

**SOUND TRANSIT  
STAFF REPORT**

**RESOLUTION NO. R2009-22**

**2010 Service Implementation Plan**

| Meeting:          | Date:    | Type of Action:  | Staff Contact:   | Phone:         |
|-------------------|----------|--|--|----------------|
| Finance Committee | 12/03/09 | Discussion/Possible Action to Recommend Board Approval | Bonnie Todd, Director Operations   | (206) 398-5367 |
| Board             | 12/10/09 | Action   | <b>Mike Bergman,<br/>Program Manager,<br/>Service Planning &amp; Development</b> | (206) 398-5358 |

| Contract/Agreement Type:             | ✓ | Requested Action:                 | ✓ |
|--------------------------------------|---|-----------------------------------|---|
| 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**

2010 Service Implementation Plan (Service Delivery)

**PROPOSED ACTION**

Adopting the 2010 Service Implementation Plan, authorizing the chief executive officer to implement recommended service changes in September 2010 and February 2011, and approving the use of preliminary 2011-2015 service changes for planning and forecasting purposes.

**KEY FEATURES OF PROPOSED ACTION**

- The Draft 2010 Service Implementation Plan (SIP) includes bus service improvements proposed for implementation in September 2010 and February 2011, together with preliminary service plans for late 2011 through 2015. Preliminary bus and rail service plans for late 2011 through 2015 would be approved in-principle only, for planning and forecasting purposes.
- Resolution No. R2009-10, approved by the Sound Transit Board on May 28, 2009, adopted an expedited schedule for implementing bus service improvements included in the voter-approved "Sound Transit 2" (ST2) program. The recommended September 2010 and February 2011 changes are the final phase of bus service improvements included in the ST2 program.
- The recommended bus service improvements include a new weekday express route, Route 542, which would connect Redmond with the University District and the I-5/65th Park-and-Ride via SR 520. Other improvements include added peak period service on Route 511 (Ash Way-Lynnwood-Seattle), Route 513 (Everett-Eastmont-Seattle), Route 522 (Woodinville-Seattle), Route 532 (Everett-Bellevue) and Route 554 (Issaquah-Seattle). Routes 511 and 513 would be modified to serve the new Mountlake Terrace Freeway Station, and Route 566 (Auburn-Overlake) would be extended from Overlake to downtown Redmond during weekday off-peak times.
- Bus service improvements for February 2011 are included in the 2010 SIP because contractual deadlines for finalizing that service change occur before the 2011 Service Implementation Plan can be scheduled for Board review and action. In addition, related projects to expand the bus fleet and increase bus base capacity require a long lead time and these projects are being developed in close coordination with the Draft 2010 SIP schedule.

- No changes are recommended for Central Link, Tacoma Link and Sounder rail services.

**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 2010 Budget includes a total transit operations budget in the amount of \$188,385,498 before depreciation, which would fund the delivery of ST Express, Sounder, Central Link and Tacoma Link services, and 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 2010 Budget for ST Express includes purchased transportation services from King County, Pierce Transit and Community Transit. The total amount budgeted for ST Express is \$97,207,434 for 2010.

The Proposed 2010 Budget for Central Link is \$45,568,105, which includes purchased transportation services from King County, the Central Link operator.

The Proposed 2010 Budget for Sounder is \$36,127,342, which includes costs for agreements with the BNSF Railway and Amtrak.

The Proposed 2010 Budget for Tacoma Link is \$4,142,951. Tacoma Link is directly operated by Sound Transit.

The Proposed 2010 Budget for the Accessible Services Program is \$895,464.

In addition to the amounts listed above, there is an Agency-wide contingency of \$4,444,202, which would be utilized only in the event a mode exceeds its annual budget. Transit operations budgets are included in the Proposed 2010 Budget.

The 2010 transit operations budget is fully funded in the finance plan.

The service plans and cost estimates for 2011 and beyond will be incorporated into the current financial plan.

## **BUDGET TABLE**

The 2010 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.

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

#### **Action Item: Adoption of the 2010 Service Implementation Plan.**

| <b>Modal Budget</b>             | <b>Proposed 2010<br/>Budget (1)</b> |
|---------------------------------|-------------------------------------|
| Sounder Commuter Rail           | 36,127                              |
| ST Express Bus                  | 97,207                              |
| Tacoma Link Light Rail          | 4,143                               |
| Accessible Services Program     | 895                                 |
| Central Link Light rail         | 45,568                              |
| Agency-wide Contingency         | 4,444                               |
| <b>Total Transit Operations</b> | <b>188,385</b>                      |

#### **Notes**

<sup>1</sup> The proposed action would authorize the 2010 Service Implementation Plan. The Proposed 2010 budget was prepared on the basis of the service described in the 2010 SIP. Budget authority would be granted with the adoption of the 2010 budget in December, 2009.

Budget numbers shown above do not include depreciation.

## **PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION**

The ST2 plan calls for expanding Sound Transit express bus service by 100,000 annual bus hours, about a 17 percent increase over September 2008 service levels. Resolution No. R2009-10 adopted the expedited schedule that implemented service in the shortest possible time frame with the last improvements in place by February 2011. Details of the 2010 and 2011 service improvements will be determined through the annual Service Implementation Plan (SIP) process. Currently, of the 100,000 annual bus hours in the ST2 program, about 42,000 hours have already been implemented or committed, and approval of the 2010 SIP would authorize implementation of the remaining 58,000 hours.

ST Express improvements reflect recent schedule analysis, ridership trends and the development of other regional transportation projects. The SIP describes Sound Transit's partnership with WSDOT and King County Metro in developing service improvements for the SR 520 bridge corridor prior to the implementation of tolls on the bridge. Tolls are expected to increase transit ridership on the corridor by at least 15 percent. Other considerations that guided plan development include the opening of Sound Transit's new Mountlake Terrace Freeway Station (now under construction), changes to partner agency service, and the timing of new bus deliveries and bus base improvements. Improvements to bus service in South King County and Pierce County were approved by the Board as part of the 2009 Service Implementation Plan Amendment and will be implemented in February 2010. To the extent possible, bus service improvements will be designed and timed to complement changes to partner agency transit service in Snohomish County and East King County.

A summary of the proposed ST Express improvements recommended in the Draft 2010 SIP is shown in the table below:

**Recommended ST2 Bus Service Improvements: September 2010 and February 2011**

| <b>Route &amp; End Points</b>   | <b>General Description</b>                         | <b>Proposed Implementation Date</b> | <b>Change in Peak Bus Requirements</b> | <b>Change in Annual Platform Hours</b> |
|---------------------------------|--|-------------------------------------|--|--|
| 511 Ash Way-Seattle             | Peak service improved to every 15 minutes          | February 2011                       | +6                                     | +9,172                                 |
| 513 Everett-Seattle             | +2 a.m., +3 p.m. peak trips                        | February 2011                       | +3                                     | +3,035                                 |
| 522 Woodinville-Seattle         | Peak service improved to every 15 minutes          | February 2011                       | +4                                     | +4,162                                 |
| 532 Everett-Bellevue            | +4 p.m. peak trips                                 | February 2011                       | +3                                     | +2,507                                 |
| 542 Redmond-University District | New route- SR 520 corridor; 15 minute peak service | September 2010                      | +10                                    | +19,783                                |
| 554 Issaquah-Seattle            | Peak service improved to every 15 minutes          | February 2011                       | +5                                     | +12,528                                |
| 566 Overlake-Auburn             | Extend from Overlake to Redmond (Off-peak)         | February 2011                       | -0-                                    | +7,148                                 |
| <b>TOTAL</b>                    |  |                                     | <b>31 (37 w/spares)</b>                | <b>+58,335</b>                         |

No changes to Sound Transit rail services are proposed for 2010. ST2 includes expanded service on the Sounder South Line, and preliminary future plans for this service are included in the Draft SIP.

**Prior Board/Committee Actions**

None.

**CONSEQUENCES of DELAY**

Adoption of the Draft SIP is timed to implement all remaining ST2 bus service improvements by February 2011, as called for in Resolution No. R2009-10. A significant delay in approval of the SIP could impact the ability to implement the improvements by that date.

**PUBLIC INVOLVEMENT**

An extensive public outreach effort is part of the Draft 2010 SIP process. A key element of the outreach is the *Regional Transit News (RTN)*, a tabloid distributed to transit riders and stakeholders. *Regional Transit News* includes an explanation and map of proposed service changes, and encourages readers to contact Sound Transit with comments and inquiries about the SIP. Both *RTN* and the Draft SIP are posted on the Sound Transit web site, and a formal public hearing was conducted November 19, 2009 at Sound Transit’s Union Station offices to give the public additional opportunity to comment on the SIP proposals.

**ENVIRONMENTAL COMPLIANCE**

SSK 11-23-09

**LEGAL REVIEW**

JW 11/23/09

## SOUND TRANSIT

### RESOLUTION NO. R2009-22

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority adopting the 2010 Service Implementation Plan, authorizing the chief executive officer to implement service changes in September 2010 and February 2011, and approving the use of preliminary 2011-2015 service changes for planning and forecasting purposes.

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

WHEREAS, Sound Transit is authorized to plan, construct, and permanently operate a high-capacity system of transportation infrastructure and services to meet regional public transportation needs in the Central Puget Sound region; and

WHEREAS, in general elections held within the Central Puget Sound Regional Transit Authority district on November 5, 1996 and November 8, 2008, voters approved local funding to implement a regional high-capacity transportation system for the Central Puget Sound 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 meet the commitment in Sound Move and Sound Transit 2; and

WHEREAS, the proposed service changes included in the 2010 Service Implementation Plan are consistent with the Proposed 2010 Budget and Agency financial plan.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that the 2010 Service Implementation Plan is adopted, the use of the preliminary 2011-2015 service changes for planning and forecasting purposes is approved, and the chief executive officer is authorized to implement the September 2010 and February 2011 service changes included in the plan as described below:

1. **ST Express Route 511 (Ash Way-Lynnwood-Seattle):** Implement 15-minute service during weekday peak periods, and add a stop in each direction at the new Mountlake Terrace Freeway Station.

2. **ST Express Route 513 (Everett-Eastmont-Seattle):** Implement two new southbound morning peak period trips, three new northbound afternoon peak period trips and add a stop in each direction at the new Mountlake Terrace Freeway Station.
3. **ST Express Route 522 (Woodinville-Seattle):** Increase peak period service from every 30 minutes to every 15 minutes in the peak direction (from Woodinville to Seattle in the morning, from Seattle to Woodinville in the afternoon).
4. **ST Express Route 532 (Everett-Bellevue):** Add four afternoon peak period trips from Bellevue to Everett.
5. **ST Express Route 542 (Redmond-I-5/65<sup>th</sup> Park-and-Ride):** Implement new express route providing two-way, 15-minute weekday peak period service between Redmond Transit Center and I-5/65<sup>th</sup> Park-and-Ride in Seattle, with intermediate stops at Redmond Town Center, SR 520/Northeast 51<sup>st</sup> Street Freeway Station, SR 520/Northeast 40<sup>th</sup> Street Freeway Station, Yarrow Point Freeway Station, Evergreen Point Freeway Station, Montlake Boulevard at East Shelby Street, and six stops each way on Northeast Pacific Street and 15<sup>th</sup> Avenue Northeast in the University District.
6. **ST Express Route 554 (Issaquah-Seattle):** Increase weekday peak period service from every 30 minutes to every 15 minutes in both directions between Issaquah Transit Center and downtown Seattle.
7. **ST Express Route 566 (Auburn-Overlake):** Extend route from Overlake Transit Center to Redmond Transit Center during weekday off-peak periods, with intermediate stops at SR 520/Northeast 51<sup>st</sup> Street Freeway Station and Redmond Town Center.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on \_\_\_\_\_.

ATTEST:

\_\_\_\_\_  
Greg Nickels  
Board Chair

\_\_\_\_\_  
Marcia Walker  
Board Administrator

**DRAFT  
2010  
SERVICE  
IMPLEMENTATION  
PLAN**

**October 22, 2009**







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## Executive Summary:

Each year, Sound Transit prepares an annual update on the development of its express bus, commuter rail and light rail services. The Draft 2010 Service Implementation Plan, or SIP, describes service additions and revisions proposed for September 2010 and February 2011, together with preliminary service proposals and financial projections for 2011 through 2015. 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 2010 SIP comes at a very challenging time for public transit. The most severe economic recession since the 1930's has increased unemployment and reduced tax revenues available for transit operations. In addition, retail gasoline prices have dropped considerably compared with 2008, providing fewer incentives for transit use. These factors are reducing transit ridership at Sound Transit's partner transit agencies and in other metropolitan areas nationwide. Sound Transit is bucking this trend with the total number of ST boardings (rail and bus combined) continuing to increase during the first half of 2009, although at a lower growth rate than in previous years. Area voters expressed confidence in the future by approving the Sound Transit 2 (ST2) program in November 2008, which will greatly expand the light rail network and provide near-term funding for expanded express bus and Sounder service. There is good reason for optimism in 2010 and beyond as improvements to Sound Transit services, together with a gradual economic recovery, should continue to produce ridership growth.

### ST Express Bus

The highlight of the 2010 SIP is implementation of the remaining express bus service improvements in the ST2 program. ST2 called for 100,000 additional platform hours of bus service per year, a 17 percent increase. About 42,000 hours have already been implemented or committed, and approval of the 2010 SIP would authorize the implementation of the remaining 58,000 hours. The proposed improvements are based on work conducted during the ST2 planning process, updated to reflect more recent schedule analysis and ridership trends. Other considerations that guided plan development include the opening of Sound Transit's Mountlake Terrace Freeway Station, changes to partner agency service during 2010-2011 and the start-up of vehicle tolls on the SR 520 bridge. The ST Express service improvements, if approved by the Sound Transit Board, would be implemented in two phases, September 2010 and February 2011.

Express bus improvements would be coordinated with changes to partner agency routes to develop attractive, cost-effective service in key freeway corridors. For example, ST Express **Route 511 (Ash Way-Downtown Seattle)** would be modified to serve Sound Transit's new Mountlake Terrace Freeway Station in South Snohomish County, with service increased from every 30 minutes to every 15 minutes during peak periods. The freeway station is adjacent to Community Transit's 870-stall Mountlake Terrace Park-and-Ride garage. With its new HOV direct access ramps, buses can serve the freeway station very efficiently with little increase in travel time for through riders. During weekday peak periods, **Route 511** service at Mountlake Terrace would be supplemented by ST Express **Route 513** and Community Transit's Seattle commuter routes to provide very frequent combined service to and from downtown Seattle.

