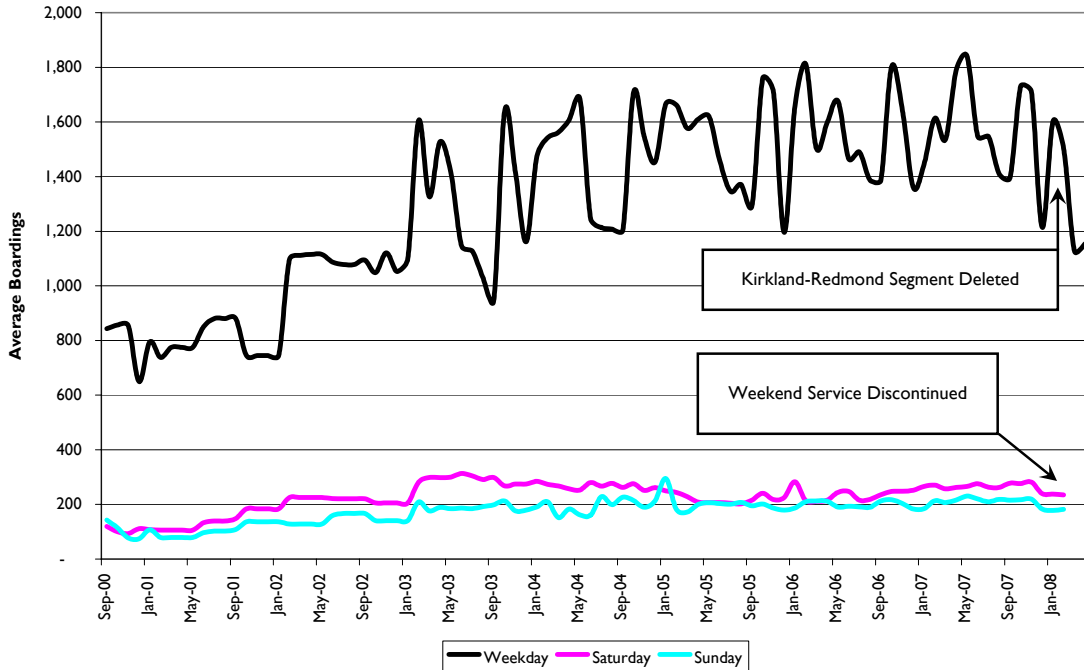
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boarding		1,528	264	201
Passengers per Trip	19.71	21.14	10.99	8.38
Passengers per Revenue Hour	17.29	18.41	10.15	7.79
Purchased Transportation Cost per Boarding	\$ 6.37	\$ 6.02	\$10.44	\$13.48
Route Assessment	3.33 Marginal	3.33 Marginal	4.00 Unsatisfactory	4.00 Unsatisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,390	237	214
Passengers per Trip	18.40	18.96	9.89	7.44
Passengers per Revenue Hour	18.19	18.92	8.61	6.15
Purchased Transportation Cost per Boarding	\$6.48	\$6.25	\$13.56	\$18.14
Route Assessment	3.33 Marginal	3.33 Marginal	4.00 Unsatisfactory	4.00 Unsatisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Down 9%	Down 10%	Up 6%
Passengers per Trip	Down 7%	Down 10%	Down 10%	Down 11%
Passengers per Revenue Hour	Up 5%	Up 3%	Down 15%	Down 20%
Purchased Transportation Cost per Boarding	Up 2%	Up 4%	Up 30%	Up 35%

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



As expected, Route 540 ridership declined following the February 2008 deletion of the Kirkland-Redmond route segment and the elimination of all weekend service. However, the restructure clearly increased overall transit ridership, with King County Metro Route 248 now carrying many more Kirkland-Redmond riders than before and ST Express Route 545 absorbing those riders who formerly used Route 540 between Redmond and the U District. 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 September 2007 service change, before the elimination of weekend service and the deletion of the Kirkland-Redmond segment of the route.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	18.33	18.17	25.83	17.40	11.00
Pass/ Rev Hr	21.22	21.20	35.77	22.40	15.35
<b>Westbound</b>					
Pass/Trip	28.86	17.54	23.20	11.25	5.00
Pass/ Rev Hr	50.61	23.55	26.17	14.52	7.69

### Stop Level Boardings and Alightings

#### Route 540 Stop Level Boardings and Alightings – Eastbound

	Route 540	
	Boardings	Alightings
University Way NE at NE Pacific St	23	0
NE Campus Pkwy Transfer Point	253	8
15 <sup>th</sup> Ave NE at NE Pacific St	50	1
NE Pacific St at 15 <sup>th</sup> Ave NE	55	2
NE Pacific St at NE Pacific Pl	149	6
Montlake Blvd E at SR-520	34	15
SR-520 at Evergreen Point	31	26
SR-520 at Yarrow Point	1	5
South Kirkland P&R	26	254
108 <sup>th</sup> Ave NE at NE 58 <sup>th</sup> St	3	13
NE 68 <sup>th</sup> St at 108 <sup>th</sup> Ave NE	9	23
State St at 4 <sup>th</sup> Ave S	4	18
Kirkland Transit Center	62	90
Central Way at 5 <sup>th</sup> St*	6	17
NE 85 <sup>th</sup> St at 126 <sup>th</sup> Ave NE*	14	29
148 <sup>th</sup> Ave NE at NE 87 <sup>th</sup> St*	6	30
NE 90 <sup>th</sup> St at 151 <sup>st</sup> Ave NE*	0	9
NE 85 <sup>th</sup> St at 154 <sup>th</sup> Ave NE*	1	7
NE 85 <sup>th</sup> St at 161 <sup>st</sup> Ave NE*	5	48
Redmond P&R*	3	17
Cleveland St at 166 <sup>th</sup> Ave NE*	2	22
Bear Creek P&R*	0	96

#### Route 540 Stop Level Boardings and Alightings – Westbound

	Route 540	
	Boardings	Alightings
Bear Creek P&R*	101	0
NE Redmond Way at NE 79 <sup>th</sup> Pl*	22	3
Redmond P&R*	37	5
NE 85 <sup>th</sup> St at 160 <sup>th</sup> Ave NE*	39	7
154 <sup>th</sup> Ave NE at NE 85 <sup>th</sup> St*	5	1
NE 90 <sup>th</sup> St at 151 <sup>st</sup> Ave NE*	12	2
148 <sup>th</sup> Ave NE at NE 87 <sup>th</sup> St*	44	7
NE 85 <sup>th</sup> St at 124 <sup>th</sup> Ave NE*	16	17
Kirkland Transit Center	108	77
State St at 4 <sup>th</sup> Ave S	15	4
NE 68 <sup>th</sup> St at 108 <sup>th</sup> Ave NE	24	5
108 <sup>th</sup> Ave NE at NE 58 <sup>th</sup> St	9	3
South Kirkland P&R	289	23
SR-520 at Yarrow Point	7	3
SR-520 at Evergreen Point	44	33
Montlake Blvd E at E Shelby St	3	19
NE Pacific St at NE Pacific Pl	19	212
NE Pacific St at 15 <sup>th</sup> Ave NE	2	56
15 <sup>th</sup> Ave NE at NE Pacific St	4	104
NE Campus Pkwy Transfer Point	1	23
NE Campus Pkwy at 12 <sup>th</sup> Ave NE	0	197

\* - These stops discontinued in February 2008.



Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 540	33% Well Below Average	34% Well Below Average	26% Well Below Average	28% Well Below Average

**Service Change Concepts**

There are no changes planned for this route in 2009. Looking at the longer term, future ridership growth will likely be influenced by trends in UW enrollment, availability of park-and-ride space on the Eastside and whether transit-friendly treatments are incorporated into the new SR 520 Bridge and its approaches.

For a map of the route, please refer to the Get Ready to Ride guide.

## Route 545: Redmond – Seattle

### Description

The Bear Creek 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, using resources from service reductions on Route 540.

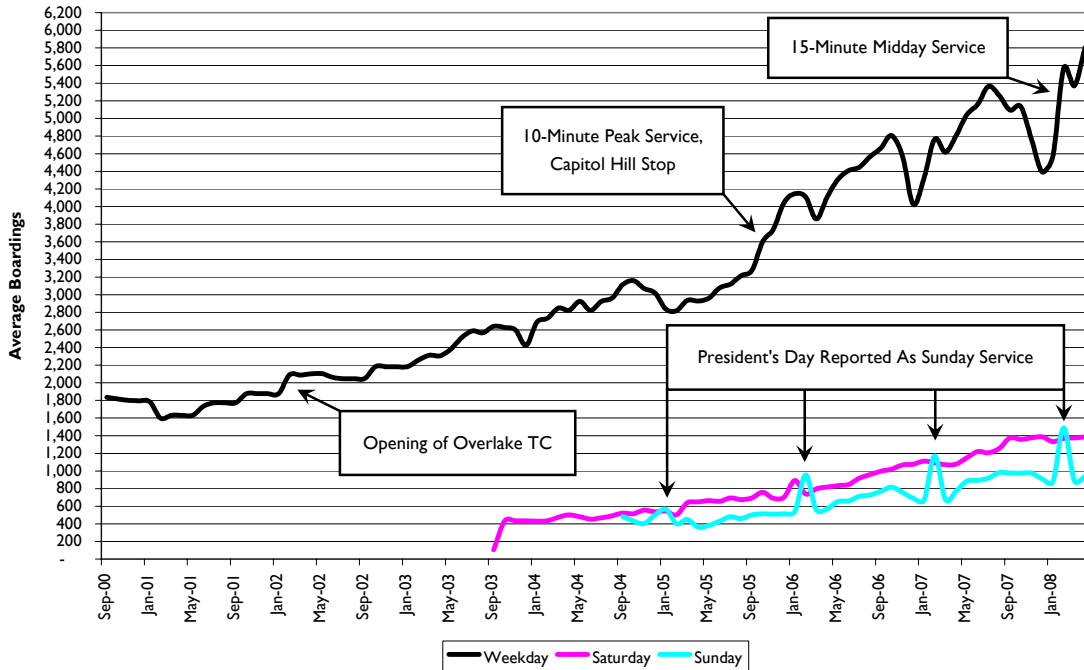
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		4,560	1,090	850
Passengers per Trip	33.56	37.78	17.57	12.84
Passengers per Revenue Hour	25.58	28.34	14.77	10.32
Purchased Transportation Cost per Boarding	\$ 4.44	\$ 4.06	\$ 7.23	\$10.26
Route Assessment	1.33 Good	1.00 Good	3.00 Marginal	3.00 Marginal

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,074	1,360	1,162
Passengers per Trip	33.23	36.30	21.72	15.73
Passengers per Revenue Hour	25.38	27.46	18.82	11.92
Purchased Transportation Cost per Boarding	\$4.71	\$4.45	\$5.87	\$8.50
Route Assessment	2.00 Satisfactory	2.00 Satisfactory	2.33 Satisfactory	3.00 Marginal

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 11%	Up 25%	Up 37%
Passengers per Trip	Down <1%	Down 4%	Up 24%	Up 23%
Passengers per Revenue Hour	Down <1%	Down 3%	Up 27%	Up 16%
Purchased Transportation Cost per Boarding	Up 6%	Up 10%	Down 19%	Down 17%

**Route 545 (Redmond-Seattle)**



Trends on this route continue to be up suggesting that additional trips would be a welcome enhancement. Many peak period trips, particularly P.M. trips from Redmond to Seattle, are carrying loads with standees. Performance measurements show a slight to minimal decrease in overall productivity due to the large amount of additional service implemented in February 2008. However, because of the heavy ridership increases on weekends, it is expected that all productivity measures will be up by 2009. Sunday ridership in February is high because President's Day, which is operated and reported as a Sunday holiday for King County Metro.

**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 September 2007 Service Change.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	46.56	33.47	45.20	31.43	10.60
Pass/ Rev Hr	42.15	35.02	43.69	38.71	14.72
<b>Westbound</b>					
Pass/Trip	43.40	32.08	47.40	28.10	18.00
Pass/ Rev Hr	49.41	33.67	41.82	31.22	22.98

**Stop Level Boardings and Alightings**

**Route 545 Stop Level Boardings and Alightings – Eastbound**

	Route 545	
	Boardings	Alightings
SODO Busway at S Holgate St	45	0
SODO Busway at S Royal Brougham Way	89	80
4 <sup>th</sup> Ave S at S Royal Brougham Way	30	4
4 <sup>th</sup> Ave S at S Jackson St	305	36
4 <sup>th</sup> Ave at James St	122	52
4 <sup>th</sup> Ave at Madison St	217	82
4 <sup>th</sup> Ave at University St	327	104
4 <sup>th</sup> Ave at Pike St	536	102
Olive Way at 8 <sup>th</sup> Ave	208	46
Olive Way at Terry Ave	119	8
Bellevue Ave at E Olive St*	246	10
SR-520 at Montlake Blvd E	424	60
SR-520 at Evergreen Point	40	65
SR-520 at Yarrow Point	12	59
SR-520 at NE 40 <sup>th</sup> St	72	899
SR-520 at NE 51 <sup>st</sup> St	22	295
West Lake Sammamish Pkwy NE at Leary Way	7	108
NE 85 <sup>th</sup> St at 154 <sup>th</sup> Ave NE	6	77
NE 85 <sup>th</sup> St at 161 <sup>st</sup> Ave NE	16	252
Redmond P&R	11	115
Cleveland St at 166 <sup>th</sup> Ave NE	10	71
Bear Creek P&R	0	338

\* - Stop served until 10:45.

**Route 545 Stop Level Boardings and Alightings – Westbound**

	Route 545	
	Boardings	Alightings
Bear Creek P&R	353	0
NE Redmond Way at NE 79 <sup>th</sup> Pl	66	7
Redmond P&R	290	17
NE 85 <sup>th</sup> St at 160 <sup>th</sup> Ave NE	157	12
154 <sup>th</sup> Ave NE at NE 85 <sup>th</sup> St	66	5
West Lake Sammamish Parkway NE at Leary Way	77	4
SR-520 at NE 51 <sup>st</sup> St	267	34
Overlake Transit Center <sup>†</sup>	325	19
SR-520 at NE 40 <sup>th</sup> St	525	39
SR-520 at Yarrow Point	29	11
SR-520 at Evergreen Point	50	58
SR-520 at Montlake Blvd E	30	346
Stewart St at Yale Ave	41	301
Stewart St at 9 <sup>th</sup> Ave	37	151
Stewart St at 7 <sup>th</sup> Ave	50	242
5 <sup>th</sup> Ave at Pine St	80	397
5 <sup>th</sup> Ave at Pike St	22	124
5 <sup>th</sup> Ave at Seneca St	28	188
5 <sup>th</sup> Ave at Spring St	19	168
5 <sup>th</sup> Ave at Marion St	6	105
5 <sup>th</sup> Ave at Cherry St	20	102
5 <sup>th</sup> Ave at Jefferson St	17	72

5 <sup>th</sup> Ave S at S Jackson St	1	155
6 <sup>th</sup> Ave S at S Royal Brougham Wy	0	1

† - Stop served after 12:00.

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 545	96% Below Average	101% Above Average	91% Below Average	74% Well Below Average

**Service Change Concepts**

There are no changes planned for this route during 2009. With many peak trips at or exceeding seated capacity, Route 545 is a strong candidate for more service if additional resources are identified in the future.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

## Route 550: Bellevue – Seattle

### 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 a strong candidate for High Capacity Transit in the future.

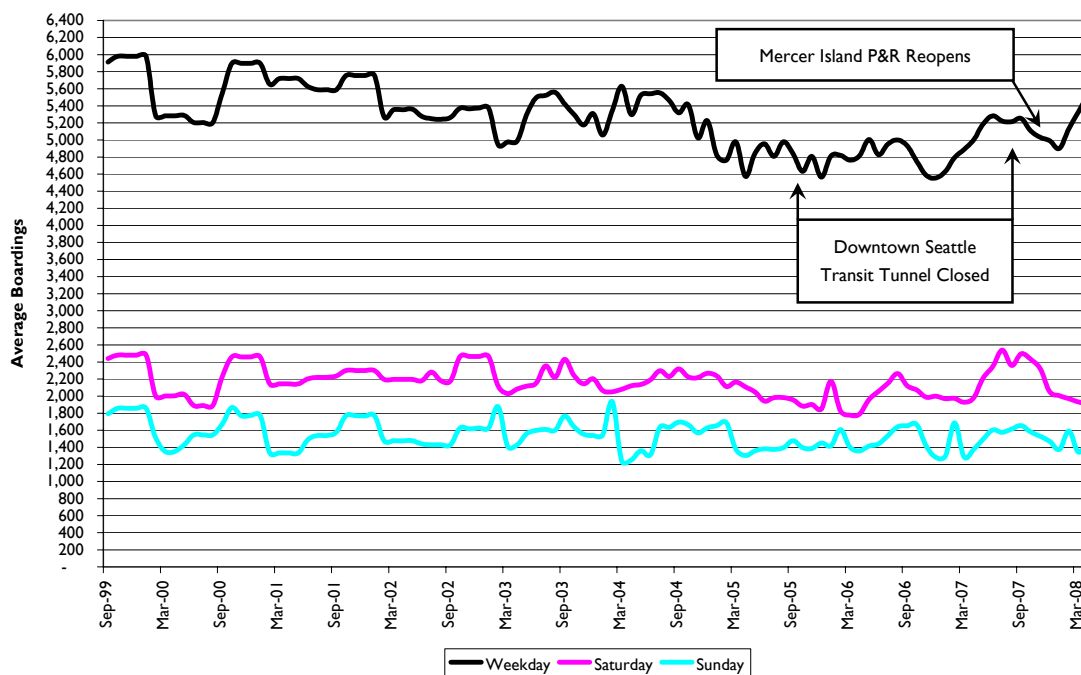
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		4,770	1,955	1,432
Passengers per Trip	29.16	30.45	27.15	18.95
Passengers per Revenue Hour	26.34	27.66	24.39	16.36
Purchased Transportation Cost per Boarding	\$ 4.18	\$ 4.04	\$ 4.19	\$ 6.24
Route Assessment	1.33 Good	1.33 Good	1.00 Good	1.67 Satisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,038	1,967	1,540
Passengers per Trip	31.23	33.02	27.31	19.08
Passengers per Revenue Hour	31.72	34.60	24.59	16.68
Purchased Transportation Cost per Boarding	\$3.71	\$3.49	\$4.41	\$6.23
Route Assessment	1.33 Good	1.33 Good	1.33 Good	2.00 Satisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 6%	Up <1%	Up 8%
Passengers per Trip	Up 7%	Up 8%	Up <1%	Up <1%
Passengers per Revenue Hour	Up 20%	Up 25%	Up <1%	Up 2%
Purchased Transportation Cost per Boarding	Down 12%	Down 14%	Up 5%	Down <1%

### Route 550 (Bellevue-Seattle)



Ridership and productivity are up from last year, with the exception of Saturdays which are static. Route 550 continues a growth in average daily ridership starting from early 2007 that has not been seen on for a number of years. Two projects in the past year have also helped improve ridership and productivity: The Downtown Seattle Transit Tunnel reopened in September 2007, and the Mercer Island Park-and-Ride reopened in February 2008 with over 400 parking stalls for Route 550 and 554 customers.

#### 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 September 2007 service change. The tables following include stop level information for Route 550.

#### *Passenger Activity by Time Period*

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	37.44	27.42	43.52	28.30	12.83
Pass/ Rev Hr	53.56	39.56	69.07	44.92	22.65
<b>Westbound</b>					
Pass/Trip	35.21	23.42	40.93	29.67	17.83
Pass/ Rev Hr	58.34	35.95	61.50	50.86	32.42

**Stop Level Boardings and Alightings**

**Route 550 Stop Level Boardings and Alightings – Eastbound**

	Route 550	
	Boardings	Alightings
Convention Place Station	250	0
Stewart St at 4th Ave*	24	7
2nd Ave at Stewart St*	28	1
Westlake Station	612	23
University Street Station	538	45
2nd Ave at University St*	55	2
2nd Ave at Spring St*	8	0
2nd Ave at Cherry St*	6	0
Pioneer Square Station	373	65
S Washington St at 4th Ave S*	11	0
International District/Chinatown Station	478	208
5th Ave S at S Jackson St*	34	1
Rainier Avenue Freeway Station	136	29
Mercer Island Park-and-Ride	109	372
South Bellevue Park-and-Ride	81	576
Bellevue Way SE at SE 16th St	19	72
Bellevue Way SE at SE 10th St	9	25
Bellevue Way SE at SE 3rd St	37	89
Bellevue Way NE at Main St	19	109
NE 4th St at 105th Ave NE	11	271
Bellevue Transit Center	34	686
NE 10th St at 108th Ave NE	4	82
NE 10th St at Bellevue Way NE	4	72
NE 8th St at 102nd Ave NE	7	54
NE 10th St at 102nd Ave NE	0	92

**Route 550 Stop Level Boardings and Alightings – Westbound**

	Route 550	
	Boardings	Alightings
NE 10 <sup>th</sup> St at 102 <sup>nd</sup> Ave NE	44	0
NE 10 <sup>th</sup> St at Bellevue Way NE	95	2
NE 10 <sup>th</sup> St at 109 <sup>th</sup> Ave NE	50	5
Bellevue Transit Center	756	35
NE 4 <sup>th</sup> St at 108 <sup>th</sup> Ave NE	108	4
Bellevue Way NE at NE 4 <sup>th</sup> St	147	6
Bellevue Way NE at NE 1 <sup>st</sup> St	32	6
Bellevue Way SE at Main St	80	13
Bellevue Way SE at SE 3 <sup>rd</sup> St	85	26
Bellevue Way SE at SE 11 <sup>th</sup> St	21	9
Bellevue Way SE at SE 16 <sup>th</sup> St	53	17
South Bellevue Park-and-Ride	569	69
Mercer Island Park-and-Ride	334	105
Rainier Avenue Freeway Station	31	120
5 <sup>th</sup> Ave S at S Jackson St*	1	37
International District/Chinatown Station	199	382
4 <sup>th</sup> Ave S at S Washington St*	0	7
Pioneer Square Station	74	377
4 <sup>th</sup> Ave at Cherry St*	0	19
4 <sup>th</sup> Ave at Seneca St*	1	22



University Street Station	52	526
4 <sup>th</sup> Ave at Union St*	2	73
Westlake Station	37	567
4 <sup>th</sup> Ave at Stewart St*	1	22
Convention Place Station	0	306
4 <sup>th</sup> Ave at Lenora St*	0	18

\* - Stop when Downtown Seattle Transit Tunnel not open

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 550	95% Below Average	98% Below Average	116% Above Average	106% Above Average

**Service Change Concepts**

Route 550 is the only Sound Transit bus route operating in the Downtown Seattle Transit Tunnel (DSTT). Current DSTT hours of operation are limited to weekdays between 5:00 A.M. and 7:00 P.M. When the DSTT is closed, Route 550 operates on downtown surface streets. With the opening of Central Link in mid-2009, DSTT hours will expand to cover all periods of light rail operation- 5:00 A.M. to 1:00 A.M. weekdays and Saturdays, and 6:00 A.M. to 12 Midnight on Sundays. Since the added costs of expanded DSTT hours are already budgeted, Sound Transit staff is planning to modify Route 550 to use the DSTT all day, seven days a week. This would be implemented as an administrative change, not requiring Board action. There are several advantages to full-time DSTT operation, including reduced travel time, more reliable operation (particularly during major downtown events) and a reduction in customer confusion by using consistent routing and stops at all times. The switch to full-time DSTT routing would occur at either the June or September 2009 service change.

The current express stop pattern on Bellevue Way, based on the existence of a leased park-and-ride lot near Bellevue Way SE and SE 11th Street, has not been evaluated since 1999. There are numerous high-density residential units between SE 3rd Street and SE 10th Street, and residents have requested a Route 550 stop near SE 6th Street. In addition, the former leased lot has not been available to commuters since 2004. Sound Transit has received complaints that there are too many stops along Bellevue Way. Finally, there is a stop southbound on Bellevue Way NE at NE 1st Street that does not have a companion stop in the opposite direction. The closest stop to NE 1st Street is one block south at Main Street. As an administrative change, Sound Transit staff will work with King County Metro to discontinue the stop at NE 1st Street and consolidate the stops at SE 3rd Street and SE 10th Street to SE 8th Street (preferred due to a pedestrian traffic signal) or SE 6th Street.

For a route map, please refer to the map in the Get Ready to Ride Transit Guide.

**Service Change Highlights (Changes Implemented Administratively)**

- Discontinue serving the stop at Bellevue Way NE at NE 1<sup>st</sup> St.
- Relocate the stop on Bellevue Way SE at SE 3<sup>rd</sup> Street and SE 10<sup>th</sup> Street to Bellevue Way SE and SE 8<sup>th</sup> Street.
- Modify night and weekend routing to use the Downtown Seattle Transit Tunnel (DSTT).

**Criteria for Bellevue Way Bus Stop Changes**

Other criteria used to evaluate the concepts and develop the staff recommendations:

- Consistency with *Sound Move*, Sound Transit’s master plan
- Impacts on existing and future riders with each alternative
- Likelihood of ridership growth and improved system productivity
- Affordability

<b>Evaluation Criteria</b>	
<i>Sound Move</i>	This change would further enhance the service envisioned in <i>Sound Move</i> by reducing the number of stops along the route.
Service Standards	This change would reduce the number of stops along the route. One stop has not met the standards for years until recently. The other stops, while meeting the boarding standards for a stop, are located two to three blocks from existing or proposed stops.
Ridership Impacts	Approximately 140 people would be affected by this change which may or may not require a longer walk to access Route 550.
Ridership Productivity	Fewer stops will reduce delays for passengers on this route.
Affordability	This proposal is affordable.

## Route 554: Issaquah - Seattle

### Description

The Issaquah to Seattle Express began service in September 2001. It operates generally along the I-90 corridor, with intermediate stops at Eastgate Park-and-Ride, Richards Road/I-90, Mercer Island Park-and-Ride and the Rainier Avenue Freeway Station. Service operates all day, seven days a week. In September 2003, weekday service was extended from the Issaquah Park-and-Ride to the interim Issaquah Highlands Park-and-Ride on the Sammamish Plateau. Weekend service to the Issaquah Highlands began in June 2006. Weekday ridership has shown a slow but steady upward trend. Beginning 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. Further service was added in June 2008 to South Sammamish, including three extra night trips and two early morning trips westbound from South Sammamish to Issaquah Highlands and on to Seattle. At the same time, the Issaquah Park-and-Ride reopened as the Issaquah Transit Center, and an adjacent 800-stall garage followed in July 2008.

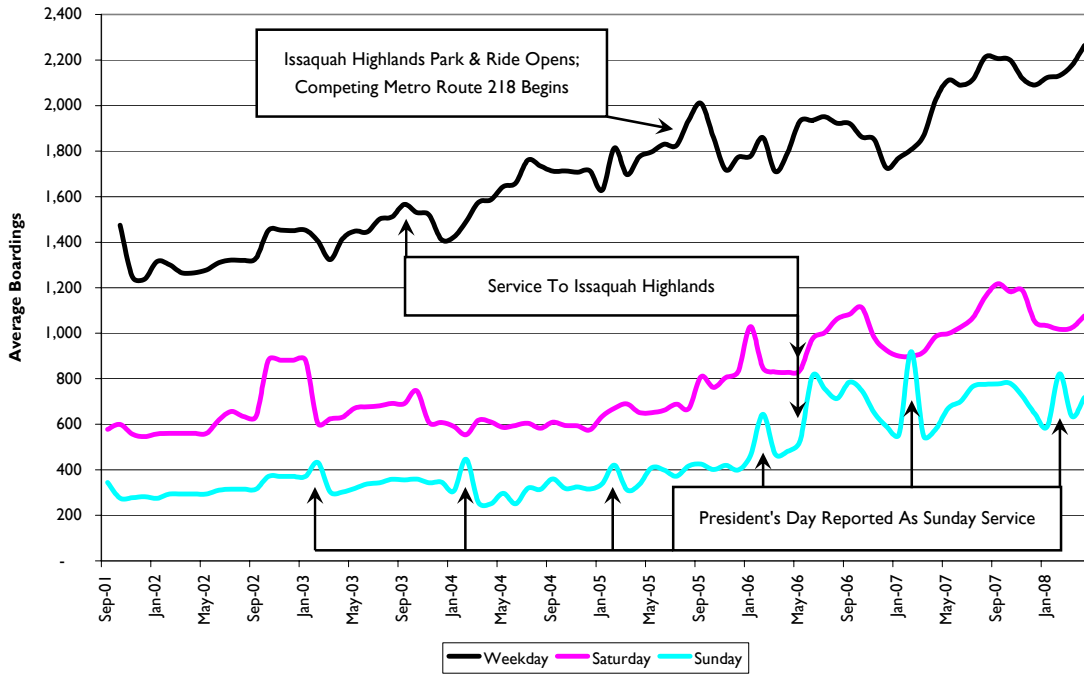
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,815	906	683
Passengers per Trip	21.96	24.87	14.62	12.31
Passengers per Revenue Hour	17.38	19.85	12.13	8.87
Purchased Transportation Cost per Boarding	\$ 6.17	\$ 5.43	\$ 8.76	\$11.83
Route Assessment	3.00 Marginal	2.67 Marginal	4.00 Unsatisfactory	3.67 Unsatisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,110	1,025	731
Passengers per Trip	24.74	28.29	16.53	12.30
Passengers per Revenue Hour	19.63	22.73	13.09	9.15
Purchased Transportation Cost per Boarding	\$5.83	\$5.11	\$8.44	\$12.04
Route Assessment	3.00 Marginal	2.67 Marginal	4.00 Unsatisfactory	4.00 Unsatisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 16%	Up 13%	Up 7%
Passengers per Trip	Up 13%	Up 14%	Up 13%	Down <1%
Passengers per Revenue Hour	Up 13%	Up 15%	Up 8%	Up 3%
Purchased Transportation Cost per Boarding	Down 9%	Down 6%	Down 4%	Up 2%

**Route 554 (Issaquah-Seattle)**



Average daily boardings are up during the entire week and productivity is also up, except for cost per boarding on Sundays. Some Route 554 riders shifted to new King County Metro Route 218 during the middle of the first quarter in 2006, since the Metro route provided faster service from Issaquah Highlands to Seattle. However, weekday Route 554 ridership has since rebounded with boardings increasing at other stops. Sunday ridership continues its growth since the implementation of 30-minute service in early 2006. The large increase in Sunday/Holiday boardings during February is because of the heavy ridership experienced on President’s Day. King County Metro operates a Sunday schedule on President’s Day, thus there is no Metro commuter service provided and all Seattle-bound riders use Route 554.

**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 September 2007 service change, and stop level information for February 2008 service change.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	29.00	31.14	30.43	27.00	12.67
Pass/ Rev Hr	33.83	35.74	30.50	32.49	15.83
<b>Westbound</b>					
Pass/Trip	29.89	36.15	34.83	14.20	12.00
Pass/ Rev Hr	33.01	38.95	33.89	18.05	16.00

**Stop Level Boardings and Alightings**

**Route 554 Stop Level Boardings and Alightings – Eastbound**

	Route 554	
	Boardings	Alightings
Lenora St at 5th Ave	81	0
Lenora St at 4th Ave	11	1
2nd Ave at Stewart St	149	3
2nd Ave at University St	214	10
2nd Ave at Spring St	92	4
2nd Ave at Cherry St	131	10
S Washington St at 4th Ave S	27	3
5th Ave S at S Jackson St	239	22
Rainier Avenue Freeway Station	58	8
Mercer Island P&R	49	98
I-90 at 142nd Pl SE	9	111
142nd Pl SE at SE 32 <sup>nd</sup> St	13	70
Eastgate Park-and-Ride	57	234
142nd Pl SE at SE 32 <sup>nd</sup> St	43	150
Issaquah Park-and-Ride	21	181
E Sunset Way at Rainier Blvd S	9	92
Issaquah Highlands Park-and-Ride	0	202
Issaquah Pine Lake Rd at Issaquah-Fall City Rd*	0	0
Issaquah Pine Lake Rd at SE 37th Pl*	0	1
South Sammamish Park-and-Ride*	0	1

\* – Stop served by two trips departing downtown Seattle at 20:03 and 23:33.

**Route 554 Stop Level Boardings and Alightings – Westbound**

	Route 554	
	Boardings	Alightings
Issaquah Highlands Park-and-Ride	120	0
W Sunset Way at 1 <sup>st</sup> Pl NW	78	7
Issaquah Park-and-Ride	182	18
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	47	21
Eastgate P&R	391	81
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	72	8
I-90 at 142 <sup>nd</sup> Pl SE	75	6
Mercer Island Park-and-Ride	111	50
Rainier Avenue Freeway Station	8	44
5 <sup>th</sup> Ave S at S Jackson St	31	243
4 <sup>th</sup> Ave S at S Washington St	4	28
4 <sup>th</sup> Ave at Cherry St	25	167
4 <sup>th</sup> Ave at Seneca St	10	152
4 <sup>th</sup> Ave at Union St	10	219
4 <sup>th</sup> Ave at Stewart St	1	53
Lenora St at 4 <sup>th</sup> Ave	0	70

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

**Passenger Miles per Revenue Hour**

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 554	78% Below Average	87% Below Average	65% Well Below Average	61% Well Below Average

**Service Change Concepts**

Sound Transit staff propose to revise Route 554 so that only one set of bus stops would be served in the Eastgate area, the current eastbound and westbound stops located on the I-90 HOV direct access ramps (see attached diagram). Stops at the Eastgate Park-and-Ride bus loop and on 142<sup>nd</sup> Place SE would no longer be served by Route 554. This change would reduce travel time for through riders by approximately five minutes. The travel time savings would allow current “turnback” trips that start or end at Eastgate to be extended to Issaquah Transit Center at no additional cost, thus increasing Issaquah service from every 30 minutes to every 15 minutes during the midday. Sound Transit staff would work with King County Metro to improve wayfinding signage at Eastgate Park-and-Ride to direct passengers between the Eastgate Park-and-Ride bus loop and the freeway station, a distance of about 900 feet.

**Service Change Highlights**

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Discontinue serving the stops at 142nd Place SE at SE 32nd Street and Eastgate Park-and-Ride bus loop.</li> <li>• Extend the existing trips that end at Eastgate Park-and-Ride to Issaquah Transit Center.</li> </ul> |
|--|

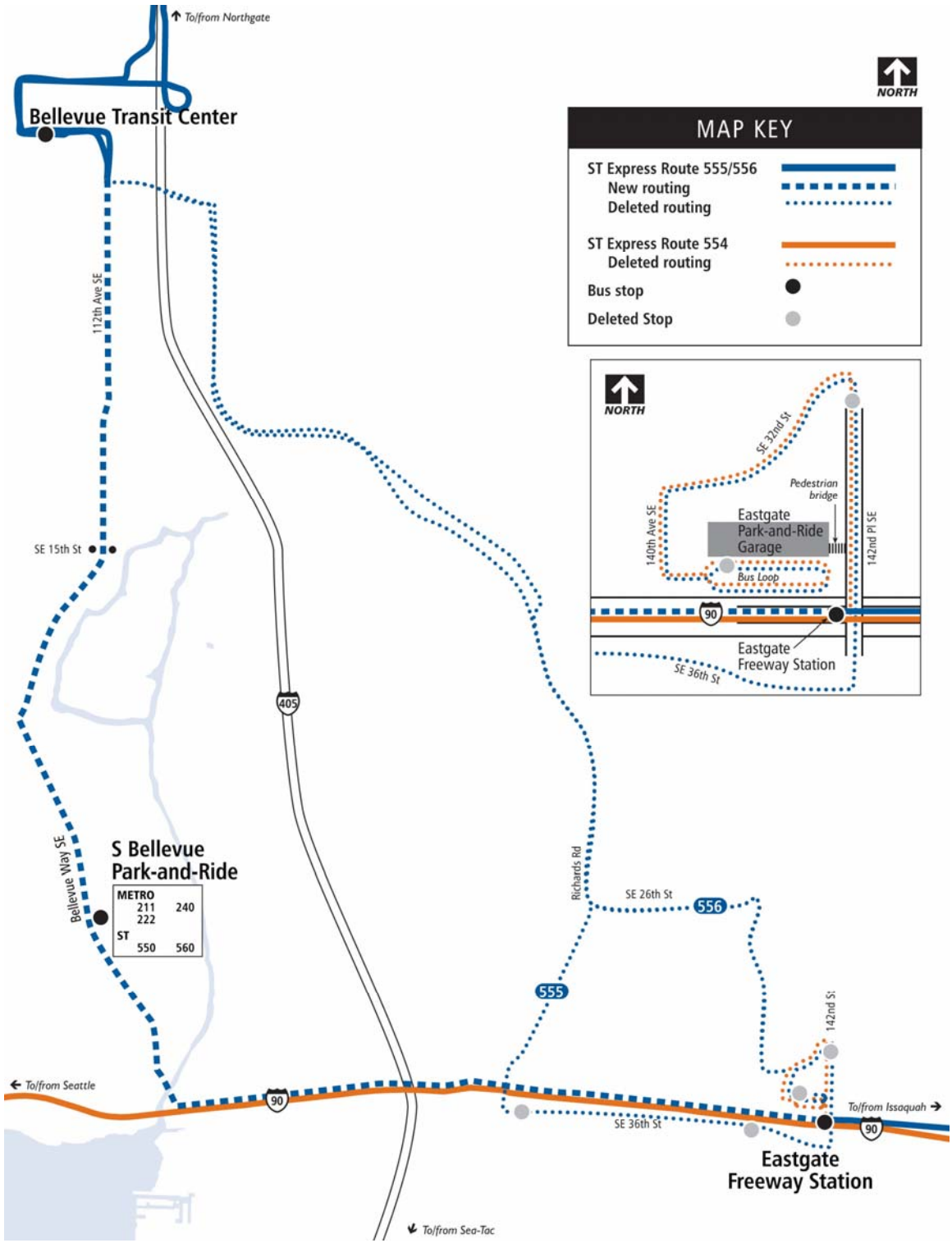
**Criteria**

Other criteria used to evaluate the concepts and develop the staff recommendations:

- Consistency with *Sound Move*, Sound Transit’s master plan
- Impacts on existing and future riders with each alternative
- Likelihood of ridership growth and improved system productivity
- Affordability

<b>Evaluation Criteria</b>	
<i>Sound Move</i>	This change would further enhance the service envisioned in <i>Sound Move</i> by extending the frequent midday service to Issaquah Transit Center.
Service Standards	This change would discontinue some arterial street operation and would improve speed and reliability for passengers traveling through Eastgate.
Ridership Impacts	Approximately 440 people in the Eastgate area would be affected by this change and would need to access the bus at the freeway station. This would mean a walk of about three blocks for passengers boarding near Bellevue Community College and about a two block walk and four-floor difference in elevation from the stops at the Eastgate bus loop. Likewise, about 460 existing riders will have a faster trip to their destinations.
Ridership Productivity	While passengers at Eastgate will need to access the service at the freeway stop, productivity should improve in that 15-minute

	service to Issaquah will allow Metro to make better connections with local service in Issaquah.
Affordability	Extending the trips and serving only the freeway stop at Eastgate would result in a savings for East King residents. To extend the trips to Issaquah and maintain service to the Eastgate P&R bus loop would require approximately 1,500 annual hours or about \$180,000 per year.





## Route 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 intermediate stops at Eastgate Park-and-Ride and Bellevue Transit Center. Service operates two-way 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, allowing access to that area and the University of Washington 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 36<sup>th</sup> Street (136<sup>th</sup> Avenue SE and Factoria Boulevard SE). Finally in September 2008, the routing in the University District was changed for Route 556 to operate along 15<sup>th</sup> Avenue NE. Making this change provides a common routing with Routes 271 and 540 for passengers trying to go from the University District to SR-520 where passengers may transfer to other Eastside routes.