Transit demand on the Evergreen Point Bridge (SR 520) is forecast to increase by 15 to 30 percent following the start-up of vehicle tolls. Under an Urban Partnership Agreement (UPA) with the federal government, the Washington State Department of Transportation plans to implement tolls beginning in early 2011 to improve traffic flow and generate revenue for bridge replacement. As part of the UPA, the U.S. Department of Transportation will provide grant funding to both King County Metro and Sound Transit for Bus Rapid Transit (BRT) capital

improvements on the corridor. The Draft 2010 SIP includes a proposed new SR 520 route, **Route 542**, that would provide two-way, 15-minute peak period weekday service between downtown Redmond, Overlake, the University of Washington and the I-5/65th Park-and-Ride in Seattle. Serving major educational and employment destinations on both ends, the new route would address overcrowding on existing ST Express **Route 545 (Redmond-Seattle)** and help address construction impacts when work begins on replacing the existing SR 520 bridge. Other East King County improvements include added peak service on ST Express **Route 522 (Woodinville-Seattle via SR 522)**, ST Express **Route 554 (Issaquah-Seattle via I-90)**, and an off-peak extension of **Route 566 (Overlake-Auburn)** from Overlake Transit Center to downtown Redmond. Enhanced service levels on these routes would be coordinated with changes to parallel King County Metro services to optimize ridership and productivity.

No bus service changes are proposed for Pierce County and South King County at this time. The Sound Transit Board approved ST2 bus service improvements for these areas with the 2009 SIP, and they will be implemented with the Feb. 6, 2010 service change.

Until now, ST2 bus service improvements have been largely limited to midday, evening and weekend time periods since the existing Sound Transit bus fleet is fully utilized during peak commuter hours. However, the Board approved the purchase of 13 new articulated buses for delivery in mid-2010, and staff is seeking Board approval for an additional 24 articulated buses for delivery by the end of 2010. These buses would bring the total ST Express fleet to 280 vehicles, completing the fleet expansion needed for the ST2 improvement package.

The day-to-day management of ST Express includes regular reviews of productivity and schedule efficiency. Within limits set in the Board-approved Service Standards and Performance Measures, Sound Transit staff may implement schedule changes administratively to improve these performance measures. For 2010, staff is evaluating potential schedule efficiencies and trip management actions on several ST Express routes, including **Route 540 Kirkland-University District**, **Route 550 Bellevue-Seattle** and **Routes 590-594 Lakewood-Tacoma-Seattle**.

Proposed changes to ST Express service requiring Sound Transit Board approval are listed in Chapter 1.

## **Central Link**

Central Link began passenger operations with a grand opening weekend July 18-19, 2009. Initial light rail service operates from Westlake Station in downtown Seattle to Tukwila International Boulevard Station with 10 intermediate stations. Construction is underway on Airport Link and by the end of 2009, light rail service will extend directly to the SeaTac/Airport Station, which will be connected to the airport terminal via an overhead pedestrian bridge and walkway through the airport garage.

The start-up of Central Link represents a dramatic increase in transit capacity along the corridor. Service operates seven days a week between 5 a.m. and 1 a.m. (6 a.m. to midnight on Sundays). Two-car trains operate every 7 to 10 minutes most of the day, with 15-minute service provided early in the morning and late at night. Ridership is expected to increase gradually over time, and initial passenger counts are consistent with predictions of just under 16,000 average weekday boardings during the first six months of operations. Light rail boardings will increase following the first phase of King County Metro bus service revisions in September 2009 that will increase access to Link stations in Seattle and Tukwila. This will be followed by a second phase of bus service revisions in February 2010 that will improve local connections to light rail in the

Burien/SeaTac/Tukwila area. The restructure of King County Metro's SR 99 bus service will be particularly significant as the current Metro route between Federal Way and Tukwila International Boulevard will be truncated at the light rail station rather than continuing through to downtown Seattle.

Once light rail begins operating to the airport, changes to Central Link service levels over the next several years will generally be limited to minor schedule adjustments and extra trains added for major events. However, the opening of University Link in 2016 is expected to increase demand on Central Link dramatically, requiring both longer trains and more frequent service.

## **Souder Commuter Rail**

After several years of steady growth culminating with record passenger boardings in fall 2008, ridership on Souder's South Line began to decline during the first half of 2009. Lower gasoline prices and the economic recession are clearly impacting commuter ridership in this corridor more than on other Sound Transit services. However, average weekday boardings on the South Line are still well ahead of comparable 2007 figures. On the Souder North Line, ridership growth between Everett and Seattle has slowed but average daily boardings have remained relatively stable. No changes to Souder service are proposed for 2010.

Staff predicts that South Line ridership will recover with a gradual increase in total boardings between 2010 and 2012, with a larger increase in 2013 following the opening of the Lakewood extension (see Chapter 4, Projected Ridership and Fare Revenue). King County Metro is evaluating possible changes to its I-5 corridor network that would reduce parallel bus service and provide improved connections between buses and Souder trains, and these changes would likely be proposed for 2011 implementation. In addition, capital projects are under development that will provide more park-and-ride capacity near the Sumner and Puyallup Souder stations by the end of 2010.

Looking farther ahead, the ST2 program includes expanded service on the South Line, including two new round trips and longer trains. Up to 14 additional passenger cars and four more locomotives will be acquired. Negotiations are underway with the host railroads to determine what time slots could be available for additional Souder trains, and staff is evaluating alternatives for acquiring additional rolling stock. The uncertainties associated with these tasks make it difficult to predict the exact start-up dates for added trains; thus, the "out year" information on Souder service shown in Chapter 3 is preliminary and assumes a very conservative implementation schedule that starts in 2013. Chapter 3 will be updated as progress is made on each task.

## **Tacoma Link**

Tacoma Link has recently shown a healthy increase in total boardings even as ridership growth on the rest of the Sound Transit system has slowed. Event-related activities at the Tacoma Dome, Tacoma Convention Center and Freighthouse Square have generated new customers. Another new visitor attraction is the LeMay Auto Museum, the largest museum of its type in the country, being developed near the Tacoma Dome Station. No changes are proposed for Tacoma Link service at this time, but construction of the D-to-M Souder project during the next two years may impact the ability to continue the current 10-minute base frequency due to traffic signals changes. Frequent service has been a key feature of Tacoma Link's success, and staff will review plans for this project to see if these impacts can be mitigated.

## **Preliminary Service Plans for 2011 - 2015**

Chapter 3 of the SIP describes preliminary 2011-2015 service plans. These “out year” plans were updated following voter approval of the Sound Transit 2 (ST2) program, and reflect the Board-approved schedule of ST Express bus service expansion and expected completion dates of the remaining Sound Move projects and services. Service levels, ridership and fare revenue estimates shown for 2011-2015 are used to develop the agency’s Long-Range Financial Plan; however, the actual implementation of service changes is still subject to Board approval of the annual SIP. Here is a preliminary summary of “out year” service proposals:

### **2011 (September)**

- Potential changes to Route 513 service on Highway 99 in South Everett to avoid duplication with Community Transit Swift service between downtown Everett and South Everett.
- Potential service improvements on Routes 540, 542, 545, 555 and 556 during SR 520 bridge replacement, pending availability of state or federal construction mitigation funds.
- Potential changes to Route 560 at White Center or Fauntleroy to avoid duplication with King County Metro’s new “Rapid Ride” bus rapid transit service in West Seattle.

### **2012**

- Potential improvements to Route 550 coordinated with the start-up of King County Metro’s “Rapid Ride” bus rapid transit service between Bellevue and Redmond.

### **Late 2012/Early 2013**

- Sounder South Line extended from Tacoma to South Tacoma and Lakewood.
- First new ST2-funded trains on the Sounder South Line
- Temporary bus routes 593 and 599 discontinued with extension of Sounder service to Lakewood.

Preliminary plans for 2014 through 2015 are still under development. Additional details are included in Chapter 3.

## **Accessible Services**

With the start up of Central Link service, Sound Transit now has a paratransit obligation under provisions of federal regulations. This service, operated for Sound Transit under contract with King County Metro, provides transportation for eligible persons with disabilities within ¾-mile of the Central Link alignment. The 2011 SIP will include operating results for the first full year of Central Link paratransit service. Projected paratransit operating and maintenance costs are shown in Appendix A-7. Annual trips are estimated to be 69,000.

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

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

## **Quick Guide to the 2010 SIP:**

**Chapter 1** summarizes the proposed September 2010 and February 2011 service changes proposed for Sound Transit Board consideration.

**Chapter 2** includes a description and performance summary of Sounder, Link and each ST Express route, with detailed background information for each 2010 SIP service change.

**Chapter 3** describes preliminary plans for 2011-2015.

**Chapter 4** includes estimates of ridership and fare revenue for all three transit modes through 2015, and a description of the modeling and assumptions used to develop the estimates.





# Chapter 1: Summary of September 2010 and February 2011 Service Changes for Sound Transit Board Consideration

The following service changes are proposed for Sound Transit Board consideration in the 2010 Service Implementation Plan. A detailed description of the changes and additional background information is included in the ST Express section of Chapter 2.

## ST Express Bus

### **Route 511 Lynnwood-Seattle (February 2011)**

- Implement 15-minute service during peak periods on weekdays.
- Add a stop in each direction at the new Mountlake Terrace Freeway Station.

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

- Add two southbound morning peak trips and three northbound afternoon peak trips. The morning trips and two of the afternoon trips would operate between Seattle and Eastmont Park-and-Ride only.
- Add a stop in each direction at the new Mountlake Terrace Freeway Station.

### **Route 522 Woodinville-Seattle (February 2011)**

- Improve afternoon, peak service from every 30 minutes to every 15 minutes service in the peak direction (from Seattle to Woodinville).

### **Route 532 Everett-Bellevue (February 2011)**

- Add five afternoon peak period trips from Bellevue to Everett.

### **Route 542 Redmond-Interstate 5/65th Park-and-Ride (September 2010)**

- Implement new two-way 15-minute peak-period service between Redmond Transit Center and I-5/65th Street Park-and-Ride via University District.
- Westbound stops will be made at
  - Redmond Transit Center
  - NE Leary Way at 162nd Ave NE (Redmond Town Center)
  - SR-520 at NE 51st St, NE 40th St, Yarrow Point, and Evergreen Point
  - Montlake Blvd E at E Shelby St
  - NE Pacific St at NE Pacific Pl and 15th Ave NE (pedestrian overpass)
  - 15th Ave NE at NE Pacific St, NE 40th St, NE 41st St, NE 42nd St, NE 45th St
  - NE 50th St at University Way NE
  - NE 65th St at Ravenna Blvd NE (I-5/65th Park-and-Ride)
- Eastbound stops will be made at
  - NE 65th St at Ravenna Blvd NE (I-5/65th Park-and-Ride)
  - NE 50th St at University Way NE
  - 15th Ave NE at NE 45th St, NE 43rd St, NE Campus Parkway, NE 40th St and NE Pacific St
  - NE Pacific St at 15th Ave NE (pedestrian overpass) and NE Pacific Pl
  - Montlake Blvd E at SR-520
  - SR-520 at Evergreen Point, Yarrow Point, NE 40th St and NE 51st St

- NE Leary Way at 162nd Ave NE (Redmond Town Center)
- Redmond Transit Center

**Route 550 Bellevue-Seattle (September 2010)**

- Discontinue serving the stop at southbound on Bellevue Way NE at NE 1st Street
- Consolidate the stops along Bellevue Way SE at SE 3rd Street and SE 10th Street to a stop near SE 8th Street

**Route 554 Issaquah-Seattle (February 2011)**

- Improve peak period service from every 30 minutes to every 15 minutes in both directions between Issaquah Transit Center and downtown Seattle.

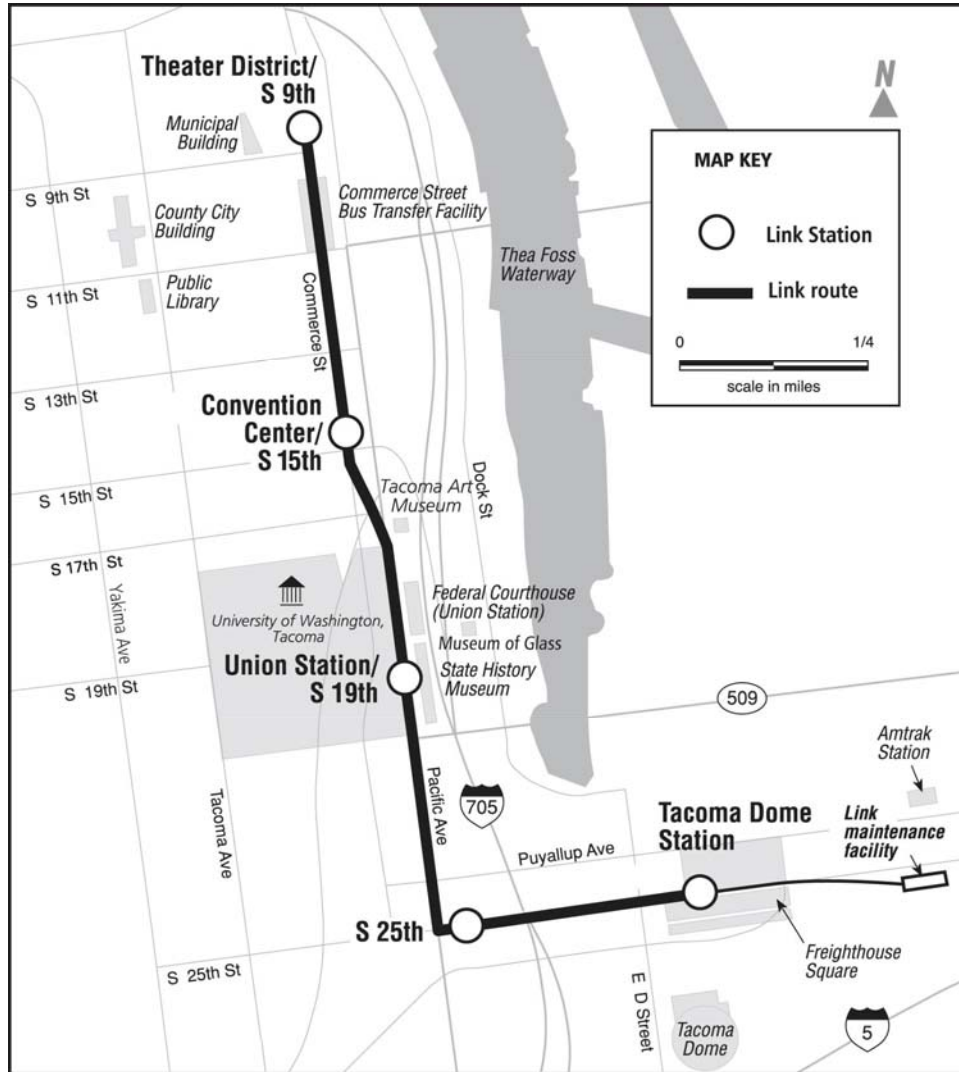
**Route 566 Auburn-Redmond (February 2011)**

- Extend route from Overlake Transit Center to Redmond Transit Center during weekday off-peak hours
- Southbound added stops will be made at
  - Redmond Transit Center
  - NE Leary Way at 162nd Ave NE (Redmond Town Center)
  - SR-520 at NE 51st St
- Northbound stops will be made at
  - SR-520 at NE 51st St
  - NE Leary Way at 162nd Ave NE (Redmond Town Center)
  - Redmond Transit Center

# Chapter 2: 2009 Service Analysis

## Link Light Rail

### Tacoma Link



#### *Description*

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

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

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

**Performance Assessment**

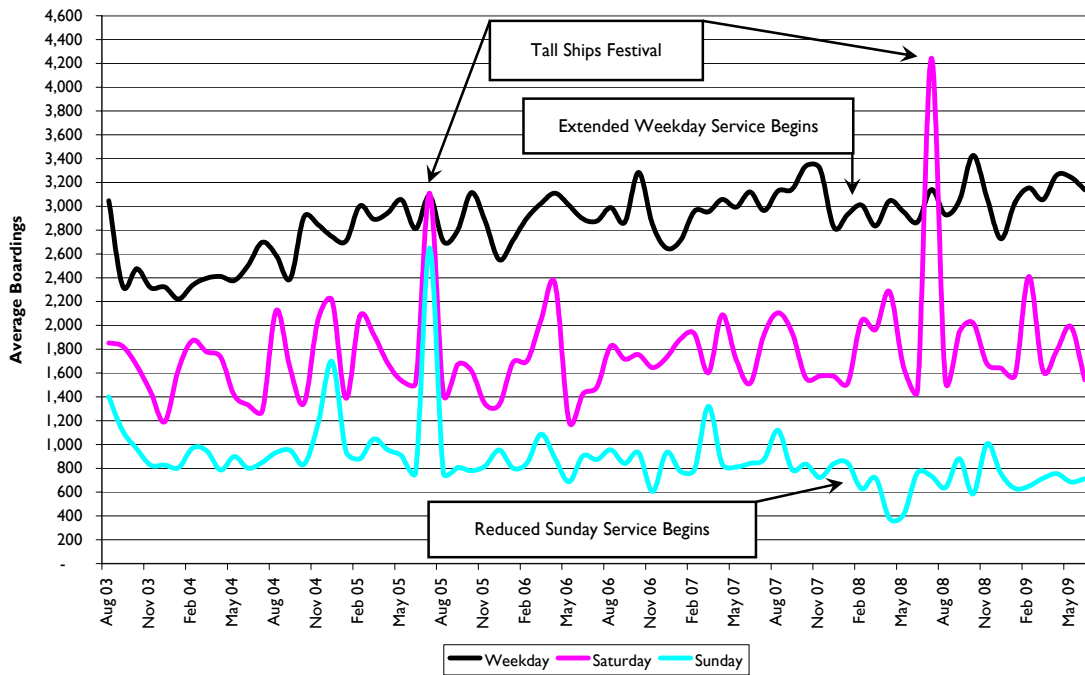
|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 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  |

| 1st Quarter 2009            | Overall | Weekday | Saturday | Sunday |
|-----------------------------|---------|---------|----------|--------|
| Daily Boardings             |         | 3,079   | 1,848    | 667    |
| Passengers per Trip         | 15.83   | 16.93   | 10.82    | 13.61  |
| Passengers per Service Hour | 95.98   | 102.95  | 65.17    | 80.50  |

| 2008-2009 Comparison        | Overall | Weekday | Saturday  | Sunday |
|-----------------------------|---------|---------|-----------|--------|
| Daily Boardings             |         | + 5%    | No change | -10%   |
| Passengers per Trip         | + 6%    | + 5%    | + <1%     | + 27%  |
| Passengers per Service Hour | + 6%    | + 5%    | - <1%     | + 25%  |

**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 2009                 | Weekday<br>Early AM | Weekday<br>AM Peak | Weekday<br>Midday | Weekday<br>PM Peak | Weekday<br>Evening |
|-----------------------------|---------------------|--------------------|-------------------|--------------------|--------------------|
| Daily Boardings             | 84                  | 662                | 1,178             | 894                | 390                |
| Passengers per Trip         | 16.78               | 22.07              | 16.37             | 24.85              | 10.00              |
| Passengers per Service Hour | 100.70              | 132.41             | 98.20             | 149.08             | 59.99              |

| Spring 2009                 | Saturday<br>Daytime | Saturday<br>Evening | Sunday | Holiday* |
|-----------------------------|---------------------|---------------------|--------|----------|
| Daily Boardings             | 1,487               | 433                 | 720    | 576      |
| Passengers per Trip         | 12.39               | 8.49                | 14.70  | 11.76    |
| Passengers per Service Hour | 74.36               | 50.96               | 88.18  | 70.56    |

\* - Memorial Day was the only Holiday during the Spring 2009 service change.

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.

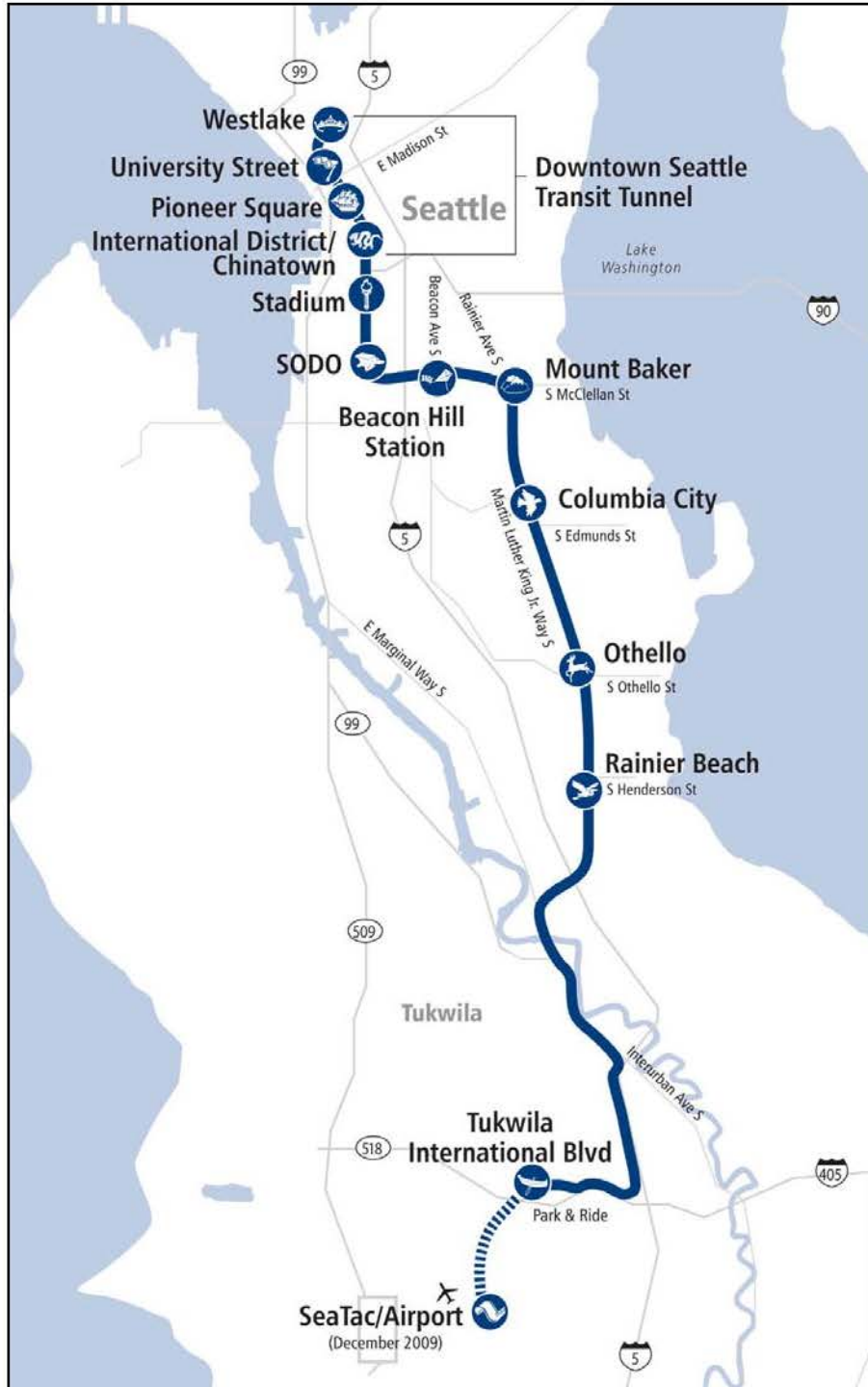
On-Time Performance: 99.80%. Systemwide, an average 98.50 percent of all scheduled trips should operate on schedule as shown in the published timetable during each quarter and calendar year. Tacoma Link exceeds the standard.

### **Service Change Concepts**

Weekday boardings on Tacoma Link increased by 5% between 1<sup>st</sup> Quarter 2009 and the same period a year earlier, even as growth on the rest of the Sound Transit system slowed. Visitor traffic in Tacoma has been on the upswing with increasing attendance at Tacoma Dome events, downtown museums and the Tacoma Convention Center. Many attendees at Tacoma Dome concerts have been taking advantage of extended light rail operating hours when these events are scheduled, parking at downtown garages and taking Link to the concert. However, ridership on nights when there are no events has been very low. While no service changes are proposed at this time, Sound Transit staff will continue to monitor ridership trends closely, both total daily boardings and boardings by time period.

Construction of the Sounder Lakewood extension project during the next two years may impact the ability to maintain signal priority for Tacoma Link. Since frequent, dependable service has been a key feature in Tacoma Link's success, staff will monitor plans for this project to see if these impacts can be mitigated.

## Central Link Light Rail



### *Description*

Central Link opened for passenger service on Saturday, July 18, 2009. During the “Launch” weekend no fares were charged and over 92,000 boardings were recorded on Saturday and Sunday. The initial 13.9-mile segment of Central Link operates between Westlake Station and

Tukwila International Boulevard Station with 10 intermediate stations serving the SODO district, Beacon Hill and Rainier Valley. Central Link trains operate both on reserved right-of-way separated from other traffic and on semi-exclusive right-of-way with motor vehicles crossing tracks at-grade. Frequent service is provided with two-car trains having a capacity of 400 passengers, representing a huge increase in transit capacity for the corridor. In December 2009, Central Link will be extended an additional 1.7 miles to the SeaTac/Airport Station, expected to be a major ridership generator. Until the airport extension is completed, a temporary shuttle bus route connects the Tukwila International Boulevard Station with the existing airport bus stop at the arrivals level.

Central Link has been designed to be part of an integrated bus-rail transit network with buses playing a major role in providing customer access to light rail. All stations are served by Metro bus routes, and some have facilities for off-street bus loading, turnaround loops and layovers. Starting in Summer 2008, King County Metro worked closely with residents and stakeholders in Southeast Seattle and South King County to develop proposals to increase bus access to Link stations, together with other potential bus service improvements. Following a six month planning and public outreach process, the King County Council approved major bus service revisions in May 2009. The changes will be implemented in two phases, September 2009 and February 2010.

#### ***Performance Assessment***

The 2009 SIP projected that Central Link ridership would average about 15,900 weekday 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. Initial ridership results indicate that Central Link is on its way to meeting the SIP projection, with an average of about 14,400 weekday boardings during August, traditionally a low ridership month for transit. Weekend ridership has performed relatively well with an average of 13,200 boardings on Saturdays and 9,900 boardings on Sundays during August. Weekend ridership is significantly higher on days when major sports events are scheduled at Safeco Field or Qwest Field.

Note that the initial performance assessment table is based on combined ridership data for July and August, with the opening launch weekend boardings excluded. The Final 2010 SIP will include on-time performance data for the first six months of operation.

#### **Service Change Concepts**

Central Link ridership is expected to increase during the next year as the Airport extension opens for service and as improvements to connecting bus service are implemented. More people will be riding light rail following the first phase of major King County Metro bus service revisions in September 2009 that will increase access to Link stations in Southeast Seattle and Tukwila. This will be followed by the second phase of bus service revisions in February 2010 that will increase local connections to light rail in the Burien/SeaTac/Tukwila area. The February restructure is particularly significant as King County Metro will discontinue Route 194, leaving the downtown Seattle-to-Airport transit market entirely to Central Link. Additionally, King County Metro will implement frequent bus service (every 15 minutes on weekdays) connecting Tukwila International Boulevard Station directly with Burien, Southcenter and Renton. In June 2010, Metro plans to enhance SR 99 bus service between Federal Way and Tukwila International Boulevard Station as part of its first "Rapid Ride" bus rapid transit project.

Once light rail begins operating to the airport, changes to Central Link service levels over the next several years will be limited to minor schedule adjustments and extra trains added for major

events. However, the opening of University Link in 2016 is expected to increase demand on Central Link dramatically, requiring both longer trains and more frequent service.

No service changes are planned in 2010. For the Central Link fleet plan, see Table B-3 in the appendix.