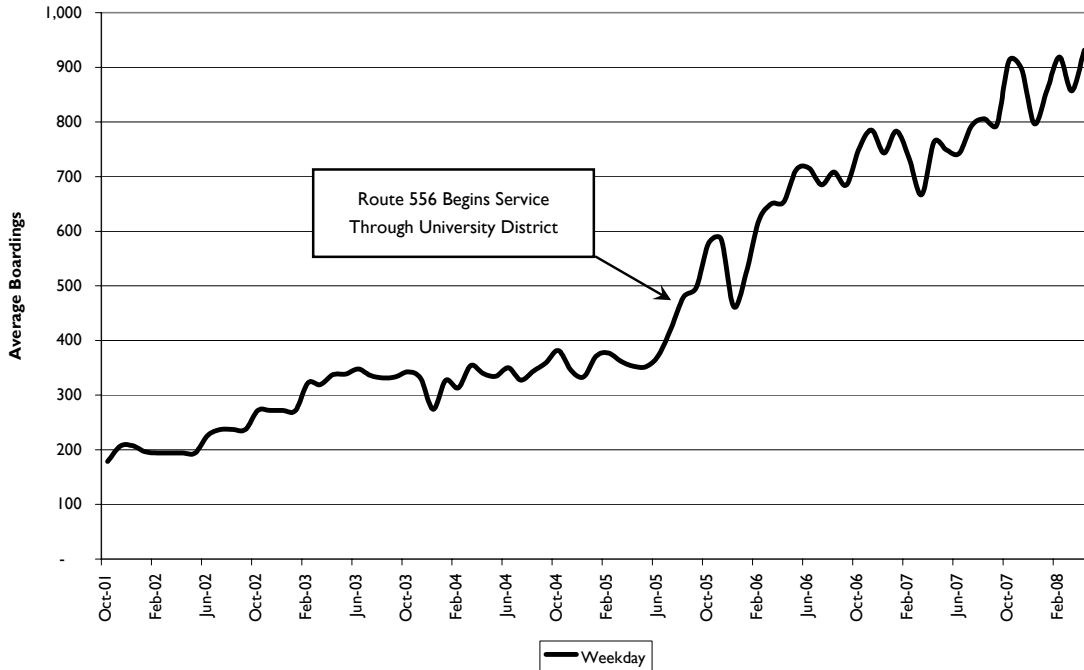
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		728	No weekend service	
Passengers per Trip	30.40	30.40		
Passengers per Revenue Hour	21.20	21.20		
Purchased Transportation Cost per Boarding	\$ 5.98	\$ 5.98		
Route Assessment	2.00 Satisfactory	2.67 Marginal		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		863	No weekend service	
Passengers per Trip	33.72	33.72		
Passengers per Revenue Hour	22.92	22.92		
Purchased Transportation Cost per Boarding	\$5.63	\$5.63		
Route Assessment	2.00 Satisfactory	2.67 Marginal		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 19%	No weekend service	
Passengers per Trip	Up 11%	Up 11%		
Passengers per Revenue Hour	Up 8%	Up 8%		
Purchased Transportation Cost per Boarding	Down 6%	Down 6%		

**Routes 555/556 (Northgate-Issaquah)**



Ridership and performance metrics continue to improve on this service, and productivity now rates as “Satisfactory” overall based on Sound Transit’s Service Standards & Performance Measures. By comparison, the 2007 SIP performance assessment rated the service as “marginal.”

**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 September 2007 service change, and stop level information for February 2008 service change.

***Passenger Activity by Time Period***

	Route 555		Route 556	
	AM Peak Eastbound	PM Peak Westbound	AM Peak Westbound	PM Peak Eastbound
Pass/Trip	29.50	29.50	35.71	35.86
Pass/ Rev Hr	26.48	23.44	30.36	28.04

***Stop Level Boardings and Alightings***

Route 555/556 Stop Level Boardings and Alightings – Eastbound

	Route 555		Route 556		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Northgate Transit Center	120	0	19	0	139	0
Roosevelt Way NE at NE 45 <sup>th</sup> St			4	0	4	0
Roosevelt Way NE at NE 43 <sup>rd</sup> St			11	0	11	0
NE Campus Pkwy at University Way NE			29	1	29	1
15 <sup>th</sup> Ave NE at NE Pacific St			23	0	23	0
NE Pacific St at 15 <sup>th</sup> Ave NE			23	0	23	0
NE Pacific St at NE Pacific Pl			49	2	49	2
Montlake Blvd E at SR-520			2	6	14	10
SR-520 at Montlake Blvd E	12	4				
SR-520 at Evergreen Point	2	2	8	17	10	19
SR-520 at Yarrow Point	0	1	0	1	0	2
Bellevue Transit Center	48	115	69	37	117	152
SE 36 <sup>th</sup> St at Factoria Blvd SE	2	16			2	16
SE 36 <sup>th</sup> St at 136 <sup>th</sup> Ave SE	0	3			0	3
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	2	9			2	9
Eastgate P&R	6	11	10	44	16	55
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	2	4	9	26	11	30
Issaquah P&R	4	24	3	64	7	88
Issaquah Highlands P&R	0	9	0	60	0	69

Route 555/556 Stop Level Boardings and Alightings – Westbound

	Route 555		Route 556		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Issaquah Highlands P&R	14	0	79	0	93	0
Issaquah P&R	16	1	57	4	73	5
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	2	1	0	3	2	4
Eastgate P&R	25	3	70	11	95	14
142 <sup>nd</sup> Pl SE at SE 32 <sup>nd</sup> St	1	0			1	0
SE 36 <sup>th</sup> St at 136 <sup>th</sup> Ave SE	2	0			2	0
SE 36 <sup>th</sup> St at Factoria Blvd SE	14	2			14	2
Bellevue Transit Center	107	38	42	84	149	122
SR-520 at Yarrow Point	1	0	1	0	2	0
SR-520 at Evergreen Point	2	1	13	0	15	1
SR-520 at Montlake Blvd E	4	23			4	23
Montlake Blvd E at E Shelby St			0	1	0	1
NE Pacific St at NE Pacific Pl			5	62	5	62
NE Pacific St at 15 <sup>th</sup> Ave NE			0	11	0	11
15 <sup>th</sup> Ave NE at NE Pacific St			1	32	1	32
Brooklyn Way NE at Campus Pkwy NE			3	18	3	18
11 <sup>th</sup> Ave NE at NE 42 <sup>nd</sup> St			2	9	2	9
11 <sup>th</sup> Ave NE at NE 45 <sup>th</sup> St			2	9	2	9
Northgate Transit Center	0	120	0	33	0	153

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

*Passenger Miles per Revenue Hour*

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 555	63% Well Below Average	63% Well Below Average	No weekend service	
Route 556	76% Below Average	76% Below Average	No weekend service	
Routes 555/556 Combined	73% Well Below Average	70% Well Below Average	No weekend service	

**Service Change Concepts**

Sound Transit proposes to revise the routing in the Eastgate area for both routes to reduce travel time and improve on-time performance (see map on page 62). **Route 555** would be revised to serve SE Eastgate Way, serving the stop at Richards Road, then continuing along I-90 to Bellevue Way SE and 112th Avenue SE to the Bellevue Transit Center. Stops would be added at the South Bellevue Park-and-Ride and on 112th Avenue SE at SE 15<sup>th</sup> St. Existing Route 555 stops on SE 36<sup>th</sup> St. would be discontinued. The new stop set at Richards Road would serve employees at T-Mobile and other companies in the Factoria area.

**Route 556** would be revised to make just one stop in the Eastgate area, at the Eastgate Freeway Station. This change would reduce transit travel time between Issaquah and downtown Bellevue by five minutes. Route 556 would no longer serve the Eastgate Park-and-Ride bus loop and two stops on 142<sup>nd</sup> Place SE.

**Service Change Highlights – Route 555**

- |   |
|---|
| <ul style="list-style-type: none"> <li>• Revise routing to use Eastgate Way between Eastgate Park-and-Ride and Richards Road</li> <li>• Operate between Richards Road and downtown Bellevue via I-90, SE Bellevue Way and 112<sup>th</sup> Avenue SE.</li> <li>• Add stops at 112<sup>th</sup> Avenue SE at SE 15<sup>th</sup> Street and at South Bellevue Park-and-Ride.</li> </ul> |
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**Service Change Highlights – Route 556**

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|--|
| <ul style="list-style-type: none"> <li>• Discontinue serving the stops at 142nd Place SE at SE 32nd Street, Eastgate Park-and-Ride bus loop, and along SE 36th Street.</li> <li>• Revise routing between Eastgate and downtown Bellevue via I-90, Bellevue Way SE and 112<sup>th</sup> Avenue.</li> <li>• Add stops at 112<sup>th</sup> Avenue SE at SE 15<sup>th</sup> Street and at South Bellevue Park-and-Ride.</li> </ul> |
|--|

**Criteria**

Other criteria used to evaluate the concepts and develop the staff recommendations:

- Consistency with *Sound Move*, Sound Transit’s master plan
- Impacts on existing and future riders with each alternative
- Likelihood of ridership growth and improved system productivity
- Affordability

<b>Evaluation Criteria</b>	
<i>Sound Move</i>	This change would further enhance the service envisioned in <i>Sound Move</i> by taking full advantage of the direct access ramp and freeway stops.
Service Standards	This route change would improve speed and reliability for passengers traveling through Eastgate.
Ridership Impacts	Approximately 100 people in the Eastgate area would be affected by this change and would need to access the bus at the freeway station. This would mean a walk of about three blocks for passengers boarding near Bellevue Community College and about a two block walk and four-floor difference in elevation from the stops at the Eastgate bus loop. About 160 existing riders will have a faster trip to their destinations.
Ridership Productivity	While passengers at Eastgate will need to access the service at the freeway stop, productivity should improve in that there will be a savings in revenue time of approximately five minutes per trip or 2.17 hours per day...
Affordability	This proposal is affordable.

## Route 560: Bellevue – SeaTac – West Seattle

### 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) combined into one route. The Westside Express originally began service in September 1999. 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 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. A new stop set at the Wilburton Park-and-Ride was added with the September 2005 service change. Service operates all day, seven days a week.

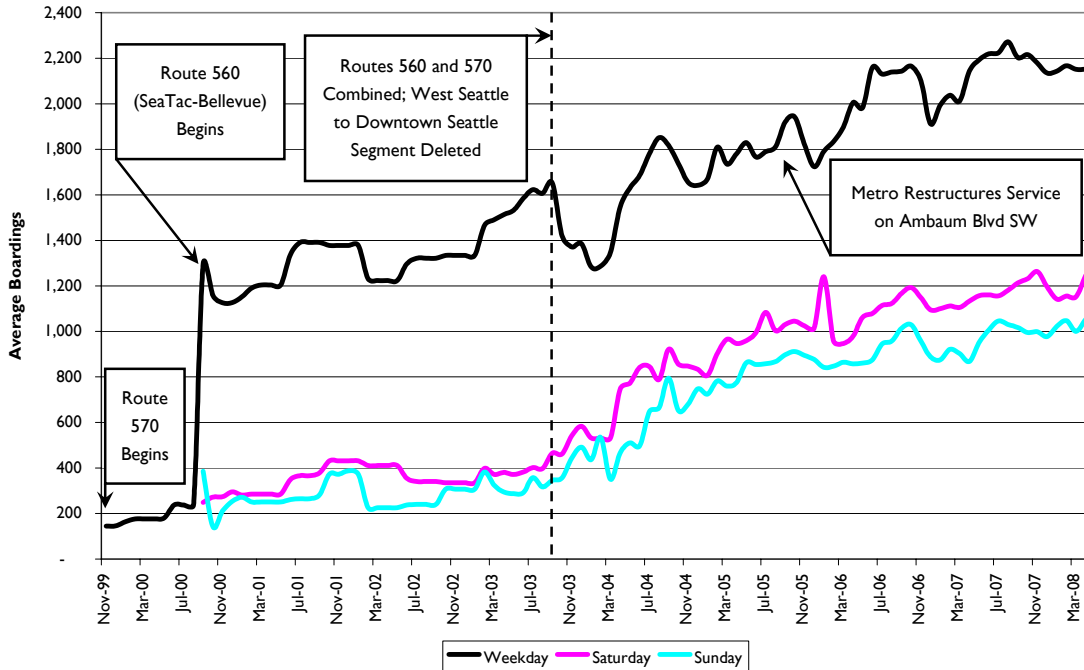
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,013	1,106	899
Passengers per Trip	29.26	29.60	30.71	24.98
Passengers per Revenue Hour	15.92	15.99	17.24	14.07
Purchased Transportation Cost per Boarding	\$ 6.62	\$ 6.55	\$ 6.34	\$ 7.72
Route Assessment	2.67 Marginal	3.00 Marginal	2.00 Satisfactory	1.67 Satisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		2,120	1,150	1,096
Passengers per Trip	31.36	31.67	31.94	28.42
Passengers per Revenue Hour	16.99	17.12	17.46	15.55
Purchased Transportation Cost per Boarding	\$6.58	\$6.48	\$6.62	\$7.40
Route Assessment	3.00 Marginal	3.00 Marginal	2.33 Satisfactory	1.67 Satisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 5%	Up 4%	Up 22%
Passengers per Trip	Up 7%	Up 7%	Up 4%	Up 14%
Passengers per Revenue Hour	Up 7%	Up 7%	Up 1%	Up 11%
Purchased Transportation Cost per Boarding	Down <1%	Down 1%	Down 4%	Down 4%

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



Ridership and productivity for Route 560 is up. Likewise, productivity in terms of boardings per trip and boardings per revenue hour is up seven percent and up one percent respectively. This route has higher productivity on weekends than it does on weekdays, perhaps because of its structure of connecting regional centers and transit hubs, rather than a single traditional commute corridor. The graph above also shows ridership of both Routes 560 and the Westside Express prior to September 2003.

**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 September 2007 service change.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	36.10	22.50	26.67	22.00	20.00
Pass/ Rev Hr	24.84	15.56	17.71	15.86	14.91
<b>Westbound</b>					
Pass/Trip	31.67	32.92	50.50	31.20	33.50
Pass/ Rev Hr	21.98	22.66	33.73	22.29	23.93

***Stop Level Boardings and Alightings***

**Route 560 Stop Level Boardings and Alightings – Eastbound**

	Route 560	
	Boardings	Alightings
Alaska Junction Transfer Point	83	0
California Ave SW at SW Dawson St	10	1
Fauntleroy Way SW at California Ave SW	24	7
Fauntleroy Ferry Terminal	37	16
35 <sup>th</sup> Ave SW at SW Barton St	21	6
SW Roxbury St at 28 <sup>th</sup> Ave SW	31	9
SW Roxbury St at 20 <sup>th</sup> Ave SW	3	1
White Center Transfer Point	101	27
16 <sup>th</sup> Ave SW at SW 116 <sup>th</sup> St	17	6
Ambaum Blvd SW at SW 128 <sup>th</sup> St	29	10
Ambaum Blvd SW at SW 136 <sup>th</sup> St	31	16
Burien Transit Center	135	79
Sea-Tac Airport	211	172
Rainier Ave S at S 7 <sup>th</sup> St	11	53
Renton Transit Center	89	116
Park Ave N at N 6 <sup>th</sup> St	8	13
Garden Ave N at N 8 <sup>th</sup> St	3	9
Garden Ave N at Park Ave N	5	7
I-405 at N 30 <sup>th</sup> St (Kennydale)	23	12
I-405 at 112 <sup>th</sup> Ave SE (Newport Hills)	12	7
South Bellevue Park-and-Ride	27	43
112 <sup>th</sup> Ave SE at SE 15 <sup>th</sup> St	4	18
I-405 at SE 8 <sup>th</sup> St	8	12
Bellevue Transit Center	0	281



Route 560 Stop Level Boardings and Alightings – Westbound

	Route 560	
	Boardings	Alightings
Bellevue Transit Center	347	0
SE 8 <sup>th</sup> St at I-405	20	19
112 <sup>th</sup> Ave SE at SE 15 <sup>th</sup> St	11	6
South Bellevue Park-and-Ride	62	22
I-405 at 112 <sup>th</sup> Ave SE (Newport Hills)	12	17
I-405 at N 30 <sup>th</sup> St (Kennydale)	18	31
Garden Ave N at Park Ave N	12	8
Garden Ave N at N 8 <sup>th</sup> St	18	5
Park Ave N at N 6 <sup>th</sup> St	15	9
Renton Transit Center	193	119
Rainier Ave S at SW 7 <sup>th</sup> St	75	23
Sea-Tac Airport	193	290
Burien Transit Center	114	146
Ambaum Blvd SW at SW 136 <sup>th</sup> St	15	36
Ambaum Blvd SW at SW 128 <sup>th</sup> St	10	35
Ambaum Blvd SW at SW 116 <sup>th</sup> St	4	23
White Center Transfer Point	42	134
SW Roxbury St at 20 <sup>th</sup> Ave SW	1	7
SW Roxbury St at 27 <sup>th</sup> Ave SW	7	36
SW Barton St at 35 <sup>th</sup> Ave SW	9	28
Fauntleroy Ferry Terminal	18	47
California Ave SW at Fauntleroy Way SW	7	38
California Ave SW at SW Dawson St	1	9
Alaska Junction Transfer Point*	3	119

\* - Includes boardings at both bays served in this direction

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

When combined with Routes 564 and 565, the stops in the north Renton neighborhood meet the standards for stops. The entire neighborhood has been going through redevelopment and was under construction during the last year as the Boeing Company sold property. Park Avenue North was completely closed for the past year. During construction, Boeing provided a shuttle from the stop at Garden Avenue North at North 8<sup>th</sup> Street to the plant. Sound Transit staff will continue to monitor these stops in 2009.

Likewise in West Seattle, some stops do not meet Sound Transit's standards for an express service stop. Sound Transit will work with King County Metro as they implement the West Seattle Rapid Ride to reduce duplication and enhance productivity of both services. West Seattle Rapid Ride is scheduled for implementation in 2011.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 560	45% Well Below Average	45% Well Below Average	56% Well Below Average	60% Well Below Average

**Service Change Concepts**

There are no changes for 2009, however staff will continue to monitor productivity and stop boardings and alightings for potential proposals for the 2010 Service Implementation Plan.

**Route 564/565: South Hill / Federal Way – Overlake**

**Route 564 Description**

Starting as a shortened version of Route 565 to supplement service on that route during peak periods, Route 564 began operation in September 2003 between Auburn and Bellevue. The Kent Station bus facility opened in June 2005. In September 2005, service was extended from Bellevue Transit Center to the Overlake Transit Center as part of the Board-approved 2005 Service Implementation Plan package. The most recent change occurred in June 2006 when Route 564 was extended from Auburn to South Hill Mall Transit Center to replace a segment of former ST Route 585. At the same time, hourly midday service was added, with alternate Route 565 midday and evening trips converted into Route 564 trips. The combined Route 564/565 service connects Overlake and Auburn every 15 minutes during peak periods (every 30 minutes in the off-peak direction), and every 30 minutes during the midday and evenings. Individually, each southern route “tail” (Route 564 to South Hill and Route 565 to Federal Way) operates every 30 minutes during peak periods and hourly during the midday and evenings. With increasing ridership, Sound Transit added new peak period Route 564 turnback trips from Kent Station to Overlake Transit Center in December 2006. Combined 564/565 service levels between Kent Station and Overlake Transit Center are currently every 7 to 8 minutes during the morning peak hour.