**Central Link Frequencies**

| Weekday Time Period        | Time Between Trains (minutes) |
|----------------------------|-------------------------------|
| 5:00 a.m. – 6:00 a.m.      | 15                            |
| 6:00 a.m. – 9:00 a.m.      | 7 to 8                        |
| 9:00 a.m. – 3:00 p.m.      | 10                            |
| 3:00 p.m. – 6:30 p.m.      | 7 to 8                        |
| 6:30 p.m. – 10:00 p.m.     | 10                            |
| 10:00 p.m. – 1:00 a.m.     | 15                            |
| Saturday Time Period       | 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       | 8             | 6              | 4                                | 2       | -    |             |             |               |         |               |                            |                |
| Beacon Hill                      | 13       | 11            | 9              | 7                                | 5       | 3    | -           |             |               |         |               |                            |                |
| Mount Baker                      | 15       | 13            | 11             | 9                                | 7       | 5    | 2           | -           |               |         |               |                            |                |
| Columbia City                    | 18       | 16            | 14             | 12                               | 10      | 8    | 5           | 3           | -             |         |               |                            |                |
| Othello                          | 22       | 20            | 18             | 16                               | 14      | 12   | 9           | 7           | 4             | -       |               |                            |                |
| Rainier Beach                    | 25       | 23            | 21             | 19                               | 17      | 15   | 12          | 10          | 7             | 3       | -             |                            |                |
| Tukwila International Blvd       | 34       | 32            | 30             | 28                               | 26      | 24   | 21          | 19          | 16            | 12      | 9             | -                          |                |
| SeaTac/Airport                   | 36       | 34            | 32             | 30                               | 28      | 26   | 23          | 21          | 18            | 14      | 11            | 2                          | -              |

**Interim Airport Connector Bus**

During the interim period between the opening of the initial segment and the extension of light rail to SeaTac/Airport Station, a temporary bus route connects Tukwila International Boulevard Station with the airport terminal. The connector bus route is a requirement of Sound Transit’s Full Funding Grant Agreement with the Federal Transit Administration. This service operates every 10 minutes except when light rail operates at 15-minute frequencies, when the connector also runs every 15 minutes. The Airport Connector Bus is funded from the Central Link operations budget, and will be discontinued when Link service to the extended to the airport.

***Interim Airport Connector Frequencies***

| <b>Weekday Time Period</b>        | <b>Time Between Buses (minutes)</b> |
|-----------------------------------|-------------------------------------|
| 5:00 a.m. – 5:50 a.m.             | 15                                  |
| 5:50 a.m. – 9:30 p.m.             | 10                                  |
| 9:30 p.m. – 1:15 a.m.             | 15                                  |
| <b>Saturday Time Period</b>       | <b>Time Between Buses (minutes)</b> |
| 5:00 a.m. – 9:00 a.m.             | 15                                  |
| 9:00 a.m. – 10:30 p.m.            | 10                                  |
| 10:00 p.m. – 1:15 a.m.            | 15                                  |
| <b>Sunday/Holiday Time Period</b> | <b>Time Between Buses (minutes)</b> |
| 6:00 a.m. – 9:00 a.m.             | 15                                  |
| 9:00 a.m. – 9:30 p.m.             | 10                                  |
| 9:30 p.m. – 12:15 a.m.            | 15                                  |

Airport Connector bus service began operation on July 20, 2009. During August, weekday boardings averaged 1,517 per day, Saturday boardings averaged 1,793 per day and Sunday boardings averaged 1,431 per day. Ridership on the Connector is expected to increase after September 19 due to King County Metro changes that will reduce the number of Metro buses serving the SeaTac Airport terminal. Connector boardings will be included with ST Express data. Pierce Transit operates the Airport Shuttle for Sound Transit under a purchased transportation service contract.

## Sounder Commuter Rail

### Everett – Seattle (North Line)



#### *Description*

The Sounder North Line began operation in December 2003 with one peak period round trip operating southbound in the morning and northbound in the afternoon. North Line trains operate along the Burlington Northern Santa Fe Railway (BNSF) 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 Sound Transit's operating agreement with BNSF Railway. Exclusive to the North Line, Sound Transit has a cooperative program with WSDOT and Amtrak that allows monthly pass holders to ride Amtrak Cascade trains between Seattle, Edmonds 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 weekday ridership increased from about 300 boardings in 2004 to over 1,050 boardings during the second quarter of 2009.

**Performance Assessment**

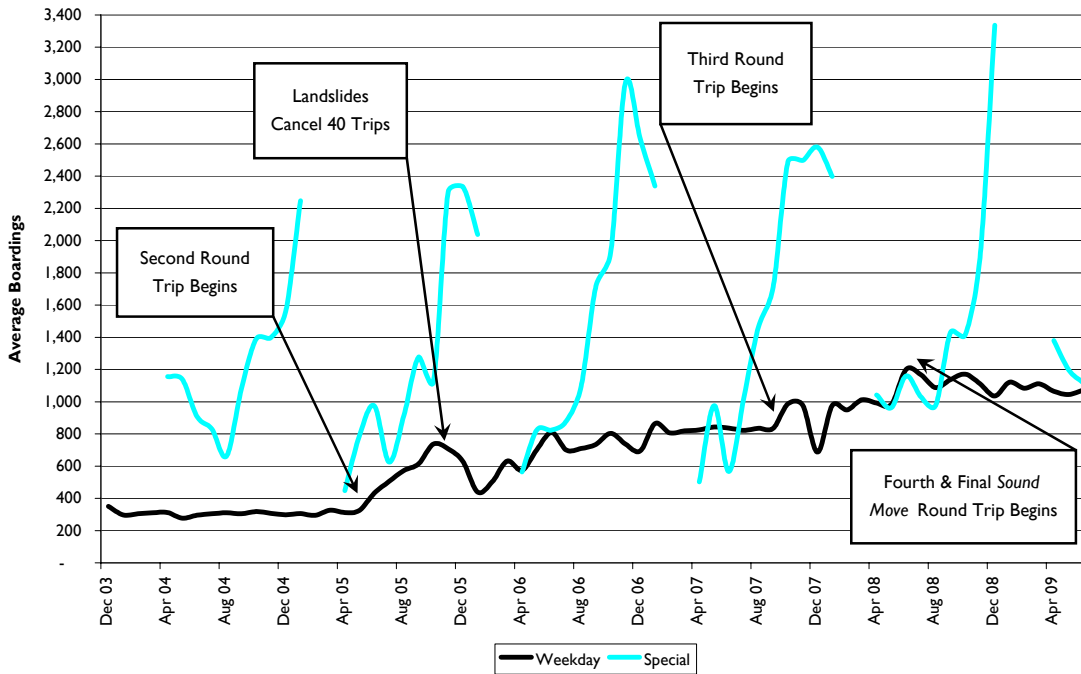
| 1st Quarter 2008          | Weekday | Special Event |
|---------------------------|---------|---------------|
| Daily Boardings           | 964     | 2,398*        |
| Passengers per Train Trip | 165.40  | 599.50        |
| Passengers per Car Trip   | 54.94   | 149.88        |

\*One Saturday Seahawks Playoff game

| 1st Quarter 2009          | Weekday | Special Event |
|---------------------------|---------|---------------|
| Daily Boardings           | 1,101   | No service    |
| Passengers per Train Trip | 137.62  | No service    |
| Passengers per Car Trip   | 55.05   | No service    |

| 2008-2009 Comparison      | Weekday | Special Event |
|---------------------------|---------|---------------|
| Daily Boardings           | + 14%   | N/A           |
| Passengers per Train Trip | - 17%   | N/A           |
| Passengers per Car Trip   | + <1%   | N/A           |

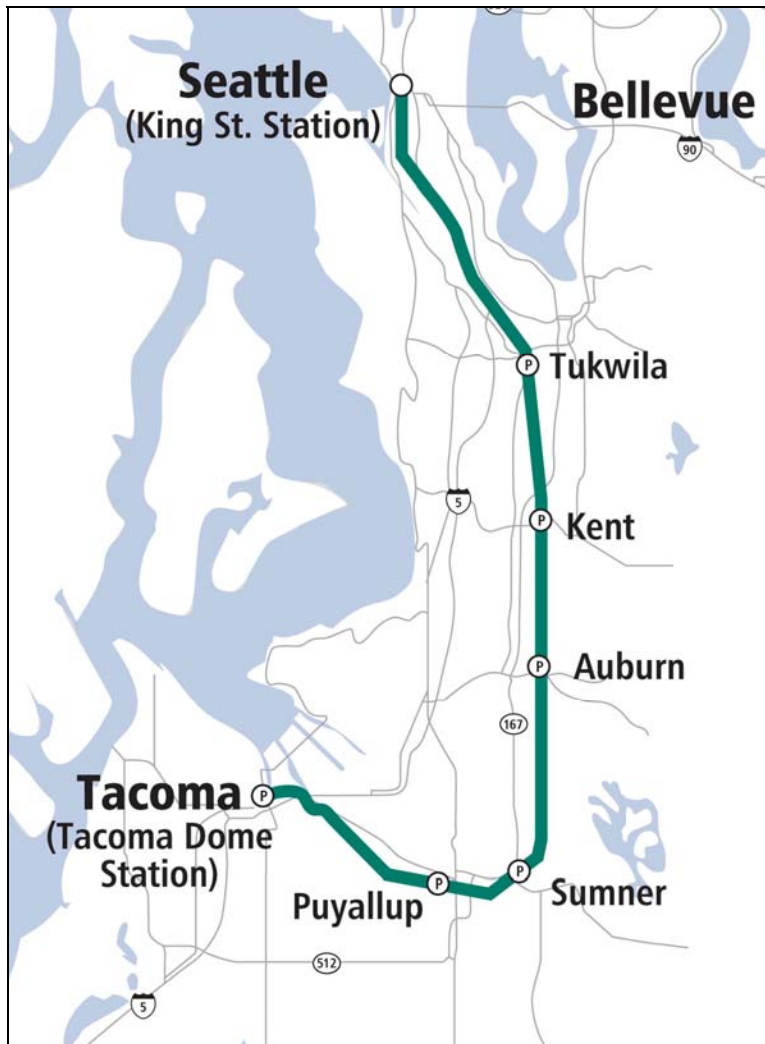
**Sounder North (Everett-Seattle)**



**Service Change Concepts**

Boardings on North Line trains increased during the 1<sup>st</sup> Quarter of 2009 compared with the comparable period in 2008, but the rate of growth has slowed and there is still considerable passenger capacity remaining on the trains. In June 2009, Sound Transit opened a major expansion of park-and-ride space at Everett Station. No changes to North Line service are planned in 2010.

## Tacoma-Seattle (South Line)



### *Description*

The Sounder South Line began operation in September 2000 with two peak period round trips operating northbound in the morning and southbound in the afternoon. Trains use BNSF Railway and Tacoma Rail tracks between Tacoma Dome Station and Seattle, with intermediate station stops at Puyallup, Sumner, Auburn, Kent and Tukwila. Since 2000, Sound Transit has worked closely with BNSF to gradually ramp up service levels as 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. More recently, Sound Transit added seventh and eighth round trips in September 2008, including a second reverse direction peak trip. The ninth round trip, originally scheduled to start in September 2008, was delayed until June 2009 because of modifications needed at Tacoma's "L" Street coach yard to store additional trains. Sound Transit has now implemented all nine round trips called for in the 1996 "Sound Move" Plan.

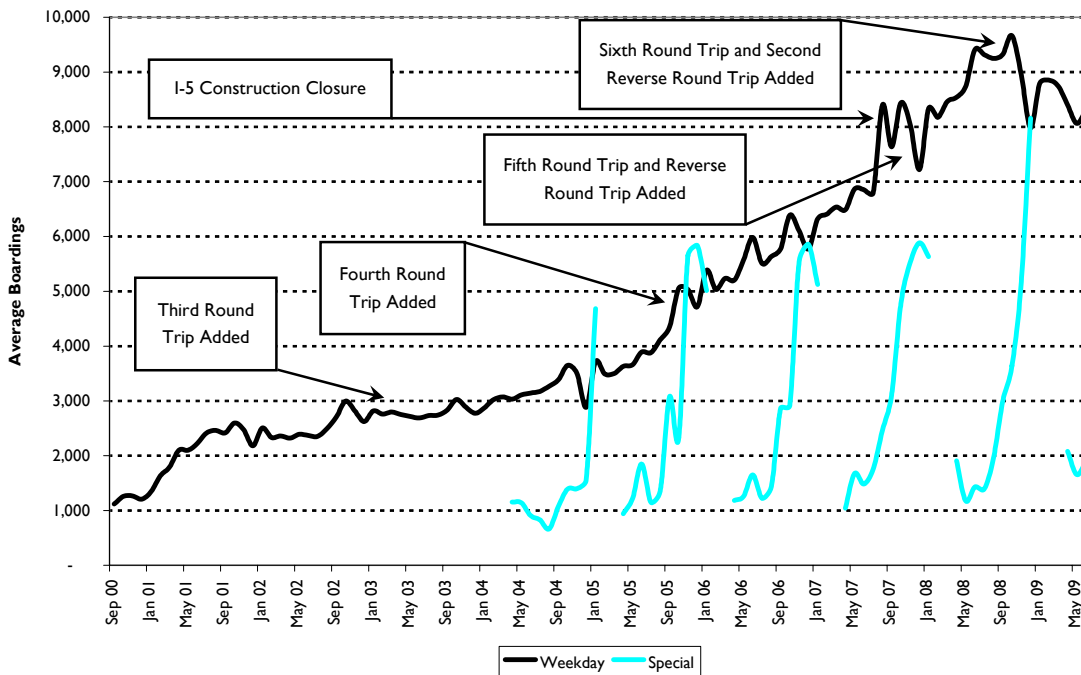
**Performance Assessment**

| 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        |

| 1st Quarter 2009      | Weekday | Special Event |
|-----------------------|---------|---------------|
| Passengers/Day        | 8,795   | No service    |
| Passengers/Train Trip | 564.50  | No service    |
| Passengers/Car Trip   | 82.15   | No service    |

| 2008-2009 Comparison      | Weekday | Special Event |
|---------------------------|---------|---------------|
| Daily Boardings           | + 6%    | N/A           |
| Passengers per Train Trip | - 19%   | N/A           |
| Passengers per Car Trip   | - 26%   | N/A           |

**Sounder South (Tacoma-Seattle)**



**Service Change Concepts**

South Line ridership hit record highs during the summer and fall of 2008 when gasoline prices increased to over \$4.35 per gallon in the Central Puget Sound area, attracting many new “choice” riders. When gasoline prices began to drop late in 2008, growth tapered off and the 2nd Quarter of 2009 has seen a decline in boardings compared with the same period in 2008, although average weekday boardings were still well ahead of comparable 2007 figures. With the addition of three more round trips since September 2008, key productivity indicators- passengers/train trip and passengers/car trip- have declined significantly. Staff predicts a gradual increase in boardings between 2010 and 2012, with a larger increase in 2013 following the opening of the Lakewood

extension (see Chapter 4, Projected Ridership and Fare Revenue). No changes to South Line service are proposed for 2010.