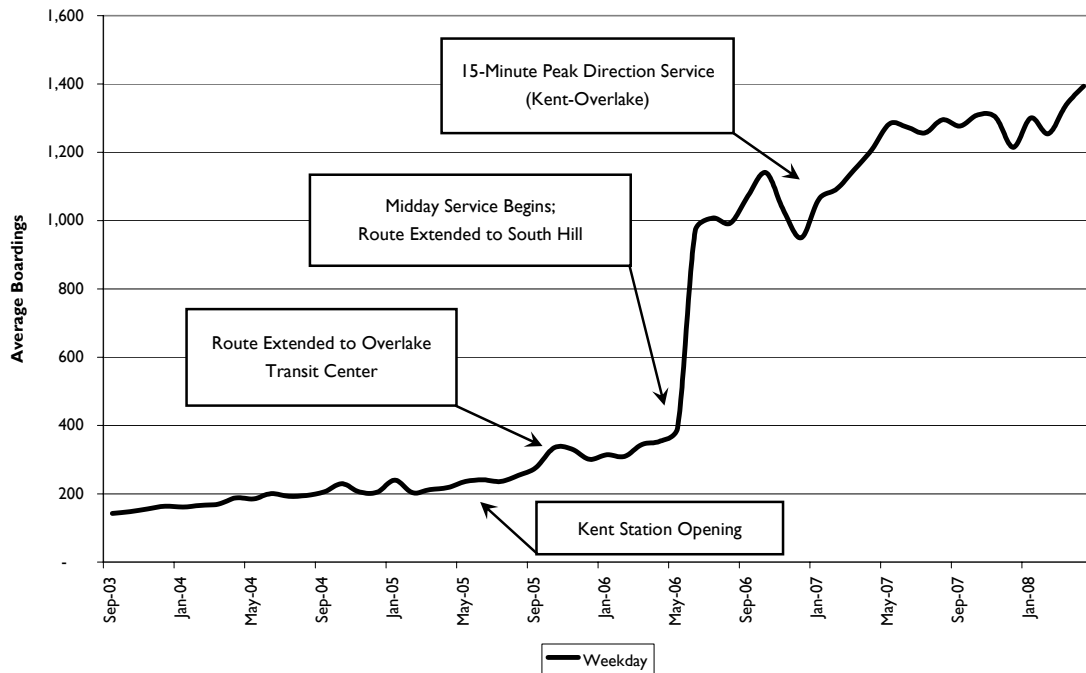
**Performance Assessment**

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,101	No weekend service	
Passengers per Trip	28.57	28.57		
Passengers per Revenue Hour	13.55	13.55		
Purchased Transportation Cost per Boarding	\$ 9.04	\$ 9.04		
Route Assessment	3.33 Marginal	3.67 Unsatisfactory		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,298	No weekend service	
Passengers per Trip	33.28	33.28		
Passengers per Revenue Hour	15.96	15.96		
Purchased Transportation Cost per Boarding	\$8.13	\$8.13		
Route Assessment	3.33 Marginal	3.33 Marginal		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 18%	No weekend service	
Passengers per Trip	Up 16%	Up 16%		
Passengers per Revenue Hour	Up 18%	Up 18%		
Purchased Transportation Cost per Boarding	Down 10%	Down 10%		

### Route 564 (South Hill-Overlake)



While productivity dipped somewhat in 2006, ridership on this route dramatically increased due to the implementation of all day service. Productivity increased between 2007 and 2008 and the route is showing solid gains, with the weekday performance assessment rating improving from “Unsatisfactory” to “Marginal.” Additional data pertinent to this route is available in the section on Route 565.

**Route 565 Description**

The Federal Way to Bellevue Express began service in September 1999. It operates generally along the SR-167 and I-405 corridors, with intermediate stops at Overlake Transit Center, Bellevue Transit Center, North Renton, Renton Transit Center, Kent Station, Auburn Station and Federal Way Transit Center. Service operates all day and in both directions on weekdays only. In September 2005, service was extended to the Overlake Transit Center as part of the Board-approved 2005 SIP package. The schedule is coordinated with Route 564 so that 15 minute combined peak directional service is provided between Auburn and Bellevue. Routing was revised slightly in February 2006 to serve the new Federal Way Transit Center.

In June 2006, midday service between Federal Way and Auburn was reduced to hourly intervals by converting alternating midday and evening trips into Route 564 trips. This resulted in more boardings on Route 564 and fewer boardings on Route 565 (see trend graph below). The combined Route 564/565 service connects Overlake and Auburn every 15 minutes during peak periods (every 30 minutes in the off-peak direction), and every 30 minutes during the midday and evenings. Individually, each route “tail” (Route 564 to South Hill and Route 565 to Federal Way) operates every 30 minutes during peak periods and hourly during the midday and evenings.

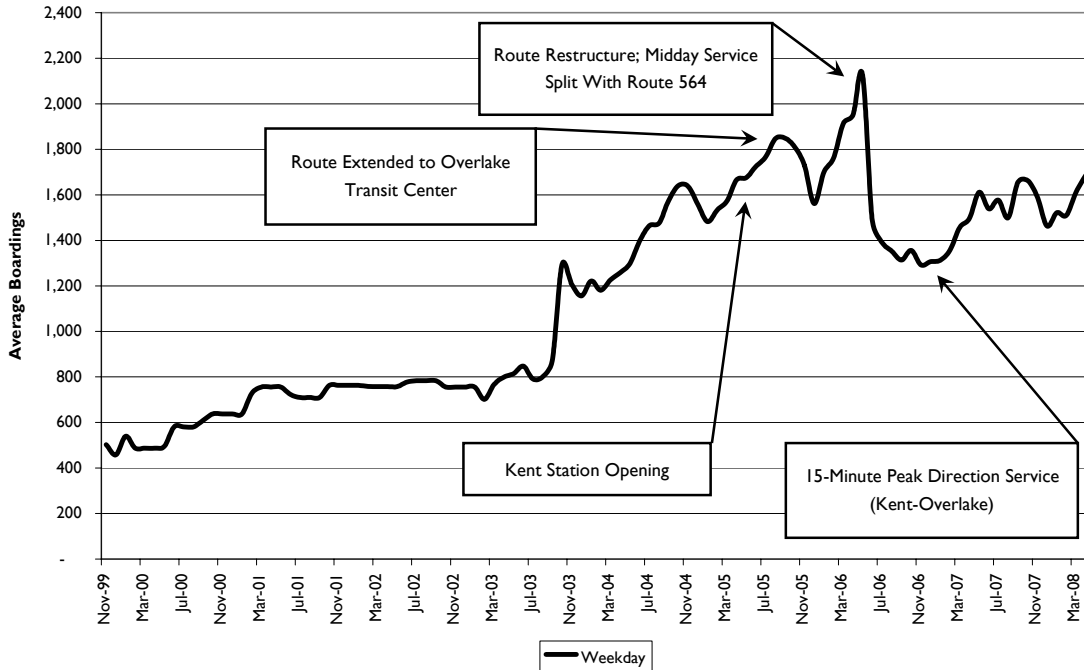
**Performance Assessment**

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,376	No weekend service	
Passengers per Trip	33.56	33.56		
Passengers per Revenue Hour	19.10	19.10		
Purchased Transportation Cost per Boarding	\$ 6.10	\$ 6.10		
Route Assessment	2.33 Satisfactory	2.67 Marginal		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,547	No weekend service	
Passengers per Trip	37.74	37.74		
Passengers per Revenue Hour	21.73	21.73		
Purchased Transportation Cost per Boarding	\$5.68	\$5.68		
Route Assessment	2.00 Satisfactory	2.67 Marginal		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 12%	No weekend service	
Passengers per Trip	Up 12%	Up 12%		
Passengers per Revenue Hour	Up 14%	Up 14%		
Purchased Transportation Cost per Boarding	Down 7%	Down 7%		

**Route 565 (Federal Way-Overlake)**



Productivity has continued to improve for Route 565 since the June 2006 restructure of midday service with Route 564. A combined 30-minute midday service is provided between Auburn Station and Overlake Transit Center. Overall ridership along the corridor has increased over the same period last year.

***Additional Data Pertinent to Route***

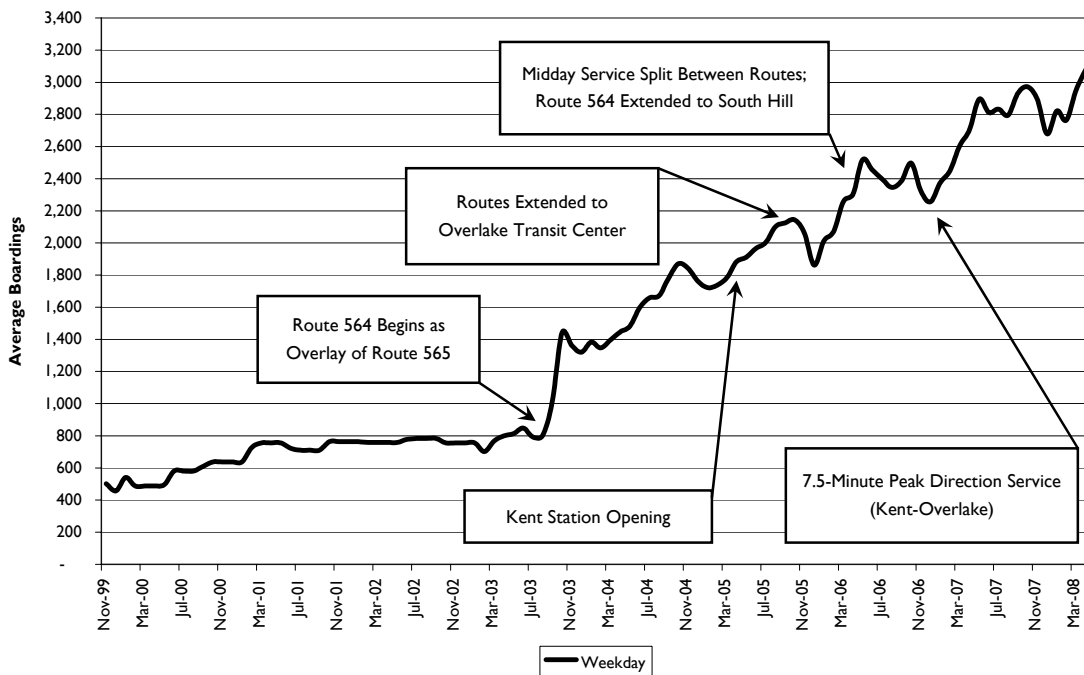
The two routes share common routing from Auburn Station to Overlake Transit Center. The following table looks at each direction by time period for both routes. Trip level information is from Automatic Passenger Count (APC) information for spring 2008.

***Passenger Activity by Time Period (Spring 2008)***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
<b>Route 564</b>					
Pass/Trip	43.00	30.00	25.67		
Pass/Rev Hr	30.80	19.30	16.44		
<b>Route 565</b>					
Pass/Trip	59.33	35.25	29.33	22.00	18.00
Pass/Rev Hr	45.16	28.82	24.11	19.04	15.65
<b>Routes 564/565 Combined</b>					
Pass/Trip	49.53	31.76	27.50	22.00	18.00
Pass/Rev Hr	36.33	23.33	19.80	19.04	15.65
<b>Southbound</b>					
<b>Route 564</b>					
Pass/Trip	26.33	28.86	48.83	41.50	

Pass/Rev Hr	15.34	15.84	23.28	22.04	
<b>Route 565</b>					
Pass/Trip	29.50	31.88	66.17	31.67	19.00
Pass/Rev Hr	22.84	23.01	41.28	22.62	13.57
<b>Routes 564/565 Combined</b>					
Pass/Trip	27.50	30.31	57.50	35.60	19.00
Pass/Rev Hr	18.33	18.97	31.08	22.34	13.57

**SR-167 Corridor: Routes 564 and 565**



**Stop Level Boardings and Alightings (Spring 2008)**

**Route 564/565 Stop Level Boardings and Alightings – Northbound**

	Route 564		Route 565		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
South Hill Mall Transit Center	80	0			80	0
South Hill Park-and-Ride	32	8			32	8
Sumner Station	37	11			37	11
Federal Way Transit Center			200	0	200	0
Auburn Station	80	32	100	40	180	72
W Smith St at 4 <sup>th</sup> Ave N	8	12	17	26	25	38
Kent Station	172	48	182	83	354	131
Central Ave N at S 228 <sup>th</sup> St	20	15	21	23	41	38
Rainier Ave S at S 7 <sup>th</sup> St	30	31	27	37	57	68
Renton Transit Center	164	84	164	117	328	201
Park Ave N at N 6 <sup>th</sup> St	24	23	19	8	43	37
Park Ave N at N 8 <sup>th</sup> St	11	9	13	19	24	28

Park Ave N at Logan Ave N	11	18	12	43	23	61
Bellevue Transit Center	51	349	50	296	101	645
Overlake Transit Center*	3	84	6	117	9	201

\* - Includes boardings at SR-520 at NE 40th St

Route 564/565 Stop Level Boardings and Alightings – Southbound

	Route 564		Route 565		Total	
	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Overlake Transit Center	25	0	93	0	118	0
SR-520 at NE 40 <sup>th</sup> St	64	5	84	7	148	12
Bellevue Transit Center	237	51	300	51	537	102
Park Ave N at Logan Ave N	13	10	14	16	27	26
Park Ave N at N 8th St	7	11	8	10	15	21
Park Ave N at N 6th St	5	11	9	19	14	30
Renton Transit Center	91	130	113	174	204	304
Rainier Ave S at SW 7 <sup>th</sup> St	16	18	25	20	41	38
Central Ave N at S 228 <sup>th</sup> St	9	12	14	15	23	27
Kent Station	61	147	107	198	168	345
4 <sup>th</sup> Ave N at W Smith St	14	25	11	22	25	47
Auburn Station	60	115	49	117	109	232
Federal Way Transit Center			0	178	0	178
Sumner Station	25	37			25	37
South Hill Park-and-Ride	31	56			31	56
South Hill Mall Transit Center	0	31			0	31

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

**Passenger Miles per Revenue Hour**

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 564	63% Well Below Average	63% Well Below Average	No weekend service	
Route 565	85% Below Average	85% Below Average	No weekend service	
Routes 564/565 Combined	76% Below Average	73% Well Below Average	No weekend service	

**Service Change Concepts**

No changes are proposed for Routes 564/565 in 2009.

For route information, please refer to the map in the Get Ready to Ride Transit Guide.



## Route 574: Lakewood - SeaTac

### Description

The Lakewood-SeaTac Express began service in September 1999. It operates generally 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 and Kent/Des Moines Park-and-Ride. Service operates seven days a week. In June 2005, late morning service was reduced from every 30 minutes to every 60 minutes. Routing was revised in February 2006 to serve the Federal Way Transit Center.

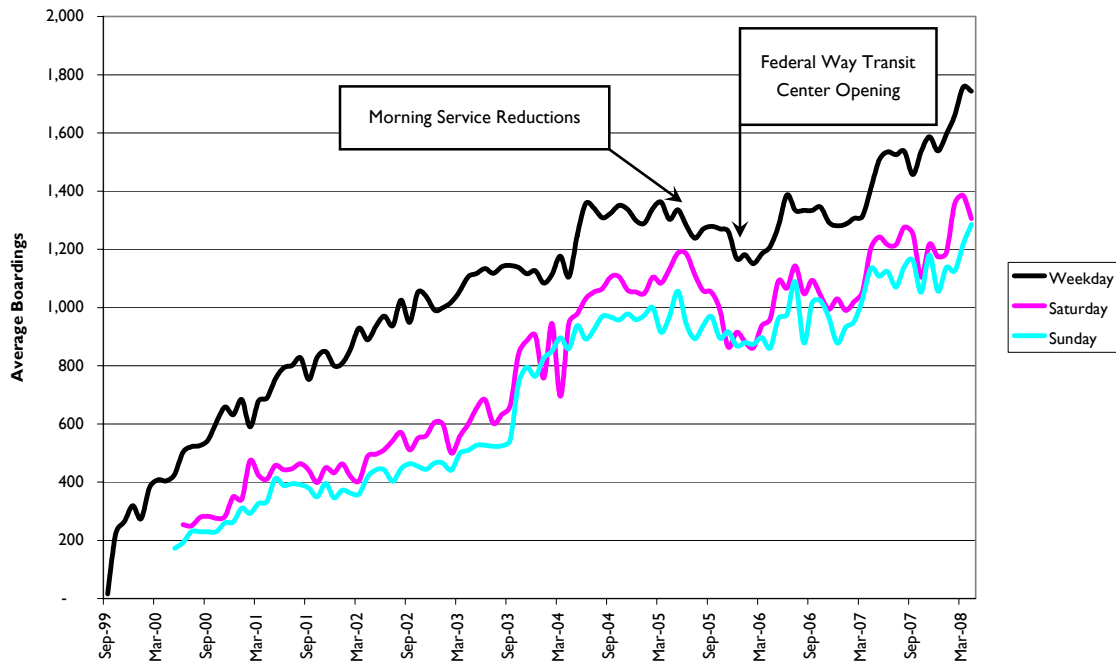
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,302	1,102	899
Passengers per Trip	19.86	20.66	18.23	17.26
Passengers per Revenue Hour	14.46	15.13	13.06	12.36
Purchased Transportation Cost per Boarding	\$ 7.43	\$ 7.18	\$ 7.97	\$ 8.42
Route Assessment	3.67 Unsatisfactory	3.67 Unsatisfactory	3.33 Marginal	2.33 Satisfactory

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		1,644	1,420	1,162
Passengers per Trip	24.32	25.30	23.14	20.39
Passengers per Revenue Hour	17.73	18.74	16.13	14.38
Purchased Transportation Cost per Boarding	\$6.56	\$6.36	\$6.72	\$7.62
Route Assessment	3.00 Marginal	3.00 Marginal	3.00 Marginal	2.00 Satisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 26%	Up 29%	Up 29%
Passengers per Trip	Up 22%	Up 22%	Up 27%	Up 18%
Passengers per Revenue Hour	Up 23%	Up 24%	Up 24%	Up 16%
Purchased Transportation Cost per Boarding	Down 12%	Down 11%	Down 16%	Down 10%

**Route 574 (Lakewood-SeaTac)**



Average daily boardings and productivity have greatly improved over the same time period last year. Although this route still performs marginally, it will provide a critical link when the service along I-5 between Seattle and Pierce County is restructured in conjunction with the light rail extension to the airport. As part of this restructure, King County Metro would delete Route 194 service between Federal Way and the airport, requiring an increase in overall service levels on Route 574. Currently, there are some periods of overcrowding occurring in the early morning northbound, and southbound in the early afternoon.

**Additional Data Pertinent to Route**

The two routes share common routing from Auburn Station to Overlake Transit Center. The following table looks at each direction by time period for both routes. Trip level information is from Automatic Passenger Count (APC) information for the September 2007 service change.

***Passenger Activity by Time Period***

	Before 5:00*	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>						
Pass/Trip	29.73	30.00	20.45	19.02	22.37	15.00
Pass/Rev Hr	30.76	26.74	18.88	17.56	22.37	15.52
<b>Southbound</b>						
Pass/Trip	No service	18.15	27.83	41.68	23.27	27.51
Pass/Rev Hr	No service	19.62	27.87	36.15	22.99	29.47

\* - Arrives at SeaTac before 5:00; departures from Lakewood Transit Center are all before 4:00

***Stop Level Boardings and Alightings***

**Route 574 Stop Level Boardings and Alightings – Northbound**

	Route 574	
	Boardings	Alightings
Lakewood Transit Center	156	0
SR-512 P&R	162	24
Tacoma Dome Station	236	50
Federal Way Transit Center	214	96
I-5 at S 272 <sup>nd</sup> St	20	14
I-5 at Kent-Des Moines Rd	25	26
S 188 <sup>th</sup> St at Military Rd	3	5
International Blvd at S 188 <sup>th</sup> St	4	33
Sea-Tac Airport	0	571

**Route 574 Stop Level Boardings and Alightings – Southbound**

	Route 574	
	Boardings	Alightings
Sea-Tac Airport	581	0
International Blvd at Airport	18	1
S 188 <sup>th</sup> St at International Blvd	20	5
S 188 <sup>th</sup> St at Military Rd	2	4
I-5 at Kent-Des Moines Rd	28	14
I-5 at S 272 <sup>nd</sup> St	21	22
Federal Way Transit Center	115	227
Tacoma Dome Station	54	219
Pacific Ave at S 25 <sup>th</sup> St	7	35
SR-512 P&R	30	179
Lakewood Transit Center	0	170

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 574	91% Below Average	96% Below Average	98% Below Average	113% Above Average

**Service Change Concepts**

A major restructure of I-5 South service, including Route 574, is included in preliminary plans for 2010 when Link light rail begins service to the airport (see Chapter 3). This restructure, if approved for implementation, would increase Route 574 ridership and productivity by eliminating service duplication with King County Metro Route 194 between Federal Way and SeaTac Airport. No changes are proposed for Route 574 during 2009.

## Route 577: Federal Way – Seattle

### Description

This route, approved by the Sound Transit Board as part of the 2003 Service Implementation Plan, began operation as a peak-hour, peak-direction service between the new Federal Way Transit Center and downtown Seattle in February 2006.

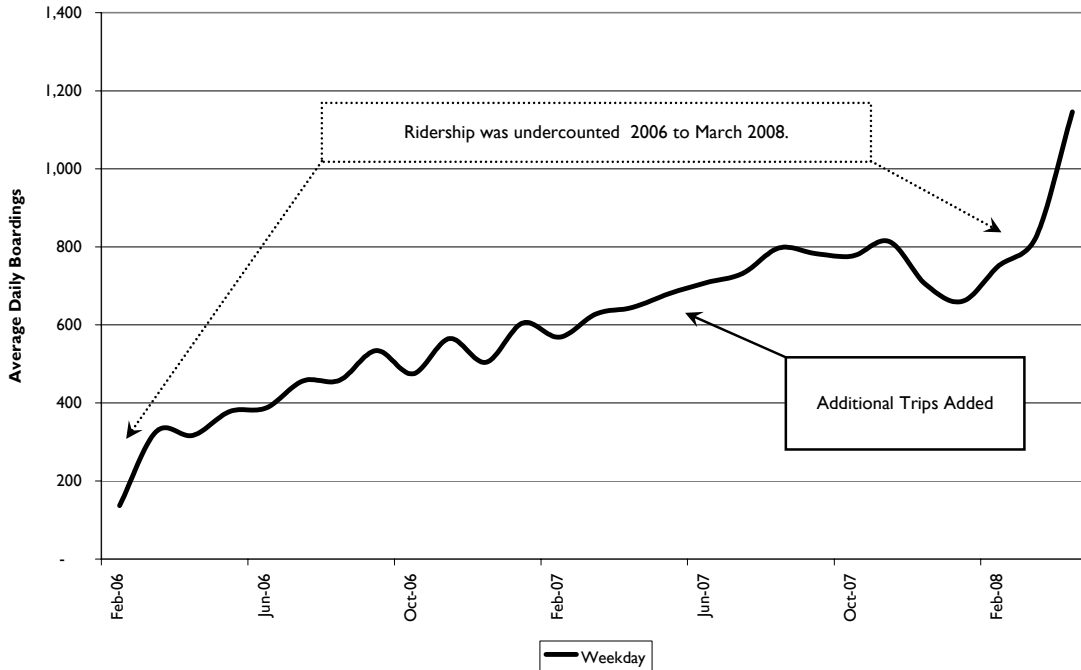
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		602	No weekend service	
Passengers per Trip	33.42	33.42		
Passengers per Revenue Hour	36.46	36.46		
Purchased Transportation Cost per Boarding	\$ 5.10	\$ 5.10		
Route Assessment	1.33 Good	1.33 Good		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		744	No weekend service	
Passengers per Trip	29.76	29.76		
Passengers per Revenue Hour	31.25	31.25		
Purchased Transportation Cost per Boarding	\$6.00	\$6.00		
Route Assessment	2.00 Satisfactory	1.67 Satisfactory		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 24%	No weekend service	
Passengers per Trip	Down 11%	Down 11%		
Passengers per Revenue Hour	Down 14%	Down 14%		
Purchased Transportation Cost per Boarding	Up 18%	Up 18%		

**Route 577 (Federal Way-Seattle)**



Route 577 began in mid-February 2006 and has continued to improve in terms of ridership and productivity. In June 2007, seven trips were added to expand the span and relieve overcrowding, though this has cut into past productivity gains. In spring 2008, passenger counting equipment was repaired along the route’s length, revealing that previous passenger tallies had been undercounted. Thus, actual route ridership is likely higher than shown above for the period before March 2008. Additional trips were added in September 2008.

**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 September 2007 service change. These numbers were updated when it became clear the APC system was undercounting passengers.

***Passenger Activity by Time Period***

	AM Peak Northbound	PM Peak Southbound
Pass/Trip	47.32	43.58
Pass/ Rev Hr	63.21	53.09

**Stop Level Boardings and Alightings**

Route 577 Stop Level Boardings and Alightings – Northbound

	Route 577	
	Boardings	Alightings
Federal Way Transit Center	515	0
Seneca St at 5 <sup>th</sup> Ave	86	318
4 <sup>th</sup> Ave at University St	17	191
Pine St at 4 <sup>th</sup> Ave	7	35
2 <sup>nd</sup> Ave at Pike St	1	4
2 <sup>nd</sup> Ave at Seneca St	4	26
2 <sup>nd</sup> Ave at Marion St	12	46
2 <sup>nd</sup> Ave at James St	33	15
2 <sup>nd</sup> Ave Ext S at S Jackson St	0	41

Route 577 Stop Level Boardings and Alightings – Southbound

	Route 577	
	Boardings	Alightings
Lenora St at 4 <sup>th</sup> Ave	58	0
2 <sup>nd</sup> Ave at Lenora St	42	5
2 <sup>nd</sup> Ave at Pike St	172	5
2 <sup>nd</sup> Ave at Seneca St	123	4
2 <sup>nd</sup> Ave at Marion St	64	4
2 <sup>nd</sup> Ave at James St	37	13
2 <sup>nd</sup> Ave Ext S at S Jackson St	51	264
Federal Way Transit Center	0	251

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

Note that southbound there are more alightings at 2<sup>nd</sup> Avenue Extension S at S Jackson Street than at the Federal Way Transit Center, the route’s actual terminus. This is a result of the undercounting passenger counters.

**Passenger Miles per Revenue Hour**

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 577	132% Well Above Average	132% Well Above Average	No weekend service	

**Service Change Concepts**

There are no changes planned for this route during 2009. Route 577 is a strong candidate for additional service if resources become available in the future.

For route information, please refer to the map in the Get Ready to Ride Transit Guide.

**Route 582: Bonney Lake – Tacoma**

**Description**

The Bonney Lake-Tacoma Express began service in September 2001 as a peak-only route. It operates generally along the SR-167 corridor, with intermediate stops at Sumner Station, Puyallup Station and Tacoma Dome Station. Midday service was added in February 2003 and weekend service was added in September 2003.

In June 2006, all off-peak service was discontinued due to low ridership and low productivity. Peak-hour trips were adjusted to provide better connections with Sounder in Sumner and (if needed) a five minute hold for late trains was initiated for afternoon trips. As well, due to low ridership and the additional running time for the majority of downtown passengers, the loop in downtown Tacoma along A Street was discontinued.

Additional trips were added in June 2007, operating solely between Sumner Station and Bonney Lake Park-and-Ride, specifically designed to wait for Sounder service from Seattle. This eliminated the variability of service for passengers transferring from Seattle on Sounder while allowing for the most optimal schedule to serve existing commuters from Tacoma. In September 2007 Pierce Transit took over operation of the Sounder Connector trips as Route 496, and the Route 582 turnback trips were removed.

In September 2008, two reverse-peak trips were discontinued due to low ridership and duplication of service on Sounder.

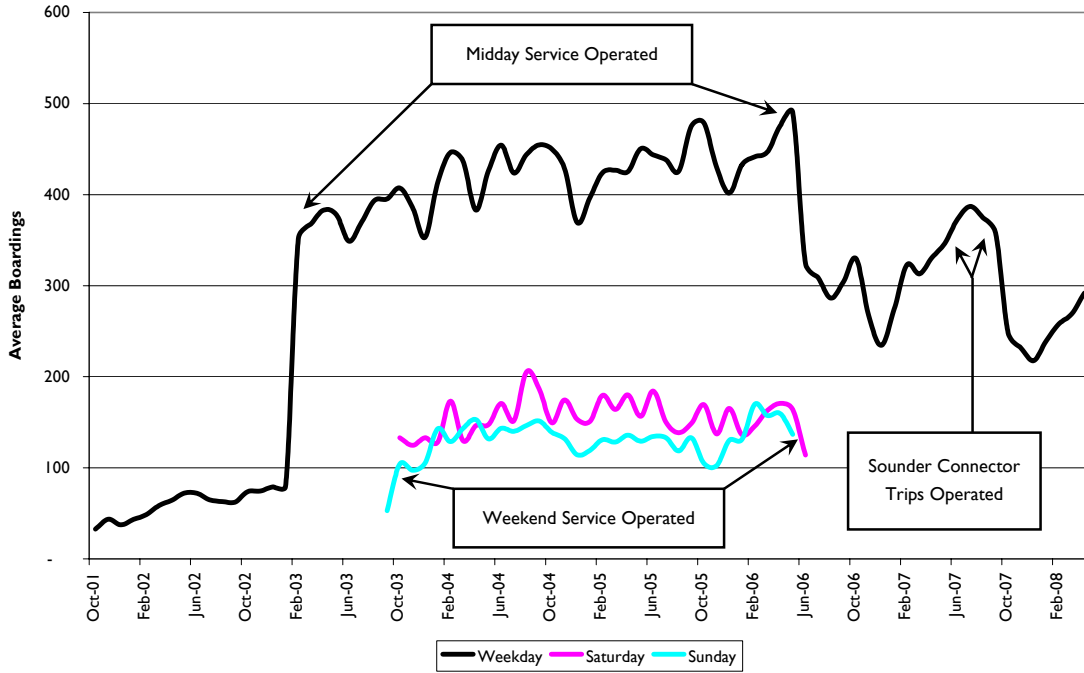
**Performance Assessment**

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		302	No weekend service	
Passengers per Trip	15.12	15.12		
Passengers per Revenue Hour	16.57	16.57		
Purchased Transportation Cost per Boarding	\$ 9.60	\$ 9.60		
Route Assessment	3.67 Unsatisfactory	3.67 Unsatisfactory		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		255	No weekend service	
Passengers per Trip	12.76	12.76		
Passengers per Revenue Hour	13.09	13.09		
Purchased Transportation Cost per Boarding	\$12.82	\$12.82		
Route Assessment	4.00 Unsatisfactory	4.00 Unsatisfactory		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Down 16%	No weekend service	
Passengers per Trip	Down 16%	Down 16%		
Passengers per Revenue Hour	Down 21%	Down 21%		
Purchased Transportation Cost per Boarding	Up 34%	Up 34%		

**Route 582 (Bonney Lake-Tacoma)**



Route 582 is now focused on serving downtown Tacoma commuters and no longer is designed to connect with Sounder trains at Sumner Station. Pierce Transit’s Route 496 now provides a dedicated train connection between Bonney Lake Park-and-Ride and Sumner Station.

**Additional Information Pertinent to Route**

The following table looks at each direction by time period. Trip and stop level information was taken from Automatic Passenger Count (APC) information for the February 2008 service change.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Eastbound</b>					
Pass/Trip	7.79	No midday service	16.19	No service	
Pass/ Rev Hr	10.27		15.96		
<b>Westbound</b>					
Pass/Trip	17.51	No midday service	11.35	No service	
Pass/ Rev Hr	22.85		13.62		



### ***Stop Level Boardings and Alightings***

#### **Route 582 Stop Level Boardings and Alightings – Eastbound**

	Route 582	
	Boardings	Alightings
Tacoma Ave at S 11 <sup>th</sup> St	14	0
S 9 <sup>th</sup> St at Fawcett Ave	4	0
S 9 <sup>th</sup> St at Broadway	5	0
Commerce St at S 10 <sup>th</sup> St	33	4
Commerce St at S 12 <sup>th</sup> St	8	0
Pacific Ave at S 14 <sup>th</sup> St	10	0
Pacific Ave at UWT Campus	11	1
S 24 <sup>th</sup> St at Pacific Ave	4	0
Tacoma Dome Station	19	2
River Rd at 4 <sup>th</sup> St NW	1	13
Puyallup Station	10	33
Sumner Station	12	27
Bonney Lake P&R	0	48

#### **Route 582 Stop Level Boardings and Alightings – Westbound**

	Route 582	
	Boardings	Alightings
Bonney Lake P&R	60	0
Sumner Station	34	24
Puyallup Station	50	12
River Rd at 4 <sup>th</sup> St NW	11	3
Tacoma Dome Station	11	25
Pacific Ave at S 24 <sup>th</sup> St	0	6
Pacific Ave at UWT Campus	1	10
Pacific Ave at S 15 <sup>th</sup> St	0	10
Pacific Ave at S 13 <sup>th</sup> St	0	1
Commerce St at S 12 <sup>th</sup> St	0	10
Commerce St at S 10 <sup>th</sup> St	0	39
S 9 <sup>th</sup> St at Saint Helens Ave	0	12
S 9 <sup>th</sup> St at Fawcett Ave	0	0
Tacoma Ave at S 11 <sup>th</sup> St	0	14

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

### ***Passenger Miles per Revenue Hour***

February 2008 Service Change	Overall	Weekday	Saturday	Sunday
Route 582	39% Well Below Average	39% Well Below Average	No weekend service	

### **Service Change Concepts**

There are no changes planned during 2009. Staff will be developing and evaluating alternatives to improve route performance as part of the 2010 Service Implementation Plan.

For route information, please refer to the map in the Get Ready to Ride Transit Guide.



## Route 586: Tacoma – U District

### 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 11 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 to reach the current totals. In addition, the reduced summer schedule was eliminated. Resources for these additions come from the Route 585 deletion.

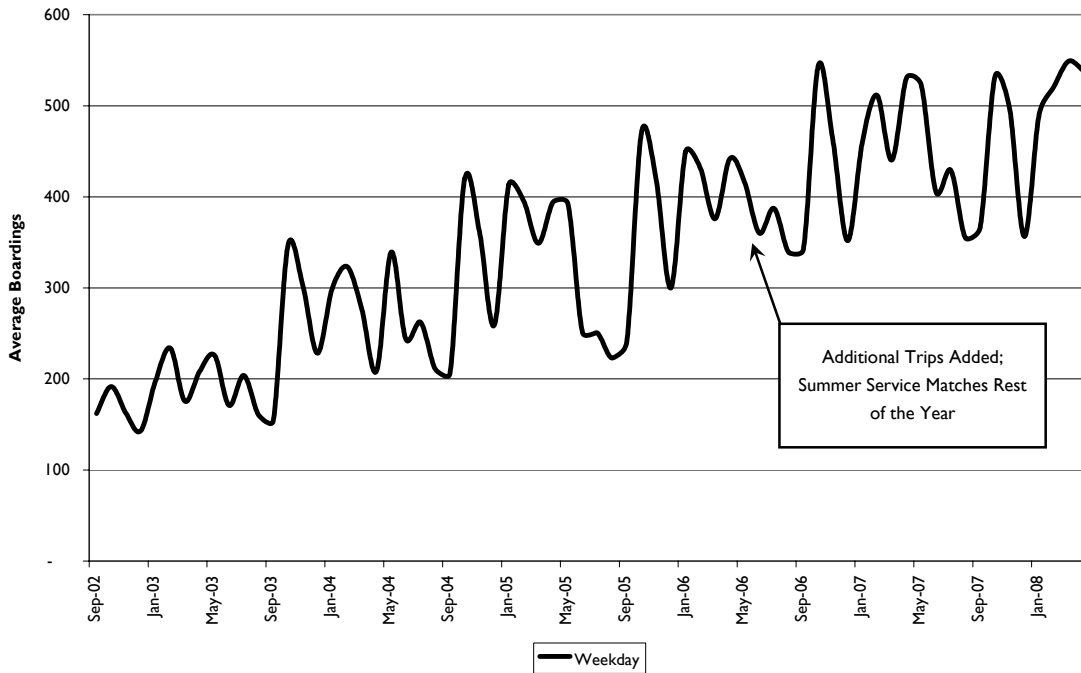
### Performance Assessment

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		469	No weekend service	
Passengers per Trip	23.44	23.44		
Passengers per Revenue Hour	17.02	17.02		
Purchased Transportation Cost per Boarding	\$11.78	\$11.78		
Route Assessment	3.33 Marginal	3.33 Marginal		

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		519	No weekend service	
Passengers per Trip	25.97	25.97		
Passengers per Revenue Hour	17.82	17.82		
Purchased Transportation Cost per Boarding	\$11.39	\$11.39		
Route Assessment	3.33 Marginal	3.67 Unsatisfactory		

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 11%	No weekend service	
Passengers per Trip	Up 11%	Up 11%		
Passengers per Revenue Hour	Up 5%	Up 5%		
Purchased Transportation Cost per Boarding	Down 3%	Down 3%		

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



While ridership has continued to increase, productivity has also finally turned a corner and has improved from 2007. Further analysis should be conducted to determine where high capacity coaches (MCI) are still needed on this route and whether some schedule adjustments should be made.

**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 September 2007 service change.

***Passenger Activity by Time Period***

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	25.76	21.77	No service		
Pass/ Rev Hr	17.81	18.93			
<b>Southbound</b>					
Pass/Trip	No service	15.52	23.78	25.15	No night service
Pass/ Rev Hr		13.30	20.38	21.55	

***Stop Level Boardings and Alightings***

**Route 586 Stop Level Boardings and Alightings – Northbound**

	Route 586	
	Boardings	Alightings
Commerce St at S 10 <sup>th</sup> St	24	0
Commerce St at S 12 <sup>th</sup> St	0	1
Pacific Ave at S 14 <sup>th</sup> St	1	0
Pacific Ave at UWT Campus	8	0
S 24 <sup>th</sup> St at Pacific Ave	4	0
Tacoma Dome Station	183	41
NE 45 <sup>th</sup> St at Roosevelt Way NE	3	13
NE 45 <sup>th</sup> St at University Way NE	1	17
15 <sup>th</sup> Ave NE at NE 43 <sup>rd</sup> St	1	27
15 <sup>th</sup> Ave NE at NE Campus Pkwy	1	40
15 <sup>th</sup> Ave NE at NE 40 <sup>th</sup> St	0	22
15 <sup>th</sup> Ave NE at NE Pacific St	1	21
NE Pacific St at NE Pacific Pl	0	46

**Route 586 Stop Level Boardings and Alightings – Southbound**

	Route 586	
	Boardings	Alightings
NE 45 <sup>th</sup> St at University Way NE	44	0
15 <sup>th</sup> Ave NE at NE 43 <sup>rd</sup> St	31	1
15 <sup>th</sup> Ave NE at NE Campus Pkwy	67	1
15 <sup>th</sup> Ave NE at NE Pacific St	51	1
NE Pacific St at NE Pacific Pl	36	2
Tacoma Dome Station	8	189
Pacific Ave at S 24 <sup>th</sup> St	0	4
Pacific Ave at UWT Campus	0	10
Pacific Ave at S 15 <sup>th</sup> St	0	0
Commerce St at S 12 <sup>th</sup> St	0	5
Commerce St at S 10 <sup>th</sup> St	0	25

Stops that do not meet ST Express service standards are not identified since this service does not operate in both directions all day long.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 586	127% Well Above Average	127% Well Above Average	No weekend service	

**Service Change Concepts**

There are no changes planned for Route 586 in 2009.

For route information, please refer to the map in the Get Ready to Ride Transit Guide.

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

**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 Project”). 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 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.