With most South Line park-and-ride facilities at or near capacity, service planning efforts have focused on increasing access to trains with new bus connections between Sounder stations and nearby residential communities. Six “connector” bus routes have now been established by Sound Transit or its partner transit agencies to provide convenient access to and from South Line trains. These routes are designed primarily to serve Sounder riders and feature schedules driven by the arrival and departure times of trains.

In early 2009, Sound Transit partnered with Pierce Transit and the City of Auburn to fund the first year of a new bus route connecting the Lakeland Hills area with Auburn Station (Route 497). In addition to schedules that connect to and from Sounder trains, PT bus Route 497 serves neighborhood bus stops and a satellite park-and-ride at its Lakeland Hills terminal. Ridership on Route 497 has been reasonably productive, averaging about 10 boardings per trip. King County Metro will replace Sound Transit’s financial contribution towards the service beginning with the February 2010 service change.

Other “dedicated” bus routes connecting with South Line trains include:

- ST Route 599, operating non-stop between Lakewood Station and Tacoma Dome Station (replaced by direct Sounder train service when the Lakewood extension opens)
- PT Route 495, operating between South Hills Park-and-Ride and Puyallup Station
- PT Route 496, operating between Bonney Lake Park-and-Ride and Sumner Station
- KC Metro Route 915, operating between Enumclaw and Auburn Station
- KC Metro Route 913, operating between Kent’s Riverview neighborhood and Kent Station (started Sept. 19, 2009)

During 2010, King County Metro will be evaluating possible changes that would reduce bus service running parallel to Sounder between Kent Station and downtown Seattle. These changes may be proposed for 2011 implementation. Also, King County Metro will evaluate potential improvements to bus-train connections at Kent Station. While there is an extensive network of bus routes connecting the populous East Hill-Covington area with Kent Station, current schedules are driven by factors other than Sounder connections, so train-bus transfers are not always dependable.

## ST Express Bus

The highlight of the 2010 SIP is implementation of the remaining express bus service improvements in the voter-approved ST2 program. The proposed improvements are based on work conducted in 2008 during ST2 planning, updated to reflect recent schedule analysis and ridership trends. Other planning considerations include the completion of Sound Transit's Mountlake Terrace Freeway Station project, proposed changes to partner agency service and the start-up of vehicle tolls on the SR 520 bridge. If approved by the Sound Transit Board, the improvements would be implemented in two phases, September 2010 and February 2011. A summary of the proposals is shown in the table below.

### ***ST2 EXPRESS BUS SERVICE IMPROVEMENTS*** ***September 2010 & February 2011***

| <b>Route &amp; End Points</b>                 | <b>General Description</b>                          | <b>Proposed Implementation Date</b> | <b>Change in Peak Bus Requirements</b> | <b>Change in Annual Platform Hours</b> |
|---|---|-------------------------------------|--|--|
| 511 Ash Way-Seattle                           | Peak headway improved from 30 minutes to 15 minutes | February 2011                       | +6                                     | +9,172                                 |
| 513 Everett-Seattle                           | Add 2 A.M. peak trips, 3 P.M. peak trips            | February 2011                       | +3                                     | +3,035                                 |
| 522 Woodinville-Seattle                       | Peak headway improved from 30 minutes to 15 minutes | February 2011                       | +4                                     | +4,162                                 |
| 532 Everett-Bellevue                          | Add 5 P.M. peak trips                               | February 2011                       | +3                                     | +2,507                                 |
| 542 Redmond-Interstate 5/65 <sup>th</sup> P&R | New route serving SR 520 corridor                   | Sept 2010                           | +10                                    | +19,783                                |
| 554 Issaquah-Seattle                          | Peak headway improved from 30 minutes to 15 minutes | February 2011                       | +5                                     | +12,528                                |
| 566 Overlake-Auburn                           | Extend from Overlake to Redmond                     | February 2011                       | -0-                                    | +7,148                                 |
| <b>TOTAL</b>                                  |   |                                     | <b>31 (37 w/spares)</b>                | <b>+58,335</b>                         |

Projected operations and maintenance costs are included in Appendix A, Table A-6, and the ST Express Fleet Plan is shown in Appendix A, Table B-1.

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

The Sound Transit Board approved updated Service Standards and Performance Measures for ST Express in 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 was presented for each ST Express route: passenger miles per revenue hour, denoting total average distance carried for all passengers per hour of service operated. This metric, while less common in the transit field, better represents the unique system structure and trip patterns of ST Express. 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.

For consistency with previous Service Implementation Plans, this year's SIP compares data from the First Quarter of 2009 with the same period a year earlier. Data from Second Quarter 2009 is also shown for each route to provide the most recent information available. The following tables indicate the level of systemwide performance for each ST Express performance measure:

***ST Express- Systemwide Performance 2008-2009***

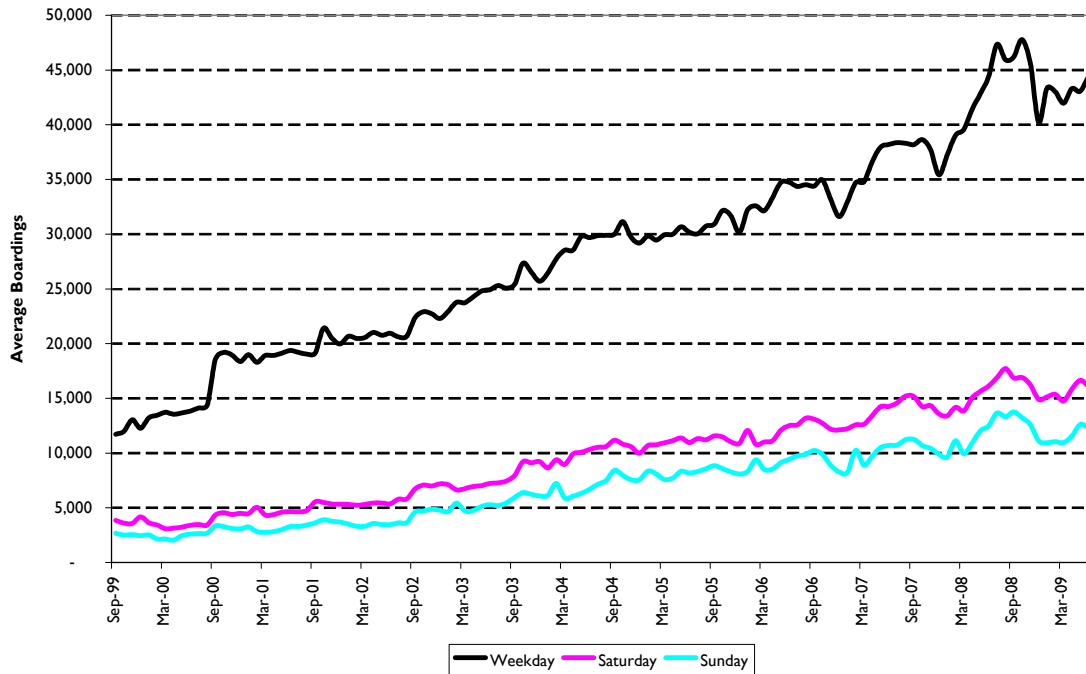
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 38,559  | 13,911   | 10,738  |
| Passengers per Trip                        | 29.06   | 30.71   | 23.62    | 18.13   |
| 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 |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 42,755  | 15,086   | 10,968 |
| Passengers per Trip                        | 30.39   | 31.67   | 25.77    | 20.57  |
| Passengers per Revenue Hour                | 23.95   | 24.93   | 20.65    | 16.12  |
| Purchased Transportation Cost per Boarding | \$5.88  | \$5.76  | \$6.08   | \$7.69 |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + 11%   | + 8%     | + 2%   |
| Passengers per Trip                        | + 5%    | + 3%    | + 9%     | + 13%  |
| Passengers per Revenue Hour                | + 6%    | + 4%    | + 10%    | + 15%  |
| Purchased Transportation Cost per Boarding | + 2%    | + 4%    | - 4%     | - 7%   |

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

**ST Express**



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

**Performance Rating Categories**

| Overall Service | Boardings per Trip | Boardings per Revenue Hour | Transportation Cost per Boarding |
|-----------------|--------------------|----------------------------|----------------------------------|
| Good            | > 37.99            | > 29.94                    | < \$4.41                         |
| Satisfactory    | 30.39 – 37.99      | 23.95 – 29.94              | \$4.41 - \$5.88                  |
| Marginal        | 22.79 – 30.39      | 17.96 – 23.95              | \$5.88 - \$7.35                  |
| Unsatisfactory  | < 22.79            | < 17.96                    | > \$7.35                         |

| Weekday Service | Boardings per Trip | Boardings per Revenue Hour | Transportation Cost per Boarding |
|-----------------|--------------------|----------------------------|----------------------------------|
| Good            | > 39.59            | > 31.16                    | < \$4.32                         |
| Satisfactory    | 31.67 – 39.59      | 24.93 – 31.16              | \$4.32 - \$5.76                  |
| Marginal        | 23.75 – 31.67      | 18.70 – 24.93              | \$5.76 - \$6.94                  |
| Unsatisfactory  | < 23.75            | < 18.70                    | > \$6.94                         |

| Saturday Service | Boardings per Trip | Boardings per Revenue Hour | Transportation Cost per Boarding |
|------------------|--------------------|----------------------------|----------------------------------|
| Good             | > 32.21            | > 25.81                    | < \$4.56                         |
| Satisfactory     | 25.77 – 32.21      | 20.65 – 25.81              | \$4.56 - \$6.08                  |
| Marginal         | 19.33 – 25.77      | 15.49 – 20.65              | \$6.08 - \$7.60                  |
| Unsatisfactory   | < 19.33            | < 15.49                    | > \$7.60                         |

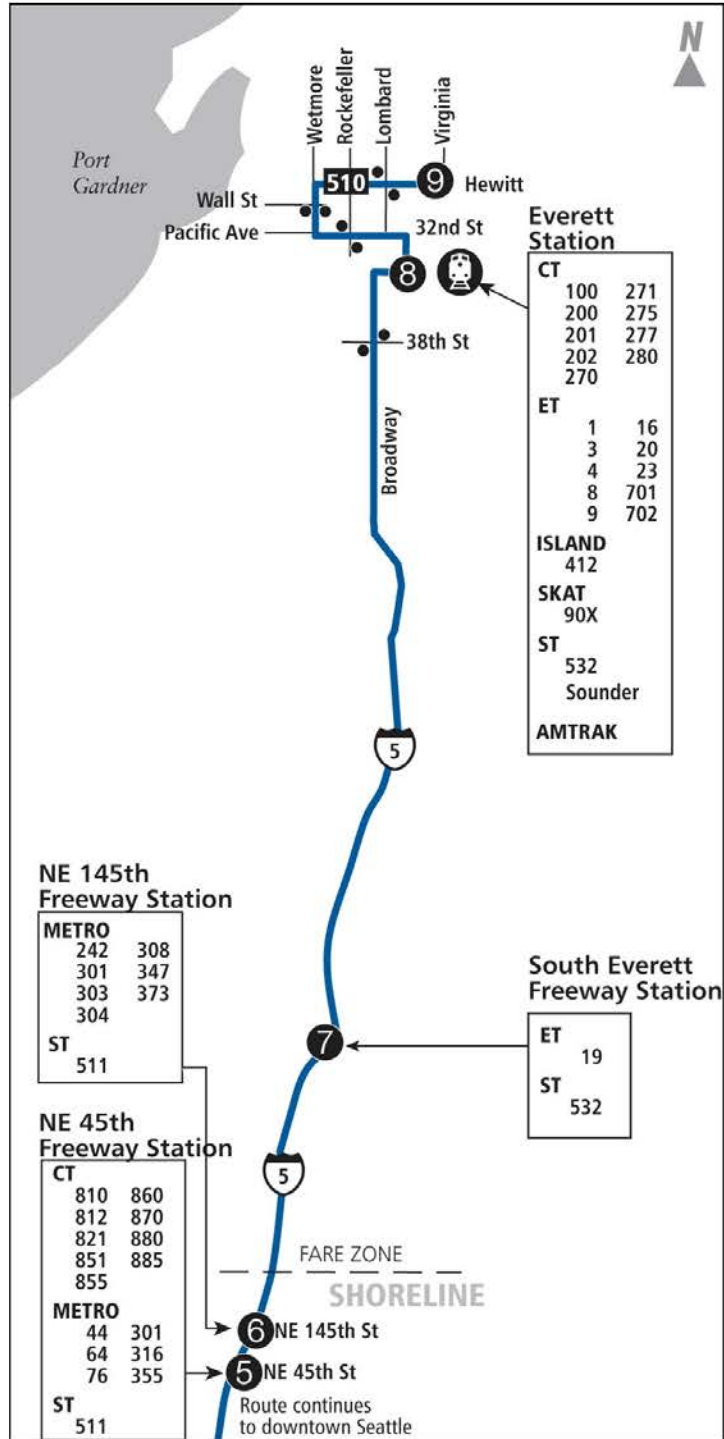
| Sunday and Holiday Service | Boardings per Trip | Boardings per Revenue Hour | Transportation Cost per Boarding |
|----------------------------|--------------------|----------------------------|----------------------------------|
| Good                       | > 25.71            | > 20.15                    | < \$5.77                         |
| Satisfactory               | 20.57 – 25.71      | 16.12 – 20.15              | \$5.77 - \$7.69                  |
| Marginal                   | 15.43 – 20.57      | 12.09 – 16.12              | \$7.69 - \$9.61                  |
| Unsatisfactory             | < 15.43            | < 12.09                    | > \$9.61                         |