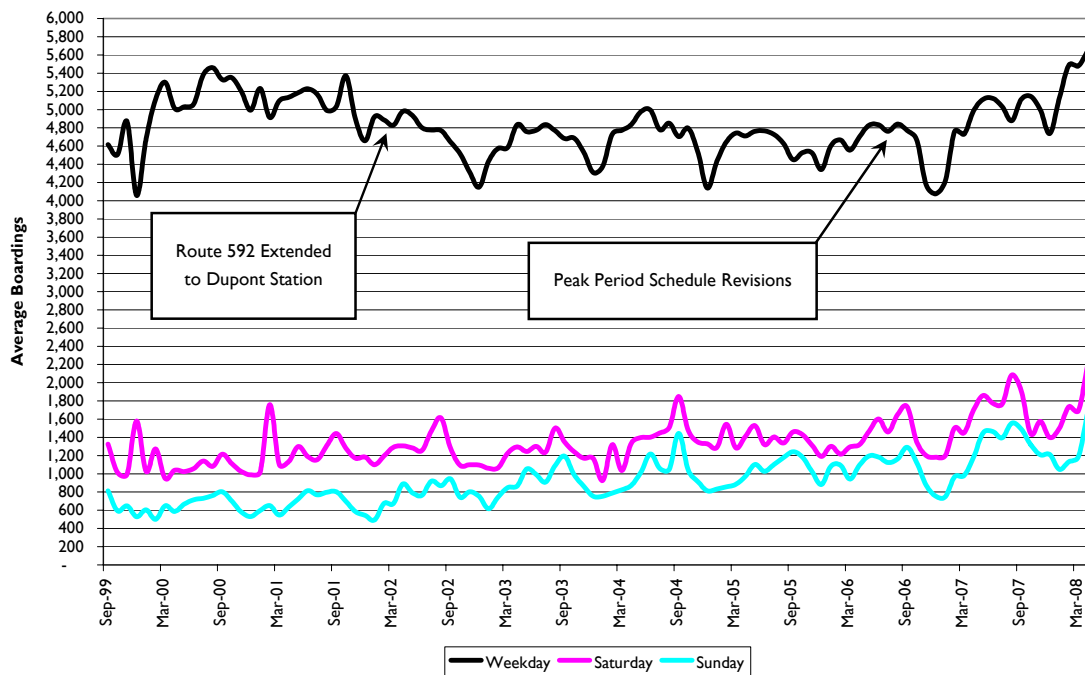
**Performance Assessment**

1st Quarter 2007	Overall	Weekday	Saturday	Sunday
Daily Boardings		4,559	1,505	825
Passengers per Trip	26.26	27.27	23.41	15.31
Passengers per Revenue Hour	16.56	16.97	16.23	10.55
Purchased Transportation Cost per Boarding	\$ 8.01	\$ 8.03	\$ 6.55	\$ 9.93
Route Assessment	3.33 Marginal	3.33 Marginal	2.67 Marginal	3.00 Marginal

1st Quarter 2008	Overall	Weekday	Saturday	Sunday
Daily Boardings		5,359	1,654	1,123
Passengers per Trip	28.56	29.94	24.33	16.51
Passengers per Revenue Hour	18.40	19.51	14.64	9.97
Purchased Transportation Cost per Boarding	\$7.53	\$7.36	\$7.60	\$11.20
Route Assessment	3.33 Marginal	3.33 Marginal	2.67 Marginal	3.67 Unsatisfactory

2007-2008 Comparison	Overall	Weekday	Saturday	Sunday
Daily Boardings		Up 18%	Up 10%	Up 36%
Passengers per Trip	Up 9%	Up 10%	Up 4%	Up 8%
Passengers per Revenue Hour	Up 11%	Up 15%	Down 10%	Down 5%
Purchased Transportation Cost per Boarding	Down 6%	Down 8%	Up 16%	Up 13%

**Routes 590/591/592/594/595 (Lakewood/Tacoma-Seattle)**



Ridership and productivity has improved since from 2007, with the exception of passengers per hour and cost per boarding during the weekends. The average daily boardings graph indicates that ridership during the entire week, and that weekday ridership levels have exceeded their previous highs in 2000-2001 before convenient Sounder service was available between Tacoma and 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 September 2007 service change.



**Passenger Activity by Time Period**

	AM Peak	Midday	PM Peak	Evening	Night
<b>Northbound</b>					
Pass/Trip	34.52	30.62	23.16	17.55	9.44
Pass/Rev Hr	24.91	24.78	17.37	13.76	7.55
<b>Southbound</b>					
Pass/Trip	20.78	31.23	30.85	28.34	17.30
Pass/Rev Hr	15.76	21.83	21.62	21.96	13.42

**Stop Level Boardings and Alightings**

**Route 590-595 Stop Level Boardings and Alightings – Northbound**

	Route 590		Route 591		Route 592		Route 594		Route 595		Total	
	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off
Purdy P&R									48	0	48	0
Kimball P&R									43	0	43	0
Narrows P&R									14	2	14	2
TCC TC									49	6	49	6
DuPont Sta					98	0					98	0
SR-512 P&R			94	0	216	11	178	0			488	11
S 10 <sup>th</sup> St	85	0					167	25			252	25
S 12 <sup>th</sup> St	7	0					12	1			19	1
S 14 <sup>th</sup> St	2	0					7	0			9	0
UWT Campus	15	0					48	4			63	4
S 24 <sup>th</sup> St	27	0					28	2			55	2
TDS	891	13	202	7			243	21			1,336	41
S Spokane	45	53	2	11	5	18	13	55	3	9	68	146
S Lander	5	30	1	7	0	14	3	18	0	4	9	73
S Holgate	7	24	1	6	2	10	6	23	1	9	17	72
Bswy/Ryl Bhm	2	30	1	14	0	7	3	23	0	5	6	79
4 <sup>th</sup> /Ryl Bhm	1	4	0	0	0	1	1	5	0	0	2	10
S Jackson	135	139	21	41	49	33	16	113	36	15	257	341
S Washington	2	10	1	2	0	1	0	4	0	1	3	18
Cherry St	13	307	2	76	2	105	12	98	2	51	31	637
Seneca St	5	224	0	50	1	48	3	72	1	27	10	421
Union St	5	262	1	70	4	79	3	214	2	52	15	677
6 <sup>th</sup> Ave	3	109	1	28	0	32	1	45	0	11	5	225
9 <sup>th</sup> Ave	0	45	0	14	0	19	0	19	0	9	0	106

Route 590-595 Stop Level Boardings and Alightings – Southbound

	Route 590		Route 591		Route 592		Route 594		Route 595		Total	
	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off
8 <sup>th</sup> Ave	2	0	0	0	1	0	1	0	0	0	4	0
4 <sup>th</sup> Ave	74	2	26	1	16	0	49	3	8	0	173	6
Stewart St	204	3	79	2	53	1	150	3	31	0	517	9
University St	234	8	90	1	59	1	191	7	39	1	613	18
Spring St	127	4	42	3	22	0	65	4	12	1	268	12
Cherry St	98	6	35	3	23	1	65	5	11	1	232	16
S Washington	58	22	23	8	18	6	71	10	10	2	180	48
Ryl Bhm	27	13	12	2	5	1	38	4	2	0	84	20
S Holgate	17	3	8	1	5	1	13	1	4	0	47	6
S Lander	23	1	8	1	10	1	13	1	5	0	59	4
S Spokane	52	79	27	56	23	34	48	38	6	0	156	207
TDS	21	722	7	175			33	334			61	1,231
S 24 <sup>th</sup> St	1	9					3	35			4	44
S 25 <sup>th</sup> St			3	27							3	27
UWT Campus	2	9					5	29			7	38
S 15 <sup>th</sup> St	0	10					0	4			0	14
S 12 <sup>th</sup> St	1	8					1	26			2	34
S 10 <sup>th</sup> St	0	43					13	113			13	156
SR-512 P&R			0	75	34	167	0	143			34	385
DuPont Sta			0	5	0	55					0	60
TCC TC									3	42	3	42
Narrows P&R									2	4	2	4
Kimball P&R									0	42	0	42
Purdy P&R									0	39	0	39

Stops shaded in pink do not meet the stop guidelines in the Board adopted 2006 Edition Service Standards and Performance Measures 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.

***Passenger Miles per Revenue Hour***

September 2007 Service Change	Overall	Weekday	Saturday	Sunday
Route 590	171% Well Above Average	171% Well Above Average	No weekend service	
Route 591	186% Well Above Average	186% Well Above Average	No weekend service	
Route 592	149% Well Above Average	149% Well Above Average	No weekend service	
Route 594	123% Above Average	130% Well Above Average	144% Well Above Average	146% Well Above Average
Route 595	168% Well Above Average	168% Well Above Average	No weekend service	
Routes 590-595 Combined	155% Well Above Average	156% Well Above Average	144% Well Above Average	146% Well Above Average

**Service Change Concepts**

With their long-haul characteristics and limited passenger turnover, these routes do not perform particularly well using Sound Transit’s productivity and effectiveness standards alone. However, their passenger miles per revenue hour is well above average for the system, as shown in the table above. In addition, many midday and Saturday trips have high load factors. The average load factor during peak periods is relatively low; indicating that some trip-level rationalization may be desirable. However, staff recommends postponing any changes until the performance data on new services to Lakewood Station is available.

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

No other changes to Route 590-595 services are planned for 2009.

**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. Each train arrival and departure connects with a trip on Route 599 to or from Lakewood Station.

**Performance Assessment**

This route did not operate during the 1<sup>st</sup> quarter of 2008.

**Service Change Concepts**

Sound Transit will add two trips and make major schedule adjustments in June 2009 when Sounder implements the final two trips.

For route information, please refer to the map in the Get Ready to Ride Transit Guide.

**Route 599/South Line Draft Proposed Schedule – June 2009  
(Subject to change)**

**Southbound**

Train No.	1501	1503	1505	1507	1509	1511	1513	1515	1517
Seattle	6:10	6:50	15:15	15:50	16:20	16:45	17:12	17:40	18:15
Tukwila	6:22	7:02	15:27	16:02	16:32	16:57	17:24	17:52	18:27
Kent	6:29	7:09	15:34	16:09	16:39	17:04	17:32	17:59	18:34
Auburn	6:36	7:16	15:41	16:16	16:46	17:11	17:39	18:06	18:41
Sumner	6:45	7:25	15:50	16:25	16:56	17:21	17:49	18:16	18:50
Puyallup	6:49	7:29	15:54	16:29	17:00	17:25	17:53	18:20	18:54
Tacoma	7:08	7:48	16:14	16:49	17:19	17:44	18:11	18:39	19:14
<b>Connecting Route 599 Trips to Lakewood Station</b>									
Tacoma	7:11	7:51	16:17	16:52	17:22	17:47	18:14	18:42	19:17
Lakewood	7:29	8:09	16:35	17:10	17:40	18:05	18:32	19:00	19:35

**Northbound**

<b>Connecting Route 599 Trips to Tacoma Dome Station</b>									
Lakewood	4:30	5:10	5:35	6:00	6:25	6:55	7:35	16:00	16:35
Tacoma	4:48	5:28	5:53	6:18	6:43	7:13	7:53	16:18	16:53
Train No.	1500	1502	1504	1506	1508	1510	1512	1514	1516
Tacoma	4:55	5:35	6:00	6:25	6:50	7:20	8:00	16:25	17:00
Puyallup	5:07	5:47	6:12	6:37	7:02	7:32	8:12	16:37	17:12
Sumner	5:12	5:52	6:17	6:42	7:07	7:37	8:17	16:42	17:17
Auburn	5:20	6:01	6:26	6:51	7:16	7:45	8:25	16:50	17:25
Kent	5:27	6:09	6:34	6:59	7:24	7:52	8:32	16:57	17:32
Tukwila	5:34	6:16	6:41	7:06	7:31	7:59	8:39	17:04	17:39
Seattle	5:54	6:34	6:59	7:24	7:49	8:19	8:59	17:23	17:58

# Chapter 3: Preliminary Service Plan 2009-2013

## Link Light Rail

As described in Chapter 2, Link light rail is planned for startup in mid-2009 between Westlake Station and the Tukwila International Blvd Station, with service extended south 1.7 miles to the SeaTac/Airport Station by the end of 2009. Service will initially be provided with 2-car trains. For purposes of preliminary planning, it is assumed that the start-up level of service will continue through 2014. Once initial U-Link construction is completed near the Pine Street layover facility, additional capacity can be provided through the use of 3-car trains, if needed. Also, additional trains may be operated for large-scale public events.

### Initial Link light rail service schedule for 2010 – 2014 *(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 8:30 a.m.	6 to 8
Base	8:30 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

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

Sound Transit will have a paratransit obligation along the Central Link line when it begins operation. At this time, staff will work with King County Metro on developing an implementation plan for this service.

**Tacoma Link**

Tacoma Link regular service levels are expected to remain stable between 2010 and 2014. Large-scale special events, such as Tacoma Dome and Convention Center activities, may result in the need for additional service (see Tacoma Link section in Chapter 2).

**Tacoma Link Regular Service Schedule 2010 – 2014**

<b>Day</b>	<b>Time</b>	<b>Frequency</b>
Monday through Friday	5:20 a.m. – 7:00 a.m.	20 min
	7:00 a.m. – 8:00 p.m.	10 min
	8:00 p.m. – 10:00 p.m.	20 min
Saturday	8:00 a.m. - 10:00 p.m.	10 min
Sundays and Holidays	10:00 a.m. – 6:00 p.m.	20 min

## **Souder Commuter Rail**

### **North Line**

Service levels are expected to remain unchanged on the North Line through 2014. 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 Souder service to South Tacoma and Lakewood are expected to be complete in 2012. Since the Tacoma-Lakewood segment of the South Line is largely single-track, it will be a challenge to operate nine daily round trips to Lakewood without a significant change to existing schedules. Staff is evaluating a potential operating schedule shown below. This schedule would start or end some trains at Tacoma Dome Station and operate connecting bus service between Lakewood and Tacoma during the times when Lakewood service would not operate. Existing departure times between Seattle and Tacoma are kept largely intact and the service can be operated with the current five train sets assigned to the line. Sound Transit staff will continue to work closely with BNSF, WSDOT and other stakeholders to develop an optimum schedule for South Line service with the Lakewood extension in place.

### South Line: Draft Proposed Schedule with Lakewood Extension

(Extending existing schedule with Tacoma Dome Station turnbacks)

#### Northbound

Lakewood Station	South Tacoma Station	Tacoma Dome Station	Puyallup Station	Sumner Station	Auburn Station	Kent Station	Tukwila Station	King Street Station
4:47	4:51	5:00	5:12	5:17	5:26	5:34	5:41	5:57
5:27	5:31	5:40	5:52	5:57	6:06	6:14	6:21	6:37
5:57	6:01	6:10	6:22	6:27	6:36	6:44	6:51	7:07
6:17	6:21	6:30	6:42	6:47	6:56	7:04	7:11	7:27
6:37	6:41	6:50	7:02	7:07	7:16	7:24	7:31	7:47
6:54	----	7:12	Sounder Bus Connector					
----	6:57	7:12						
----	----	7:20	7:32	7:37	7:46	7:54	8:01	8:17
7:34	----	7:52	Sounder Bus Connector					
----	7:37	7:52						
----	----	8:00	8:12	8:17	8:26	8:34	8:41	8:57
----	----	16:30	16:42	16:47	16:56	17:04	17:11	17:27
----	----	17:05	17:17	17:22	17:31	17:39	17:46	18:02

#### Southbound

King Street Station	Tukwila Station	Kent Station	Auburn Station	Sumner Station	Puyallup Station	Tacoma Dome Station	South Tacoma Station	Lakewood Station
6:10	6:25	6:32	6:39	6:49	6:54	7:07	----	----
6:50	7:05	7:12	7:19	7:29	7:34	7:47	----	----
15:25	15:40	15:47	15:54	16:04	16:09	16:22	----	----
Sounder Bus Connector						16:25	16:40	----
						16:25	----	16:48
16:00	16:15	16:22	16:29	16:39	16:44	16:57	----	----
Sounder Bus Connector						17:00	17:15	----
						17:00	----	17:23
16:25	16:40	16:47	16:54	17:04	17:09	17:22	17:31	17:37
16:50	17:05	17:12	17:19	17:29	17:34	17:47	17:56	18:02
17:10	17:25	17:32	17:39	17:49	17:54	18:07	18:16	18:22
17:45	18:00	18:07	18:14	18:24	18:29	18:42	18:51	18:57
18:20	18:35	18:42	18:49	18:59	19:04	19:17	19:26	19:32



## ST Express Bus

Preliminary ST Express service changes for 2010 through 2014 are described below, based on the completion of remaining *Sound Move* capital projects, planned changes to partner agency service and projected operations and maintenance funding available in each subarea. These proposals are provided for planning purposes only and are subject to change.

### 2010

- Implement non-stop express bus service between Federal Way and downtown Seattle during off-peak hours, replacing King County Metro Route 194 service.
- Modify Lakewood-SeaTac bus route (574) to connect with Link at SeaTac/Airport Station and increase service levels to mitigate deletion of King County Metro Route 194 between Federal Way and the airport.

### 2011

- Revise West Seattle-Bellevue route (560) to avoid duplication with King County Metro's planned West Seattle Rapid Ride service.
- Everett-Seattle (Route 510) and Ash Way-Seattle (Route 511) modified to serve new Mountlake Terrace Freeway Station.

### 2012-2013

- Sounder commuter rail service extended from Tacoma Dome Station to South Tacoma and Lakewood; temporary bus routes 593 and 599 discontinued.
- Coordinated improvements to East King County service with the start-up of King County Metro's Bellevue-Redmond "Rapid Ride," which could include enhanced service on ST Express Route 550 (Bellevue-Seattle).

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 30-minute frequency weekdays until 10:30 p.m. and weekends until 8:30 p.m. Improve Sunday service to 30-minute frequency
Route 511	Extend span to better match Link light rail span Extend 30-minute frequency weekdays until 10:30 p.m. and weekends until 8:30 p.m. Improve weekday service to 15-minute frequency weekdays from 6:00 a.m. to 8:00 p.m.
Route 513	Extend span to better match Link light rail span Add weekday trips between Eastmont and downtown Seattle
Route 522	Extend 30-minute frequency in the evenings Add peak trips to complete 15-minute frequency
Route 532	Extend span to better match Link light rail span Improve peak-hour, peak direction frequency to every 10 to 15-minutes

Route 545	Depending on the SR-520 bridge option that is built, add trips to implement 5 to 6 minute service during the peak period or if Montlake Freeway Station closes, implement Redmond-UW route and/or add trips to Route 555/556
Route 550	Extend span to better match Link light rail span Extend 15-minute frequency weekdays until 8:00 p.m. Add peak period trips to better coordinate with Link light rail schedule in downtown Seattle transit tunnel Improve Saturday service to 15-minute frequency from 6:00 a.m. to 6:00 p.m.
Route 554	Extend span to better match Link light rail span Extend 30-minute frequency at all times Improve weekday service to 15-minute frequency weekdays from 6:00 a.m. to 8:00 p.m.
Route 556	Improve peak-hour, peak direction frequency to every 7½-minutes Add midday service on weekdays
Route 564/565	Add trips in the afternoon peak period from Overlake Transit Center to Kent Station
Route 574	Improve weekday service to 15-minute frequency
Route 577	Improve peak-hour, peak-direction frequency to every 7½-minutes
Routes 590-594	Improve midday service to every 15-minutes
Sounder Shadow	Provide 30-minute bus service along Sounder's South Line during off-peak periods and weekends. If this option is pursued, then examine possibility of combining Route 564 and 565 into one route that operates between Kent Station and Overlake Transit Center.

## Upcoming Issues

### **BUS FLEET AND BASE CAPACITY ISSUES**

Most bus manufacturers no longer produce a standard 40-foot transit coach that seats 42 passengers. Currently, all but 21 of Sound Transit's 143 standard-sized buses are 42-seat models. The equivalent low-floor models that are produced seat 37 passengers, and the low-floor buses also have less room for standing passengers. At this time, there is only one United States manufacturer (NABI) that produces a standard floor bus with up to 42 seats. Staff is considering the replacement of older 40-foot buses with high-capacity vehicles as Sound Transit retires those vehicles (high-capacity buses have 57 or more seats). These fleet additions and changes in fleet types will require that staff address base and maintenance capacity issues with the transit partner agencies during 2009. Discussions are underway with the partners to determine near-term base needs and several alternatives are being developed and evaluated.

### **SPECIAL NEEDS REGIONAL COORDINATION**

Sound Transit will continue to formulate and update each Annual Sound Transit Accessibility Plan and to implement appropriate projects identified by the Regional Special Needs Transportation Coordination Plan.

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

### **Assumptions**

Estimated ridership, fare revenue and operations and maintenance costs assume that Sound Transit's Phase I projects and services are fully implemented by the end of 2012, except for University Link. For planning purposes, the projections do not assume a Phase II Sound Transit program ("ST2"). Once Phase 1 services are fully implemented, service levels and ridership are forecast to grow at a modest rate each year based on an expanding regional economy, but no new major service initiatives are assumed.

### **Link Light Rail**

#### **Tacoma Link**

##### **Ridership Assumptions**

Short-term ridership estimates through 2014 shown here are based on historical system performance. No fares are collected on Tacoma Link so there is no fare revenue.

##### **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**

There will only be six months of operation in 2009 as the system is projected to start passenger service in July 2009. Ridership information for the segment is provided by Link Department staff.