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

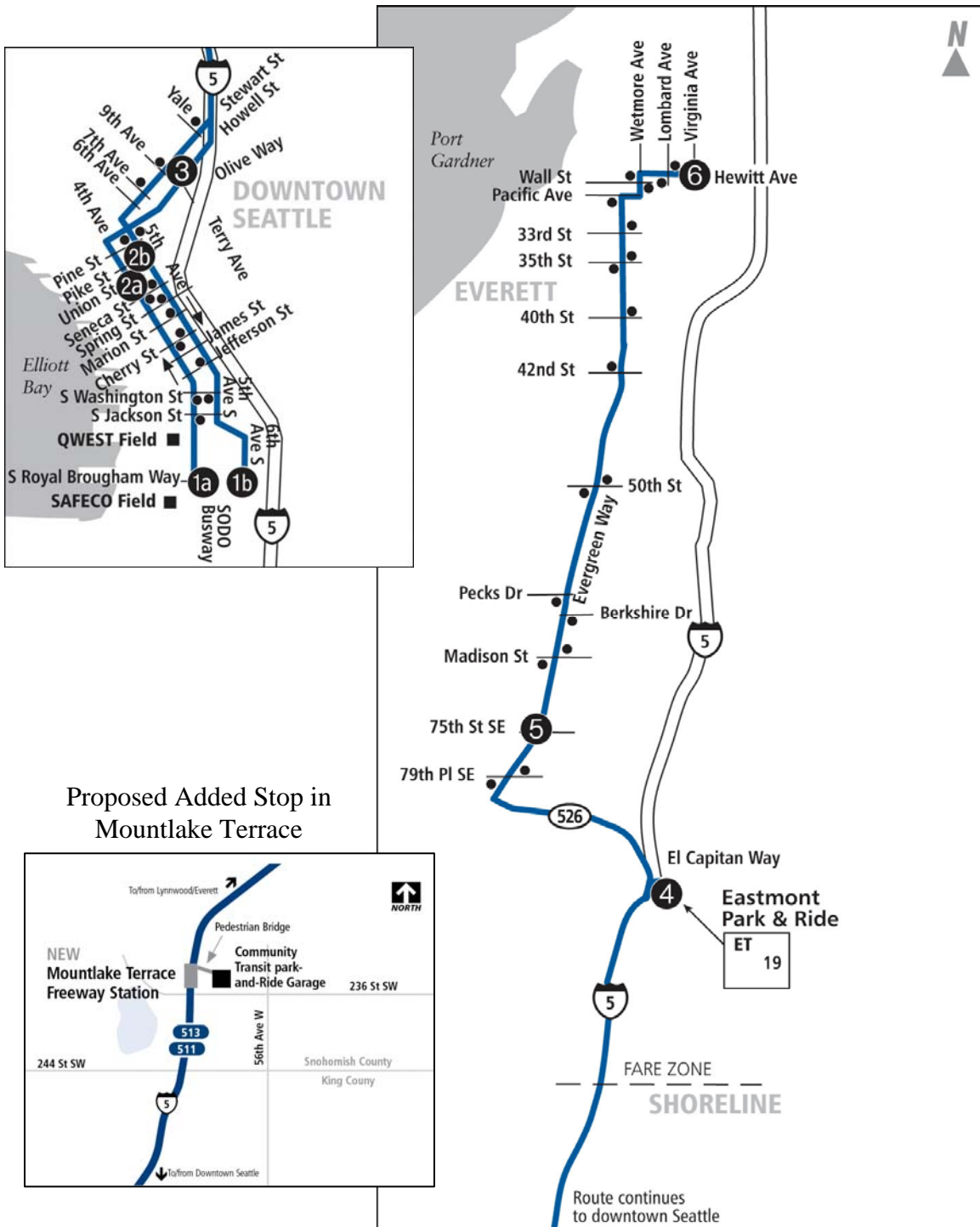
Also, as mentioned above, an additional performance measure will be presented, showing passenger miles per revenue hour for each ST Express route. Below is a table denoting productivity standards for this additional metric.

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

# Route 510/513: Everett – Seattle



**Route 510**



**Route 513**

**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 has remained a commuter route, Route 510 has expanded from a weekday peak-only service to a major regional route with service all day, seven days a week in both directions. Beginning in September 2006, Route 510 midday and Saturday service improved from every 60 minutes to every 30 minutes, and additional weekday AM peak trips were also added to accommodate overloads. Sunday service was improved from every 60 minutes to every 30 minutes in September 2009.

In September 2008, a major service restructure was implemented with the opening of the new 400-stall South Everett Park-and-Ride lot. This new lot, located in the median of I-5 at 112<sup>th</sup> Street, is served by Route 510 while Route 513 continues to serve the Eastmont Park-and-Ride, effectively splitting the park-and-ride market between the two facilities. With the September 2008 changes, four additional round trips were added to Route 510 to address passenger overloads, and travel times were reduced by about five minutes each way by using new HOV ramps to access the South Everett Park and Ride lot. The South Everett lot is now filled to capacity and some Route 510 trips continue to be overloaded during peak periods. As a part of the implementation of ST2 hours, three new Route 513 trips were added in June 2009 as an incentive for more commuters to use the Eastmont Park-and-Ride. May 2009 use of the South Everett Park-and-Ride was at 107 percent, compared to Eastmont, which had 21 percent utilization.

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 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    | 2.00    | 3.67     | 2.67   |

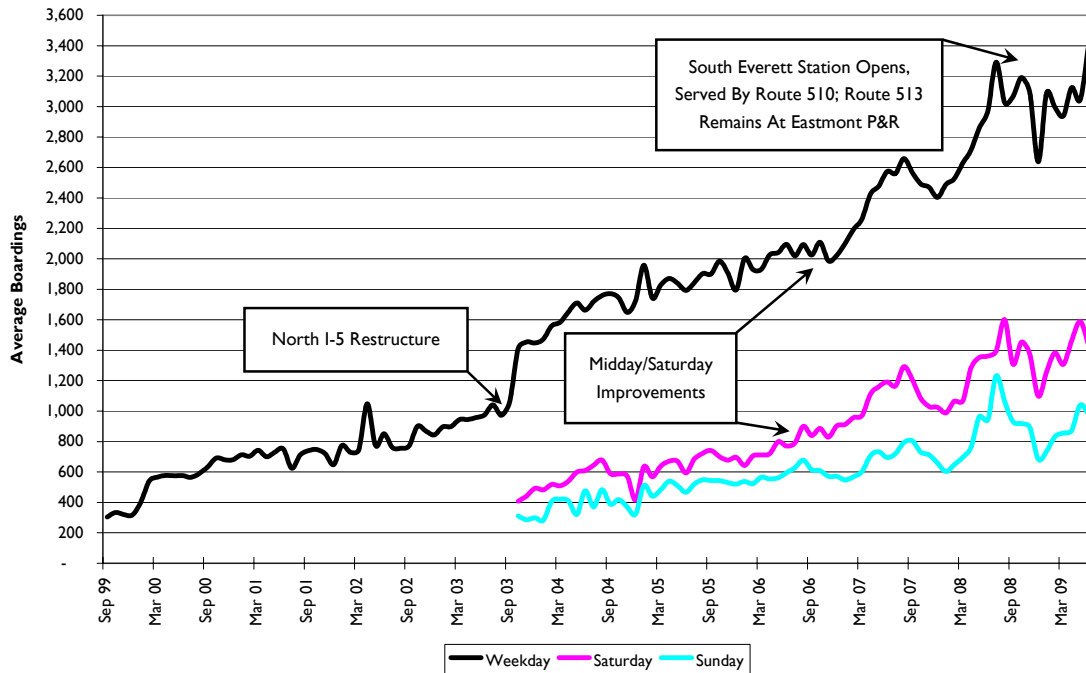
| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 3,007   | 1,310    | 806    |
| Passengers per Trip                        | 32.39   | 34.99   | 20.28    | 24.10  |
| Passengers per Revenue Hour                | 28.29   | 29.91   | 19.28    | 23.44  |
| Purchased Transportation Cost per Boarding | \$5.92  | \$5.70  | \$7.88   | \$6.62 |
| Route Assessment                           | 2.33    | 2.00    | 3.33     | 1.67   |

| 2008-2009 Comparison                       | Overall   | Weekday | Saturday | Sunday |
|--|-----------|---------|----------|--------|
| Daily Boardings                            |           | + 18%   | + 28%    | + 24%  |
| Passengers per Trip                        | + 9%      | + 6%    | + 19%    | + 34%  |
| Passengers per Revenue Hour                | + 13%     | + 10%   | + 23%    | + 40%  |
| Purchased Transportation Cost per Boarding | No change | + 4%    | - 17%    | - 24%  |

| 2nd Quarter 2009            | Overall | Weekday | Saturday | Sunday |
|-----------------------------|---------|---------|----------|--------|
| Daily Boardings             |         | 3,193   | 1,503    | 975    |
| Passengers per Trip         | 34.54   | 36.56   | 24.92    | 27.10  |
| Passengers per Revenue Hour | 30.13   | 31.22   | 23.81    | 26.35  |

|  |        |        |        |        |
|--|--------|--------|--------|--------|
| Purchased Transportation Cost per Boarding | \$5.47 | \$5.36 | \$6.38 | \$5.89 |
| Route Assessment                           | 2.00   | 2.00   | 2.67   | 1.67   |

Routes 510/513 (Everett-Seattle)



Ridership has continued to increase in this corridor and productivity improved between First Quarter 2008 and First Quarter 2009. Productivity on Saturdays is relatively low compared to weekdays, but is improving as ridership increases.

**Additional Data Pertinent to Route**

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

[To be added in Final version.]

**Service Change Concepts (February 2011)**

As noted above, since the opening of the South Everett Park-and-Ride lot in September 2008 and the shift of Route 510 to the new facility, commuter vehicles have completely filled the South Everett lot while the Eastmont Park-and-Ride has considerable surplus capacity. Staff proposes to make Eastmont more attractive to area commuters by further expanding Route 513 service so that trips are available at convenient times throughout the peak period. Route 513 would be enhanced with two new A.M. southbound trips and two new P.M. northbound trips that would operate between Eastmont Park-and-Ride and downtown Seattle only. A third new P.M. northbound trip would operate the full length of the route to downtown Everett.

In addition, Route 513 would be modified serve Sound Transit’s new Mountlake Terrace Freeway Station on all trips, enhancing service levels at the adjacent 1,000-stall Mountlake Terrace Park-and-Ride and providing a new connection opportunities to Community Transit and Metro service.

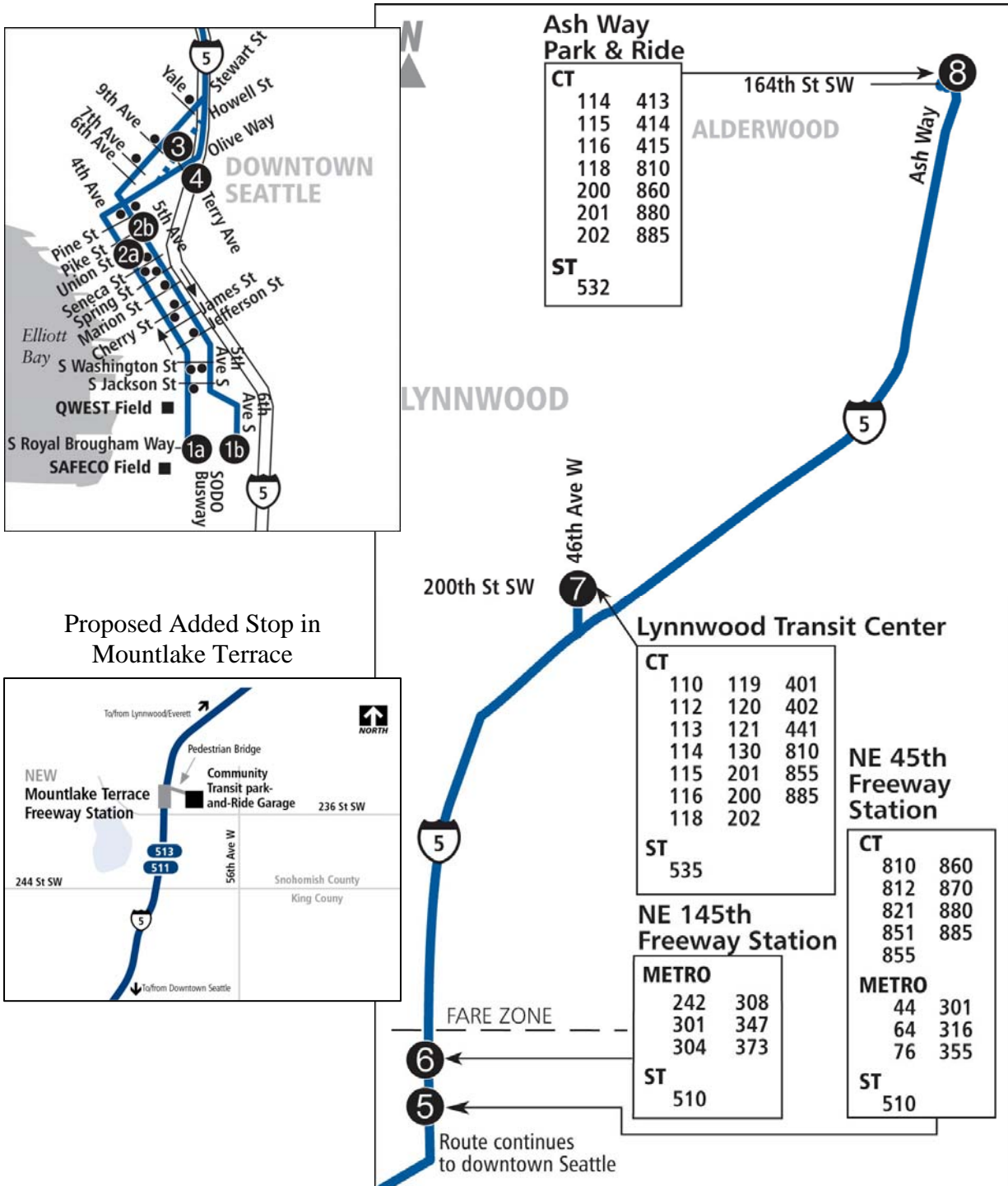
With access ramps connecting the I-5 High-Occupancy Vehicle lanes directly to the station platform, the increase in travel time with this added stop would be minimal.