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

Fare revenue projections are based on ridership estimates.

#### **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.

## **Sounder Commuter Rail**

### **Ridership Assumptions**

It is assumed that Sounder ridership will continue to grow as additional service is implemented, and that by 2012 ridership will be 4.2 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
- Park-and-ride capacity constraints

On the South Line, planned expansion of the Tacoma storage yard in 2009 allows 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 2012.

### **Fare Revenue Assumptions**

Fare revenue is tied to the increase in boardings. After 2008, the projections assume that the average fare per boarding (AFB) will increase at the estimated rate of inflation.

### **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. Sounder operating and maintenance costs are subcategorized in Appendix Table A-6 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**

### **Ridership Assumptions**

The short-term (through 2014) 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.

## **Operating & Maintenance Cost Assumptions**

### **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-7. They have been updated since the Draft 2008 SIP was published to include negotiated costs for 2008 and preliminary costs for 2009 and 2010 as estimated by Sound Transit's partner agencies, and further updated to reflect current trends, such as the recent large spike in fuel costs.

### **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 past, the SIP includes a reserve fund for Bus Contingency Hours for each subarea, shown as projected platform hours in Appendix Table A-3 and as projected dollars in Appendix Table A-7. These hours are used to "maintain the schedule" and can be used for a number of purposes:

- Additional trips to handle growth in ridership
- Temporary service enhancements to handle passenger loads for special events
- Additional time that may be needed due to increases in congestion
- Additional time for routing changes or additional stops
- Deferred *Sound Move* routes, or extensions of routes
- Earlier phase-in of some service
- Cost adjustments in service agreements.

The proportion of projected Bus Contingency Hours varies by subarea. Since 2006, the additional hours attributable to general system growth are included in Bus Contingency.

In 2009, projected increases in operating costs and lower tax revenue have significantly reduced the amount of Bus Contingency hours available in all subareas.

## **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 \$1.50 for one zone, \$2.50 for two zones, and \$3.00 for three zones. Corresponding monthly pass prices are \$54.00, \$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 2009, the average fare per boarding is estimated at approximately \$1.56.

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 \$3.28.

Central Link fares will be set by the Sound Transit Board in early 2009. 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 collected.

### 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. Estimates beyond 2008 include Central Link. Central Link ridership numbers were provided by the Link Capital Department.

	Actual	Estimated						
Tacoma Line	2007	2008	2009	2010	2011	2012	2013	2014
<b>Weekday Boardings</b>	3,056	2,925	2,851	2,867	2,880	2,893	2,904	2,914
<b>Annual Boardings</b>	919,057	0.9 mil	0.9 mil	0.9 mil	0.9 mil	0.9 mil	0.9 mil	0.9 mil
Central Line	2007	2008	2009	2010	2011	2012	2013	2014
<b>Weekday Boardings</b>			15,900*	26,600	33,800	36,400	37,500	38,600
<b>Annual Boardings</b>			2.4 mil	8.1 mil	10.3 mil	11.1 mil	11.4 mil	11.8 mil

\* Average over first six-months of operation

### Sounder Commuter Rail

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

- One more year of operating experience
- Adjusted capital improvement implementation schedule
- Park-and-ride capacity constraints

Ridership estimates were modified in the 2008 Service Implementation Plan based on previous experience when adding service on Sounder. However, ridership increased faster than anticipated due to higher gas prices and increasing congestion on the expressways. Assumptions were revised concerning implementation of additional service and the extension to Lakewood is assumed to be deferred to 2012.

	Actual	Estimated Boardings						
	2007	2008	2009	2010	2011	2012	2013	2014
<b>Weekday</b>	8,057	10,215	11,759	13,513	15,190	15,869	15,819	15,741
<b>Annual</b>	2,156,524	2.7 mil	3.1 mil	3.6 mil	3.6 mil	3.8 mil	4.2 mil	4.2 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 shifting less productive hours into more productive service

	Actual	Estimated Boardings						
	2007	2008	2009	2010	2011	2012	2013	2014
Weekday	36,026	41,573	44,208	44,634	46,196	46,402	46,587	46,756
Annual	10,685,893	12.4 mil	13.2 mil	13.3 mil	13.4 mil	13.5 mil	13.6 mil	13.6 mil

### Annual Projections – Fare Revenue (millions)

Year	Link	Sounder	ST Express	Total
2007 actual		\$6.6	\$15.4	\$22.0
2008 est.		\$6.1	\$14.4	\$20.5
2009 est.	\$3.1	\$10.2	\$20.5	\$33.8
2010 est.	\$10.5	\$12.7	\$22.4	\$45.6
2011 est.	\$13.9	\$14.2	\$22.5	\$50.6
2012 est.	\$15.0	\$15.1	\$23.5	\$53.6
2013 est.	\$16.6	\$15.4	\$24.4	\$56.4
2014 est.	\$17.2	\$15.7	\$25.4	\$58.4



# APPENDIX A: Tables

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

Route Description	Annual Vehicle Miles							
	2007	2008	2009	2010	2011	2012	2013	2014
	Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
<b>Snohomish</b>								
Central Link	0	0	0	0	0	0	0	0
<b>Subarea Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>North King</b>								
Central Link	0	0	1,029,534	2,059,069	2,059,069	2,059,069	2,059,069	2,059,069
<b>Subarea Total</b>	<b>0</b>	<b>0</b>	<b>1,029,534</b>	<b>2,059,069</b>	<b>2,059,069</b>	<b>2,059,069</b>	<b>2,059,069</b>	<b>2,059,069</b>
<b>East King</b>								
Central Link	0	0	0	0	0	0	0	0
<b>Subarea Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>South King County</b>								
Central Link	0	0	273,674	547,348	547,348	547,348	547,348	547,348
<b>Subarea Total</b>	<b>0</b>	<b>0</b>	<b>273,674</b>	<b>547,348</b>	<b>547,348</b>	<b>547,348</b>	<b>547,348</b>	<b>547,348</b>
<b>Pierce County</b>								
Tacoma Link	97,369	97,442	97,442	97,442	97,442	97,442	97,442	97,442
<b>Subarea Total</b>	<b>97,369</b>	<b>97,442</b>	<b>97,442</b>	<b>97,442</b>	<b>97,442</b>	<b>97,442</b>	<b>97,442</b>	<b>97,442</b>
<b>LINK TOTAL</b>	<b>97,369</b>	<b>97,442</b>	<b>1,400,650</b>	<b>2,703,859</b>	<b>2,703,859</b>	<b>2,703,859</b>	<b>2,703,859</b>	<b>2,703,859</b>

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

Route Description	Annual Vehicle Miles							
	2007	2008	2009	2010	2011	2012	2013	2014
	Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
<b>Snohomish</b>								
Everett/Seattle	41,293	61,003	73,564	73,286	73,564	73,564	73,564	73,564
<b>Subarea Total</b>	<b>41,293</b>	<b>61,003</b>	<b>73,564</b>	<b>73,286</b>	<b>73,564</b>	<b>73,564</b>	<b>73,564</b>	<b>73,564</b>
<b>South King County</b>								
Lakewood/Seattle	52,164	78,256	101,941	101,550	101,981	102,091	102,091	102,091
<b>Subarea Total</b>	<b>52,164</b>	<b>78,256</b>	<b>101,941</b>	<b>101,550</b>	<b>101,981</b>	<b>102,091</b>	<b>102,091</b>	<b>102,091</b>
<b>Pierce County</b>								
Lakewood/Seattle	42,679	64,131	83,541	83,221	93,810	122,331	122,331	122,331
<b>Subarea Total</b>	<b>42,679</b>	<b>64,131</b>	<b>83,541</b>	<b>83,221</b>	<b>93,810</b>	<b>122,331</b>	<b>122,331</b>	<b>122,331</b>
<b>LINK TOTAL</b>	<b>136,136</b>	<b>203,390</b>	<b>259,046</b>	<b>258,057</b>	<b>269,355</b>	<b>297,986</b>	<b>297,986</b>	<b>297,986</b>

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

Route	Route Description	Annual Platform Hours							
		2007	2008	2009	2010	2011	2012	2013	2014
		Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
<b>Snohomish</b>									
510, 513	Everett/Seattle	42,758	43,876	48,838	48,695	48,838	48,895	48,838	48,838
511	Lynnwood/Seattle	32,972	33,626	34,410	34,885	34,913	34,989	34,913	34,913
532	Everett/Bellevue	7,750	7,759	8,692	8,658	8,692	8,692	8,692	8,692
535	Lynnwood/Bellevue	8,773	9,228	10,112	10,097	10,112	10,127	10,112	10,112
	<b>Subarea Total</b>	<b>92,253</b>	<b>94,490</b>	<b>102,051</b>	<b>102,335</b>	<b>102,554</b>	<b>102,704</b>	<b>102,554</b>	<b>102,554</b>

<b>East King</b>									
532	Everett/Bellevue	4,955	5,575	6,832	6,805	6,832	6,832	6,832	6,832
535	Lynnwood/Bellevue	14,314	14,517	15,836	15,813	15,836	15,860	15,836	15,836
522	Woodinville/Seattle	44,583	45,667	48,895	48,843	48,895	48,993	48,895	48,895
540	Redmond/U. District	26,674	20,429	20,058	19,979	20,058	20,137	20,058	20,058
545	Redmond/Seattle	56,461	68,940	69,808	69,646	69,808	69,885	69,808	69,808
550	Bellevue/Seattle	57,233	52,305	52,717	52,626	52,717	52,799	52,717	52,717
554	Issaquah/Seattle	34,462	36,855	40,368	40,313	40,368	40,444	40,368	40,368
555	Northgate/Issaquah	11,467	12,227	12,179	12,131	12,179	12,179	12,179	12,179
560	West Seattle/Airport/Bellevue	19,182	19,036	19,016	18,752	18,778	18,811	18,778	18,778
564	South Hill/Overlake	11,333	11,317	11,272	11,228	11,272	11,272	11,272	11,272
565	Federal Way/Overlake	10,986	10,893	7,879	6,520	6,546	6,546	6,546	6,546
	<b>Subarea Total</b>	<b>291,649</b>	<b>297,761</b>	<b>304,861</b>	<b>302,656</b>	<b>303,289</b>	<b>303,759</b>	<b>303,289</b>	<b>303,289</b>

<b>South King County</b>									
560	West Seattle/Airport/Bellevue	22,518	22,662	22,677	22,362	22,393	22,432	22,393	22,393
564	South Hill/Overlake	9,015	9,002	8,967	8,931	8,967	8,967	8,967	8,967
565	Federal Way/Overlake	10,555	10,466	7,570	6,264	6,289	6,289	6,289	6,289
574	Lakewood/Sea-Tac	18,458	18,882	19,179	19,171	19,179	19,226	19,179	19,179
577	Federal Way/Seattle	9,646	11,054	11,509	11,464	11,509	11,509	11,509	11,509
	<b>Subarea Total</b>	<b>70,191</b>	<b>72,065</b>	<b>69,902</b>	<b>68,193</b>	<b>68,337</b>	<b>68,423</b>	<b>68,337</b>	<b>68,337</b>

<b>Pierce County</b>									
564	South Hill/Overlake	5,409	5,401	5,380	5,359	5,380	5,380	5,380	5,380
574	Lakewood/Sea-Tac	15,572	15,930	16,181	16,174	16,181	16,220	16,181	16,181
582	Bonney Lake/Tacoma	8,156	7,905	6,943	6,915	6,943	6,943	6,943	6,943
586	Tacoma/U. District	14,317	14,450	14,351	14,450	14,450	14,450	14,450	14,450
590-595	Lakewood/Tacoma/Seattle	112,553	115,377	121,116	121,235	121,541	121,661	121,541	121,541
599	Lakewood Sounder Connector	0	1,137	4,068	4,052	4,068	2,979	0	0
	<b>Subarea Total</b>	<b>156,007</b>	<b>160,201</b>	<b>168,039</b>	<b>168,186</b>	<b>168,563</b>	<b>167,633</b>	<b>164,494</b>	<b>164,494</b>

<b>ST EXPRESS TOTAL</b>		<b>610,100</b>	<b>624,517</b>	<b>644,854</b>	<b>641,369</b>	<b>642,743</b>	<b>642,519</b>	<b>638,675</b>	<b>638,674</b>
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**Table A-4: Subarea Summary Operating & Maintenance Costs – Link Light Rail**

	Actual 2007	Estimated 2008	Estimated 2009	Estimated 2010	Estimated 2011	Estimated 2012	Estimated 2013	Estimated 2014
<b>North King County</b>								
Purchased Transportation			\$7,652,654	\$11,961,242	\$12,380,437	\$12,819,513	\$13,269,736	\$13,735,700
Program Costs			\$7,201,788	\$12,147,151	\$11,905,560	\$12,388,172	\$12,760,572	\$13,208,539
Contingency			\$741,613	\$1,532,170	\$2,253,031	\$2,332,923	\$2,414,834	\$2,499,609
<b>Subarea Total</b>			<b>\$15,596,054</b>	<b>\$25,640,563</b>	<b>\$26,539,027</b>	<b>\$27,540,607</b>	<b>\$28,445,142</b>	<b>\$29,443,848</b>
<b>Proposed 2009 Budget</b>			<b>\$15,596,054</b>	<b>\$25,640,563</b>	<b>\$26,539,027</b>	<b>\$27,540,607</b>	<b>\$28,445,142</b>	<b>\$29,443,848</b>
<b>South King County</b>								
Purchased Transportation			\$3,601,249	\$7,829,033	\$8,103,410	\$8,390,799	\$8,685,486	\$8,990,475
Program Costs			\$3,356,445	\$8,232,551	\$7,792,587	\$8,108,472	\$8,352,221	\$8,645,430
Contingency			\$348,994	\$721,021	\$1,474,684	\$1,526,976	\$1,580,590	\$1,636,077
<b>Subarea Total</b>			<b>\$7,306,688</b>	<b>\$16,782,605</b>	<b>\$17,370,680</b>	<b>\$18,026,248</b>	<b>\$18,618,296</b>	<b>\$19,271,983</b>
<b>Proposed 2009 Budget</b>			<b>\$ 7,306,688</b>	<b>\$16,782,605</b>	<b>\$17,370,680</b>	<b>\$18,026,248</b>	<b>\$18,618,296</b>	<b>\$19,271,983</b>
<b>Pierce County</b>								
Purchased Transportation								
Program Costs	\$3,153,968	\$3,634,918	\$4,426,894	\$4,730,832	\$4,818,032	\$5,024,759	\$5,202,938	\$5,352,815
Contingency		\$180,655	\$190,510	\$232,342	\$236,883	\$247,407	\$256,510	\$264,204
<b>Subarea Total</b>	<b>\$3,153,968</b>	<b>\$3,815,573</b>	<b>\$4,617,404</b>	<b>\$4,963,174</b>	<b>\$5,054,914</b>	<b>\$5,272,165</b>	<b>\$5,459,448</b>	<b>\$5,617,019</b>
<b>Proposed 2009 Budget</b>	<b>\$ 3,153,968</b>	<b>\$ 3,815,573</b>	<b>\$4,617,404</b>	<b>\$4,963,174</b>	<b>\$5,054,914</b>	<b>\$5,272,165</b>	<b>\$5,459,44</b>	<b>\$5,617,019</b>
<b>Link Total</b>								
Purchased Transportation			\$11,253,902	\$19,790,275	\$20,483,846	\$21,210,312	\$21,955,222	\$22,726,175
Program Costs	\$3,153,968	\$3,634,918	\$14,985,127	\$25,110,534	\$24,516,179	\$25,521,403	\$26,315,731	\$27,206,784
Contingency		\$180,655	\$1,281,117	\$2,485,533	\$3,964,597	\$4,107,306	\$4,251,934	\$4,399,890
<b>Link Total</b>	<b>\$3,153,968</b>	<b>\$3,815,573</b>	<b>\$27,520,146</b>	<b>\$47,386,342</b>	<b>\$48,964,622</b>	<b>\$50,839,020</b>	<b>\$52,522,886</b>	<b>\$54,332,850</b>
<b>Proposed 2009 Budget</b>	<b>\$3,153,968</b>	<b>\$3,815,573</b>	<b>\$27,520,146</b>	<b>\$47,386,342</b>	<b>\$48,964,622</b>	<b>\$50,839,020</b>	<b>\$52,522,886</b>	<b>\$54,332,850</b>

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

	<b>Actual 2007</b>	<b>Estimated 2008</b>	<b>Estimated 2009</b>	<b>Estimated 2010</b>	<b>Estimated 2011</b>	<b>Estimated 2012</b>	<b>Estimated 2013</b>	<b>Estimated 2014</b>
<b>Snohomish</b>								
Purchased Transportation	\$2,052,635	\$2,588,443	\$2,736,205	\$2,861,852	\$2,948,785	\$2,991,915	\$3,083,015	\$2,930,719
Program Costs	\$5,099,526	\$5,003,557	\$5,721,364	\$5,625,222	\$5,981,065	\$5,965,186	\$5,518,063	\$5,704,377
Contingency		\$230,745	\$254,019	\$301,516	\$315,775	\$321,944	\$409,684	\$410,364
<b>Subarea Total</b>	<b>\$7,152,161</b>	<b>\$7,822,744</b>	<b>\$8,711,588</b>	<b>\$8,788,590</b>	<b>\$9,245,625</b>	<b>\$9,279,045</b>	<b>\$9,010,761</b>	<b>\$9,045,459</b>
<b>Proposed 2009 Budget</b>	<b>\$7,152,161</b>	<b>\$7,822,744</b>	<b>\$8,711,588</b>	<b>\$8,788,590</b>	<b>\$9,245,625</b>	<b>\$9,279,045</b>	<b>\$9,010,761</b>	<b>\$9,045,459</b>
<b>South King County</b>								
Purchased Transportation	\$2,646,217	\$2,668,868	\$2,491,797	\$2,673,113	\$2,752,376	\$2,812,731	\$3,254,704	\$3,925,439
Program Costs	\$9,518,653	\$9,858,989	\$13,170,199	\$12,273,375	\$12,734,791	\$12,534,025	\$11,777,074	\$12,163,470
Contingency		\$379,078	\$254,019	\$339,750	\$315,775	\$321,648	\$200,276	\$200,276
<b>Subarea Total</b>	<b>\$12,164,870</b>	<b>\$12,906,935</b>	<b>\$15,916,015</b>	<b>\$15,286,238</b>	<b>\$15,802,942</b>	<b>\$15,668,404</b>	<b>\$15,232,055</b>	<b>\$16,289,184</b>
<b>Proposed 2009 Budget</b>	<b>\$12,164,870</b>	<b>\$12,906,935</b>	<b>\$15,916,015</b>	<b>\$15,286,238</b>	<b>\$15,802,942</b>	<b>\$15,668,404</b>	<b>\$15,232,055</b>	<b>\$16,289,184</b>
<b>Pierce County</b>								
Purchased Transportation	\$15,015,596	\$15,960,422	\$18,547,193	\$19,399,619	\$20,319,134	\$21,116,864	\$21,655,781	\$22,630,291
Program Costs	\$1,881,418	\$2,226,387	\$2,414,753	\$2,944,903	\$2,961,094	\$3,073,869	\$3,198,828	\$3,329,899
Contingency		\$482,788	\$1,257,657	\$1,553,372	\$1,860,420	\$1,934,584	\$1,437,390	\$1,500,746
<b>Subarea Total</b>	<b>\$16,897,014</b>	<b>\$18,669,597</b>	<b>\$22,219,603</b>	<b>\$23,897,894</b>	<b>\$25,140,648</b>	<b>\$26,125,317</b>	<b>\$26,291,999</b>	<b>\$27,460,936</b>
<b>Proposed 2009 Budget</b>	<b>\$16,897,014</b>	<b>\$18,669,597</b>	<b>\$22,219,603</b>	<b>\$23,897,894</b>	<b>\$25,140,648</b>	<b>\$26,125,317</b>	<b>\$26,291,999</b>	<b>\$27,460,936</b>
<b>Sounder Total</b>								
Purchased Transportation	\$19,714,448	\$21,217,732	\$23,775,194	\$24,934,583	\$26,020,296	\$26,921,510	\$27,993,500	\$29,486,448
Program Costs	\$16,499,597	\$17,088,933	\$21,306,316	\$20,843,501	\$21,676,950	\$21,573,080	\$20,493,966	\$21,197,745
Contingency		\$1,092,611	\$1,765,696	\$2,194,639	\$2,491,969	\$2,578,176	\$2,047,350	\$2,111,386
<b>Sounder Total</b>	<b>\$36,214,045</b>	<b>\$39,399,276</b>	<b>\$46,847,206</b>	<b>\$47,972,723</b>	<b>\$50,189,215</b>	<b>\$51,072,766</b>	<b>\$50,534,815</b>	<b>\$52,795,580</b>
<b>Proposed 2009 Budget</b>	<b>\$36,214,045</b>	<b>\$39,399,276</b>	<b>\$46,847,206</b>	<b>\$47,972,723</b>	<b>\$50,189,215</b>	<b>\$51,072,766</b>	<b>\$50,534,815</b>	<b>\$52,795,580</b>