***Service Change Highlights***

- Add two morning trips on Route 513 between Eastmont Park-and-Ride and downtown Seattle arriving at 5<sup>th</sup> Avenue and Pike Street at approximately 7:22 and 7:52
- Add an afternoon trip on Route 513 between downtown Seattle and downtown Everett departing SODO Busway and S Royal Brougham Way at approximately 17:45
- Add two afternoon trips on Route 513 between downtown Seattle and Eastmont Park-and-Ride departing SODO Busway and S Royal Brougham Way at approximately 16:22 and 16:52
- Add a stop at the Mountlake Terrace Freeway Station on all Route 513 trips



## 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. Weekday midday service was improved from every 30 minutes to every 15 minutes starting in September 2009.

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

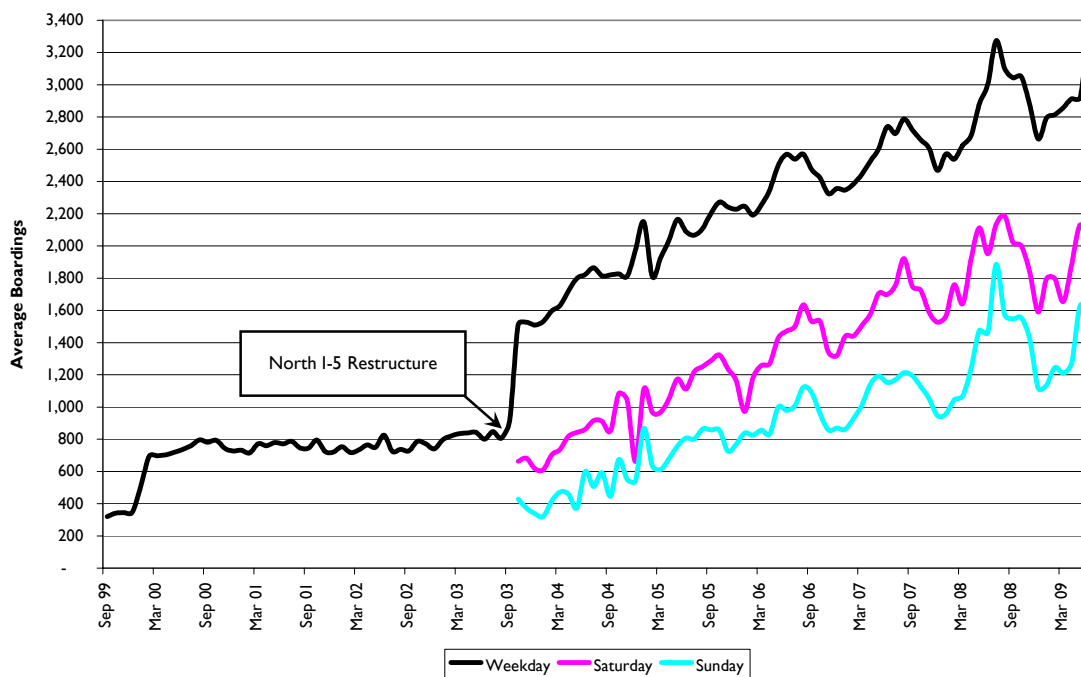
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,578   | 1,654    | 1,023  |
| Passengers per Trip                        | 32.62   | 36.38   | 27.57    | 17.05  |
| 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    | 1.33    | 1.33     | 2.00   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,823   | 1,752    | 1,194  |
| Passengers per Trip                        | 35.32   | 39.23   | 27.12    | 21.42  |
| Passengers per Revenue Hour                | 43.63   | 47.54   | 35.43    | 27.98  |
| Purchased Transportation Cost per Boarding | \$4.25  | \$4.00  | \$4.86   | \$6.14 |
| Route Assessment                           | 1.33    | 1.33    | 1.67     | 1.67   |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + 10%   | + 6%     | + 17%  |
| Passengers per Trip                        | + 8%    | + 8%    | - 2%     | + 26%  |
| Passengers per Revenue Hour                | + 8%    | + 8%    | - 2%     | + 26%  |
| Purchased Transportation Cost per Boarding | - 1%    | - 1%    | + 4%     | - 18%  |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 3,056   | 2,009    | 1,496  |
| Passengers per Trip                        | 38.45   | 41.69   | 33.49    | 24.94  |
| Passengers per Revenue Hour                | 47.52   | 50.59   | 43.75    | 32.58  |
| Purchased Transportation Cost per Boarding | \$3.81  | \$3.64  | \$3.94   | \$5.27 |
| Route Assessment                           | 1.33    | 1.00    | 1.33     | 1.67   |

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



Boardings and productivity are up significantly for the first half of 2009 compared with a year earlier.

***Additional Data Pertinent to Route***

[To be added in Final version.]

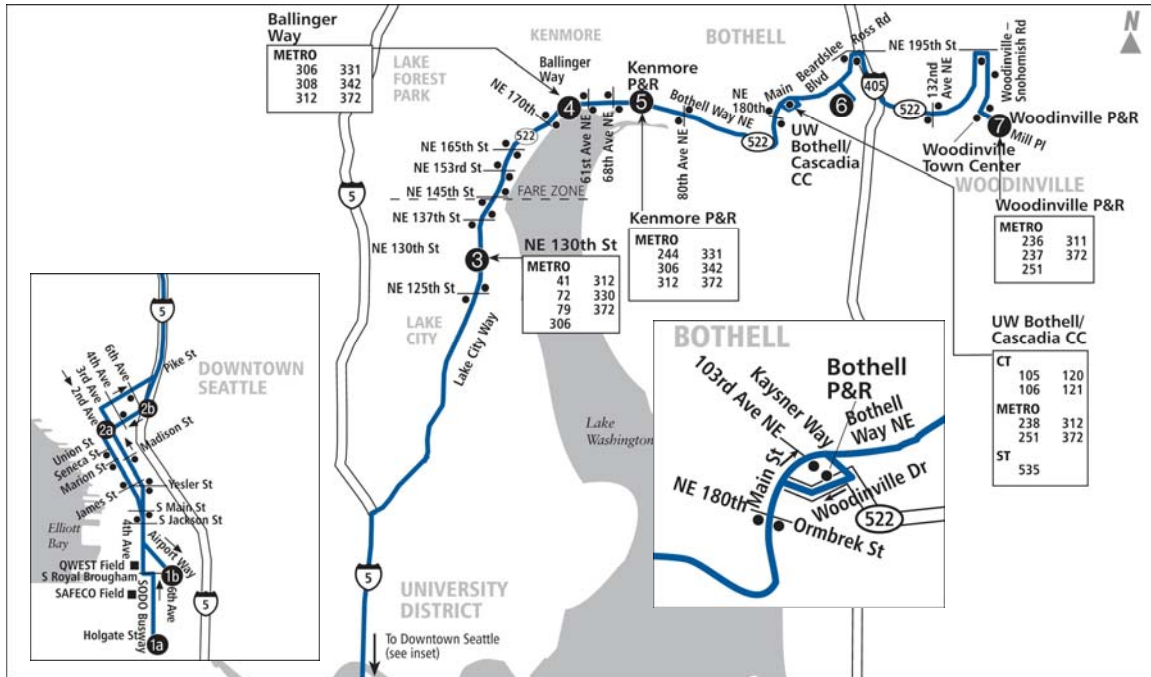
**Service Change Concepts (February 2011)**

Route 511 is one of Sound Transit’s most productive routes, and ridership has shown a steady upward trend even as growth in the rest of the ST Express network has slowed. The 511 is the core regional route connecting South Snohomish County with downtown Seattle, and makes multiple connections with Community Transit local service at Ash Way Park-and-Ride and Lynnwood Transit Center. As part of the first phase of ST2-funded improvements, Sound Transit increased weekday midday service on Route 511 from every 30 minutes to every 15 minutes in September 2009. Subject to the delivery of additional buses and increased bus base capacity, staff proposes to expand the 15-minute frequency into the peak periods on weekdays starting in February 2011. In addition, a stop would be added in both directions at the new Mountlake Terrace Freeway Station, adjacent to Community Transit’s 1,000-stall Mountlake Terrace Park-and-Ride garage at I-5 and SW 236<sup>th</sup> Street. As with Route 513, the added travel time with this new stop would be minimal, and the freeway station provides additional connections to local buses as well as increased park-and-ride access. Staff would work with Community Transit to coordinate CT-ST commuter service at both Lynnwood Transit Center and Mountlake Terrace, with the goal of providing very frequent combined headways that would attract new peak period riders.

***Service Change Highlights***

- Expand 15-minute frequency to cover peak periods as well as the midday. Southbound 15-minute frequency would operate from Ash Way Park-and-Ride between approximately 5:40 a.m. and 6:40 p.m. Northbound 15-minute frequency would operate from SODO Busway at S Royal Brougham Way between approximately 5:25 a.m. and 7:25 p.m.
- Add a stop in both directions at the Mountlake Terrace Freeway Station.
- Work with Community Transit to improve coordination of peak period commuter service at the Lynnwood Transit Center and Mountlake Terrace Freeway Station.

## Route 522: Woodinville – Seattle



### Description

The Woodinville to Seattle Express began service in September 2002. It operates along the SR-522 and I-5 corridors, with key intermediate stops at UW-Bothell/Cascadia Community College, Kenmore Park-and-Ride, Lake Forest Park, and the Lake City area of Seattle. Service operates all day, seven days a week in both directions. Routing has remained unchanged since start-up, but three additional peak period round trips were added in September 2008 to address overcrowded conditions.

### Performance Assessment

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

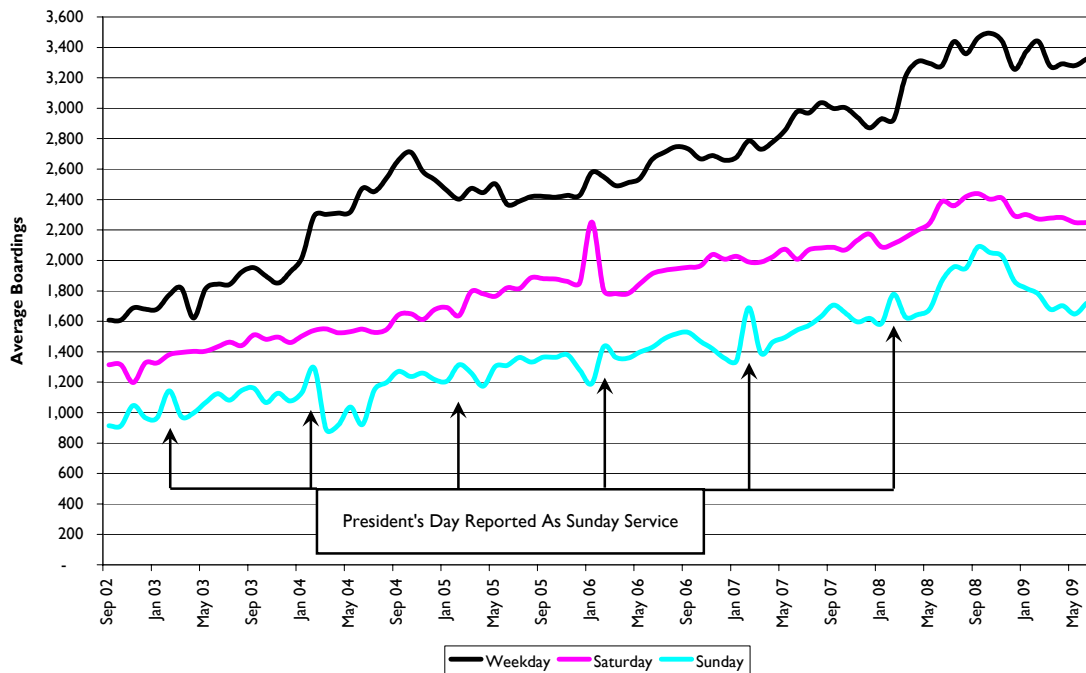
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,974   | 2,119    | 1,783  |
| Passengers per Trip                        | 34.55   | 36.85   | 32.11    | 24.79  |
| 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    | 2.00    | 1.67     | 1.67   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 3,360   | 2,286    | 1,756  |
| Passengers per Trip                        | 36.32   | 38.21   | 34.63    | 26.61  |
| Passengers per Revenue Hour                | 25.27   | 26.52   | 24.24    | 18.62  |
| Purchased Transportation Cost per Boarding | \$5.08  | \$4.98  | \$4.78   | \$6.22 |
| Route Assessment                           | 2.00    | 2.00    | 1.67     | 1.67   |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday    |
|--|---------|---------|----------|-----------|
| Daily Boardings                            |         | + 13%   | + 8%     | - 2%      |
| Passengers per Trip                        | + 5%    | + 4%    | + 8%     | + 7%      |
| Passengers per Revenue Hour                | + 3%    | + 2%    | + 6%     | + 7%      |
| Purchased Transportation Cost per Boarding | + 7%    | + 9%    | - <1%    | No change |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 3,299   | 2,260    | 1,684  |
| Passengers per Trip                        | 35.31   | 37.06   | 34.24    | 25.51  |
| Passengers per Revenue Hour                | 24.53   | 25.73   | 23.73    | 17.87  |
| Purchased Transportation Cost per Boarding | \$5.23  | \$5.14  | \$4.88   | \$6.48 |
| Route Assessment                           | 2.00    | 2.00    | 2.00     | 2.33   |

Route 522 (Woodinville-Seattle)



The increase in Sunday boardings during each February is explained by the additional service that Sound Transit operates on President's Day. A Sunday schedule is operated with added trips to provide 15-minute service, 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 Spring 2009 service change and includes boardings within the Ride Free Area.

***Passenger Activity by Time Period***

| Weekday      | AM Peak | Midday | PM Peak | Evening | Night |
|--------------|---------|--------|---------|---------|-------|
| Northbound   |         |        |         |         |       |
| Pass/Trip    | 36.94   | 49.06  | 49.55   | 46.46   | 33.85 |
| Pass/ Rev Hr | 32.65   | 41.79  | 36.89   | 47.52   | 37.61 |
| Southbound   |         |        |         |         |       |
| Pass/Trip    | 46.95   | 40.30  | 37.37   | 23.54   | 16.17 |
| Pass/ Rev Hr | 44.17   | 34.09  | 25.71   | 24.56   | 18.48 |

***Passenger Miles per Revenue Hour***

[To be added in Final version.]