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

	Actual 2007	Estimated 2008	Estimated 2009	Estimated 2010	Estimated 2011	Estimated 2012	Estimated 2013	Estimated 2014
<b>Snohomish</b>								
Purchased Transportation	\$7,943,489	\$8,830,111	\$10,150,040	\$10,636,229	\$11,138,718	\$11,656,968	\$12,163,759	\$12,711,100
Program Costs	\$1,105,427	\$1,250,541	\$1,405,014	\$1,548,517	\$1,678,949	\$1,749,637	\$1,822,312	\$1,896,978
Bus Contingency		\$86,068	\$346,652	\$487,390	\$640,884	\$670,330	\$699,304	\$730,404
<b>Subarea Total</b>	<b>\$9,048,916</b>	<b>\$10,166,720</b>	<b>\$11,901,706</b>	<b>\$12,672,136</b>	<b>\$13,458,551</b>	<b>\$14,076,935</b>	<b>\$14,685,375</b>	<b>\$15,338,482</b>
<b>Proposed 2009 Budget</b>	<b>\$9,048,916</b>	<b>\$10,166,720</b>	<b>\$11,901,706</b>	<b>\$12,672,136</b>	<b>\$13,458,551</b>	<b>\$14,076,935</b>	<b>\$14,685,375</b>	<b>\$15,338,482</b>
<b>East King</b>								
Purchased Transportation	\$32,486,814	\$34,059,392	\$38,846,839	\$40,477,328	\$42,388,315	\$44,363,753	\$46,289,100	\$48,372,110
Program Costs	\$3,368,268	\$8,035,074	\$6,796,192	\$6,765,478	\$7,054,756	\$7,258,224	\$7,463,396	\$7,678,662
Bus Contingency		\$187,991	\$976,608	\$1,291,746	\$2,064,422	\$1,919,232	\$1,995,975	\$2,201,823
<b>Subarea Total</b>	<b>\$35,855,082</b>	<b>\$42,282,457</b>	<b>\$46,619,639</b>	<b>\$48,534,552</b>	<b>\$51,507,493</b>	<b>\$53,541,209</b>	<b>\$55,748,471</b>	<b>\$58,252,595</b>
<b>Proposed 2009 Budget</b>	<b>\$35,855,082</b>	<b>\$42,282,457</b>	<b>\$46,619,639</b>	<b>\$48,534,552</b>	<b>\$51,507,493</b>	<b>\$53,541,209</b>	<b>\$55,748,471</b>	<b>\$58,252,595</b>
<b>South King County</b>								
Purchased Transportation	\$7,640,439	\$8,034,420	\$8,983,067	\$9,327,849	\$9,769,899	\$10,221,239	\$10,668,974	\$11,149,078
Program Costs	\$1,100,471	\$989,450	\$1,617,166	\$1,282,105	\$1,271,792	\$1,324,851	\$1,379,13	\$1,435,645
Bus Contingency		\$125,807						
<b>Subarea Total</b>	<b>\$8,740,910</b>	<b>\$9,149,677</b>	<b>\$10,600,233</b>	<b>\$10,609,954</b>	<b>\$11,041,691</b>	<b>\$11,546,090</b>	<b>\$12,048,109</b>	<b>\$12,584,723</b>
<b>Proposed 2009 Budget</b>	<b>\$8,740,910</b>	<b>\$9,149,677</b>	<b>\$10,558,968</b>	<b>\$10,176,499</b>	<b>\$10,585,904</b>	<b>\$11,069,791</b>	<b>\$11,550,121</b>	<b>\$12,064,187</b>
<b>Pierce County</b>								
Purchased Transportation	\$15,015,596	\$15,960,422	\$18,568,175	\$19,420,220	\$20,339,786	\$21,138,445	\$21,678,333	\$22,653,858
Program Costs	\$1,881,418	\$2,226,387	\$2,414,753	\$2,944,903	\$2,961,094	\$3,073,869	\$3,198,828	\$3,329,899
Bus Contingency		\$482,788	\$1,236,675	\$1,532,771	\$1,839,768	\$1,913,003	\$1,414,838	\$1,477,179
<b>Subarea Total</b>	<b>\$16,897,014</b>	<b>\$18,669,597</b>	<b>\$22,219,603</b>	<b>\$23,897,894</b>	<b>\$25,140,648</b>	<b>\$26,125,317</b>	<b>\$26,291,999</b>	<b>\$27,460,936</b>
<b>Proposed 2009 Budget</b>	<b>\$16,897,014</b>	<b>\$18,669,597</b>	<b>\$22,219,603</b>	<b>\$23,897,894</b>	<b>\$25,140,648</b>	<b>\$26,125,317</b>	<b>\$26,291,999</b>	<b>\$27,460,936</b>
<b>ST Express Total</b>								
Purchased Transportation	\$63,086,338	\$66,884,346	\$76,548,120	\$79,861,627	\$83,636,719	\$87,380,405	\$90,800,166	\$94,886,146
Program Costs	\$7,455,584	\$12,501,452	\$12,233,125	\$12,541,003	\$12,966,591	\$13,406,581	\$13,863,671	\$14,341,184
Bus Contingency		\$882,653	\$2,559,935	\$3,311,906	\$4,545,073	\$4,502,565	\$4,110,117	\$4,409,406
<b>ST Express Total</b>	<b>\$70,541,922</b>	<b>\$80,268,451</b>	<b>\$91,341,181</b>	<b>\$95,714,536</b>	<b>\$101,148,383</b>	<b>\$105,289,551</b>	<b>\$108,773,954</b>	<b>\$113,636,736</b>
<b>Proposed 2009 Budget</b>	<b>\$70,541,922</b>	<b>\$80,268,451</b>	<b>\$91,299,916</b>	<b>\$95,281,081</b>	<b>\$100,692,596</b>	<b>\$104,813,252</b>	<b>\$108,275,966</b>	<b>\$113,116,200</b>

# APPENDIX B: Fleet Management

**Table B-1: ST Express Bus Fleet**

	Coach Number	Manufacturer	Year in Service	Type	2007	2008	2009	2010	2011	2012	2013	2014
Actual	801-827	Orion	1994	40-foot CNG	27							
	9000-9069	Gillig	1999	40-foot Diesel	70	70	70	70	70			
	9500-9524	New Flyer	1999	60-foot Diesel	25	25	25	25	25			
	9525-9536	New Flyer	2000	60-foot Diesel	12	12	12	12	12	12		
	9070-9089	Gillig	2001	40-foot Diesel	20	20	20	20	20	20	20	
	9400-9419	New Flyer	2001	40-foot LF CNG	20	20	20	20	20	20	20	
	9200	New Flyer	2003	40-foot LF Hybrid	1	1	1	1	1	1	1	1
	9537-9552	New Flyer	2004	60-foot Diesel	16	16	16	16	16	16	16	16
	9600-9621	New Flyer	2004	60-foot Hybrid	22	22	22	22	22	22	22	22
	9090-9091	Gillig	2005	40-foot Diesel	2	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
	9622-9623	New Flyer	2008	60-foot Hybrid		2	2	2	2	2	2	2
	9713-9719	MCI	2008	45-foot Diesel		7	7	7	7	7	7	7
Replacement			2012	40-foot Bus Replacement						70	70	70
			2012	60-foot Bus Replacement						25	25	25
			2013	60-foot Bus Replacement							12	12
			2014	40-foot Bus Replacement								40
			2016	40-foot Bus Replacement								
			2017	60-foot Bus Replacement								
			2018	40-foot Bus Replacement								
			2018	45-foot Bus Replacement								
Fleet Statistics	Total Assigned Fleet:				228	240	240	240	240	240	240	240
	Peak Bus Requirements:				187	192	200	200	200	200	200	200
	Spares:				41	48	40	40	40	40	40	40
	Spare Ratio (in assigned fleet):				22%	25%	20%	20%	20%	20%	20%	20%

Note: High Capacity Diesel buses purchased in 2011 and 2012 replace the 40-foot Gilligs and 60-foot New Flyer coaches purchased in 1999 and 2000.

**Table B-2: Sounder & Link Rail Fleet**

	Vehicle Number	Manufacturer	Year in Service	Type	2007	2008	2009	2010	2011	2012	2013	2014
Actual	901-911	GM	2000-2001	Locomotive	9	11	11	11	11	11	11	11
	101-111, 301-307	Bombardier	2000-2003	Cab Car	12	18	18	18	18	18	18	18
	201-240, 401-410	Bombardier	2000-2003	Coach	29	40	40	40	40	40	40	40
Leased	901-902	GM	2000	Locomotive	2							
	102-104, 106-108	Bombardier	2000	Cab Car	6							
	201, 204, 206, 210, 212, 213, 231, 237-240	Bombardier	2000-2002	Coach	11							
Fleet Statistics	Total Locomotives on Property:				9	11	11	11	11	11	11	11
	Peak Vehicle Requirements:				7	8	9	9	9	9	9	9
	Spares:				2	3	2	2	2	2	2	2
	Total Assigned Fleet:				29%	38%	22%	22%	22%	22%	22%	22%
	Total Passenger Cars on Property:				41	58	58	58	58	58	58	58
	Peak Vehicle Requirements:				35	47	47	47	47	47	47	47
	Spares:				6	11	11	11	11	11	11	11
Total Assigned Fleet:				17%	23%	23%	23%	23%	23%	23%	23%	

**Sounder Commuter Rail**

	Coach No.	Manufacturer	Year in Service	Type	2006	2007	2008	2009	2010	2011	2012	2013
Actual	1001-1003	Skoda	2003	66-foot LR	3	3	3	3	3	3	3	3
	Total Assigned Fleet				3	3	3	3	3	3	3	3
	Peak Vehicle Requirements				2	2	2	2	2	2	2	2
	Spares				1	1	1	1	1	1	1	1
	Spare Ratio (in assigned fleet)				50%	50%	50%	50%	50%	50%	50%	50%
Planned	101-135	Kinkisharyo	2009	95-foot LR				31	35	45	45	45
	Total Assigned Fleet							31	35	45	45	45
	Peak Vehicle Requirements							28	30	32	32	32
	Spares							3	5	13	13	13



# 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 Tacoma Link light rail trains. The changes to Sound Transit service in the Draft 2009 SIP may be significant to a number of individuals and groups. Because those individuals and groups have different information needs and interests, Sound Transit will conduct 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.

## 2009 SIP Outreach

A key element of the outreach is the *Regional Transit News (RTN)*, a tabloid that was distributed at bus and train platforms and public and transportation information events held in the Fall. Five thousand copies were printed for distribution. An electronic version was posted on Sound Transit's website, provided by *E-Wave* and e-mailed to a Sound Transit subscription list. The *RTN* contains an explanation and map (when necessary) of each proposal, and encouraged riders and the public to contact Sound Transit with comments and inquiries about the changes proposed in the 2009 SIP.

As part of the outreach process, Sound Transit staff participated in a number of meetings with stakeholder groups. The stakeholders included delegations of each subarea, Transit Operators at partnering agency bases, Service & Facilities Planning Transit Integration Group and numerous internal groups with direct interest on the proposals and the financial impacts.

The *RTN* was distributed at an open house held at Sound Transit Headquarters in Union Station, convenient for ST Express riders who would be impacted by the proposals. In addition, the *RTN* was distributed at transit centers and park-and-ride lots in area impacted by the proposed changes. Distribution was also done through Employee Transportation Network, and Sound Transit meetings and events and on-board specific bus routes as well as Sounder and Tacoma Link. There was no survey conducted directly as a part of the 2008 SIP process. The *RTN* and website encourage riders and other interested members of the public to send in comments by e-mail, telephone or letter. While public comments are always reviewed by staff, the official comment period for the 2008 SIP concludes on November 30, 2008.

The Draft 2008 SIP was posted on the Sound Transit Web site on November 24, 2008, and a formal public hearing is planned for December 4, 2008 at Sound Transit to give the public additional opportunity to comment on the 2009 SIP proposals.

# APPENDIX D: Title VI Impacts

## Introduction

In compliance with Title VI of the Civil Rights Act of 1964, the Sound Transit 2008 SIP includes an impact assessment of the 2008 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 2009 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. ST Express Bus service changes and potential impacts are discussed in the following section.

## ST Express Bus

Several proposed changes to ST Express Bus routes eliminate service on select route segments. Each of these ST Express Bus service changes and their Title VI impacts are discussed below:

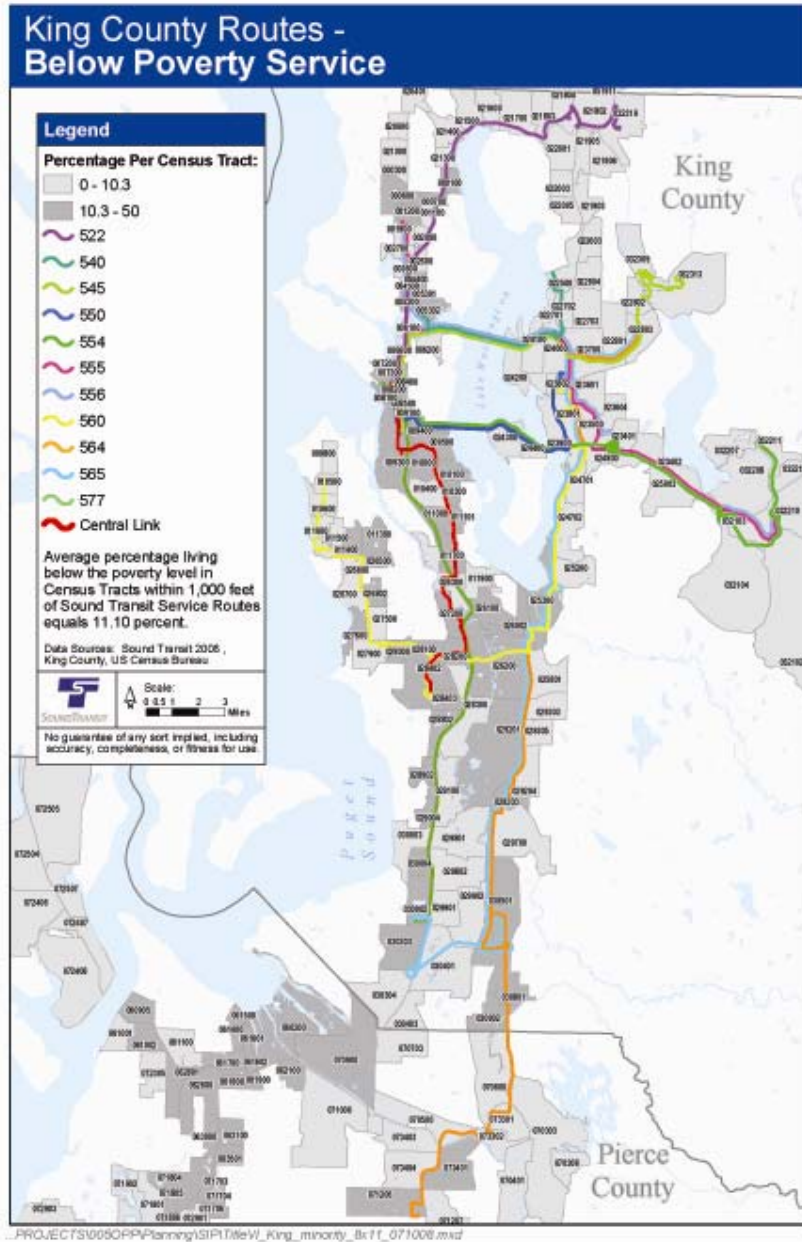
### **Route 554, Issaquah - Seattle**

The proposed service change for Route 554 would discontinue bus stops at the Eastgate Park-and-Ride bus loop and on 142nd Pl. SE. It does not appear that this proposed service change disproportionately affects a minority and disadvantaged population.

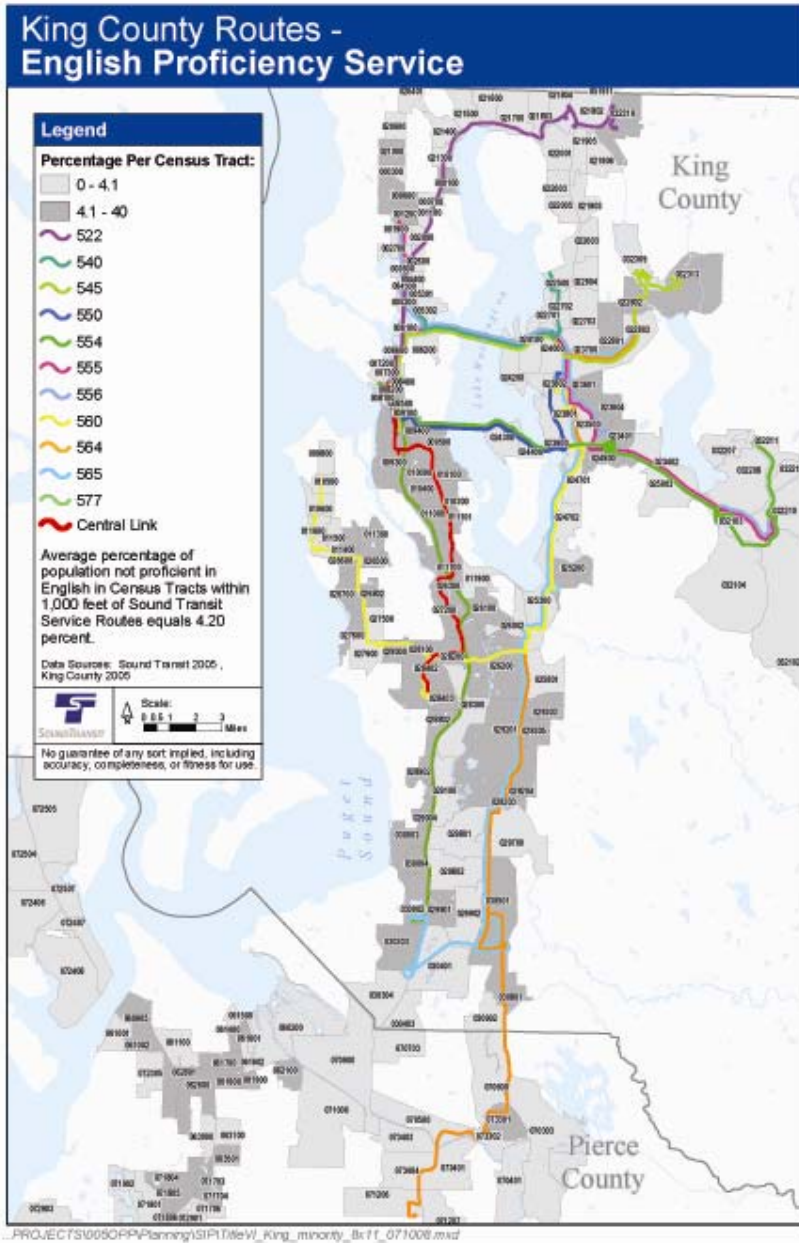
### **Route 555/556, Issaquah – Northgate Express**

The proposed service change for Route 555/556 would discontinue bus stops at the Eastgate Park-and-Ride bus loop and on 142nd Pl. SE. It does not appear that this proposed service change disproportionately affects a minority and disadvantaged population.

# King County Service – Census Tract Maps



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