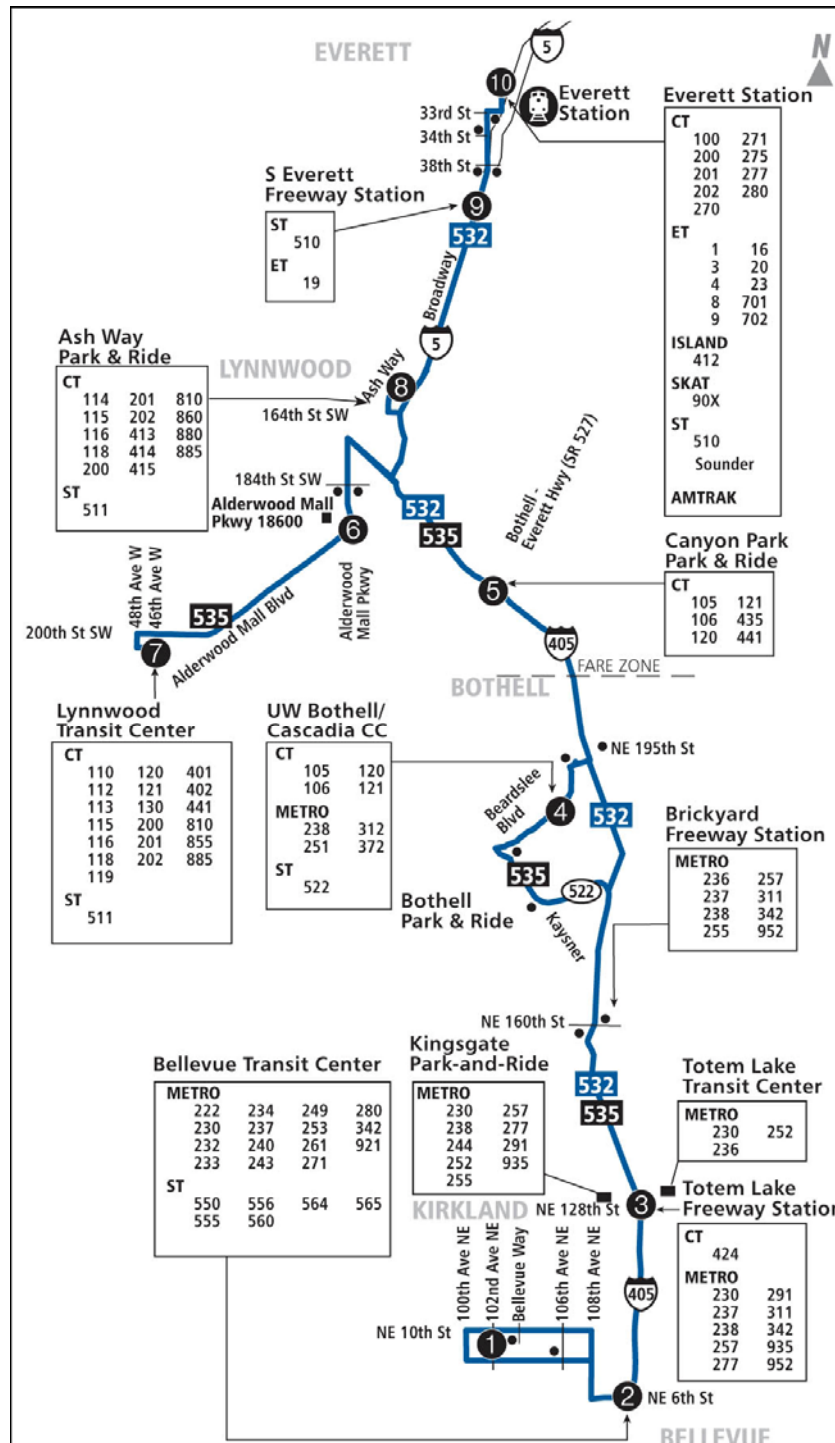
**Service Change Concepts (February 2011)**

Both Sound Transit and King County Metro provide express bus service along the SR 522 corridor. Sound Transit’s Route 522 operates all day, seven days a week in both directions, while King County Metro Routes 306 and 312 operate only during weekday peak periods, southbound in the morning and northbound in the afternoon. The ST and Metro services are similar and many peak period commuters use them interchangeably. Peak period ridership is heavy along the corridor and subject to overcrowding. The proposed improvements would add peak period/peak directional trips on Route 522 and provide a consistent 15-minute headway service both morning and afternoon. Sound Transit would work closely with King County Metro to improve schedule coordination and address specific overcrowded trips on both ST Express and Metro routes.

***Service Change Highlights***

- |   |
|---|
| <ul style="list-style-type: none"><li>• Add southbound trips departing UW-Bothell/Cascadia CC campus so that departures are added from NE 130<sup>th</sup> Street at about 5:10, 5:40, 6:10 and 6:40 a.m.</li><li>• Add southbound trip departing Woodinville Park-and-Ride at approximately 16:55</li><li>• Add northbound trips departing SODO Busway and S Holgate St so that arrivals are added to NE 130<sup>th</sup> Street at about 15:40, 17:10 and 17:40</li></ul> |
|---|

## Route 532: Everett – Bellevue



**Routes 532 and 535**

### Description

The Everett to Bellevue Express operates along the I-5 and I-405 corridors. Service began in September 1999 as two routes, 530 and 532. Many changes to stops and service levels have taken



place over the years as clear ridership patterns developed and new transit facilities were completed.

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

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

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 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    | 2.00    |                    |        |

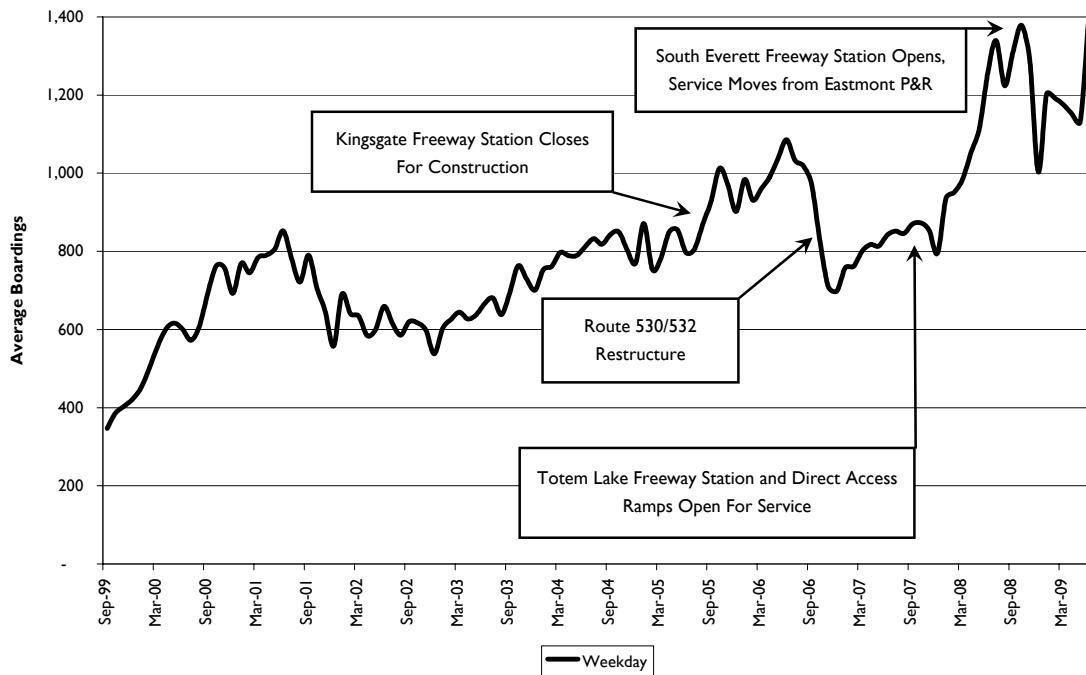
| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,190   | No weekend service |        |
| Passengers per Trip                        | 37.21   | 37.21   |                    |        |
| Passengers per Revenue Hour                | 35.10   | 35.10   |                    |        |
| Purchased Transportation Cost per Boarding | \$5.44  | \$5.44  |                    |        |
| Route Assessment                           | 1.67    | 1.67    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | + 24%   | No weekend service |        |
| Passengers per Trip                        | + 13%   | + 13%   |                    |        |
| Passengers per Revenue Hour                | + 19%   | + 19%   |                    |        |
| Purchased Transportation Cost per Boarding | + <1%   | + <1%   |                    |        |

| 2nd Quarter 2009 | Overall | Weekday | Saturday | Sunday |
|------------------|---------|---------|----------|--------|
|------------------|---------|---------|----------|--------|

|  |        |        |                    |
|--|--------|--------|--------------------|
| Daily Boardings                            |        | 1,226  | No weekend service |
| Passengers per Trip                        | 35.65  | 35.65  |                    |
| Passengers per Revenue Hour                | 33.63  | 33.63  |                    |
| Purchased Transportation Cost per Boarding | \$5.67 | \$5.67 |                    |
| Route Assessment                           | 1.67   | 1.67   |                    |

**Route 532 (Everett-Bellevue)**



**Additional Data Pertinent to Route**

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

[To be added in Final version.]

**Service Change Concepts (February 2011)**

This corridor has proven to be a success story, with strong ridership growth and good productivity. End-to-end travel time has steadily decreased as new Sound Transit freeway stops and direct access ramps have been completed at South Everett, Canyon Park, Totem Lake and downtown Bellevue. Ridership increased dramatically during most of 2008 largely because of high gas prices and employment growth in downtown Bellevue, and peak direction service continues to be overcrowded with many trips approaching about 140% of seated capacity. Standees and customer complaints are frequent occurrences, particularly on P.M. peak trips. Demand is expected to increase as Microsoft is moving more employees to downtown Bellevue from other work sites.

Staff proposes to address overcrowding and latent demand for more service by adding new afternoon northbound trips. Subject to the delivery of additional buses and expanded bus base capacity, five new northbound P.M. trips would be added at strategic times. No routing or stop changes are proposed.

***Service Change Highlights***

- Add northbound trips departing NE 10<sup>th</sup> Street at 102<sup>nd</sup> Avenue NE at about 14:58, 15:28, 16:23 and 17:58
- Adjust the northbound trip departing NE 10<sup>th</sup> Street at 102<sup>nd</sup> Avenue NE at 16:28 to 16:33

## Route 535: Lynnwood – Bellevue

See map in Route 532 section above.

### Description

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

### Performance Assessment

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

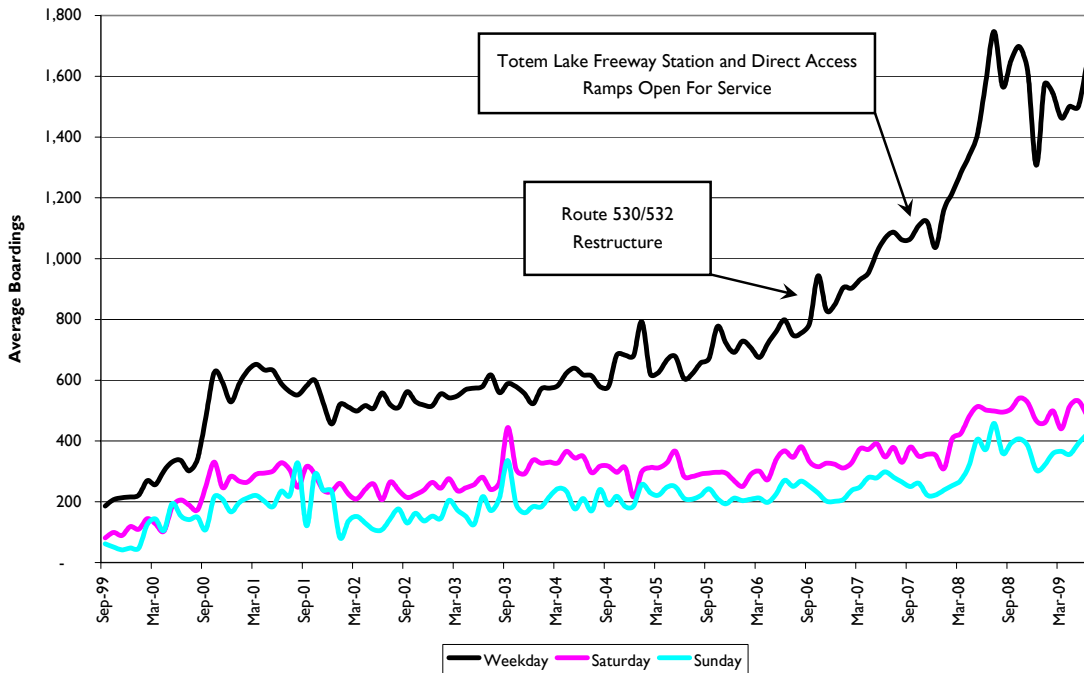
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 1,219   | 384      | 254     |
| Passengers per Trip                        | 17.29   | 18.47   | 13.23    | 8.77    |
| 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    | 3.67    | 3.33     | 3.67    |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 1,525   | 466      | 348     |
| Passengers per Trip                        | 21.67   | 23.13   | 14.92    | 12.90   |
| Passengers per Revenue Hour                | 26.18   | 27.76   | 18.61    | 16.11   |
| Purchased Transportation Cost per Boarding | \$6.55  | \$6.23  | \$8.75   | \$10.11 |
| Route Assessment                           | 3.00    | 3.00    | 3.67     | 3.67    |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + 25%   | + 21%    | + 37%  |
| Passengers per Trip                        | + 25%   | + 25%   | + 13%    | + 47%  |
| Passengers per Revenue Hour                | + 21%   | + 21%   | + 8%     | + 42%  |
| Purchased Transportation Cost per Boarding | - 13%   | - 10%   | - 15%    | - 36%  |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,545   | 513      | 389    |
| Passengers per Trip                        | 22.08   | 23.29   | 17.70    | 13.43  |
| Passengers per Revenue Hour                | 26.65   | 27.95   | 22.07    | 16.76  |
| Purchased Transportation Cost per Boarding | \$6.36  | \$6.10  | \$7.37   | \$9.71 |
| Route Assessment                           | 3.00    | 3.00    | 3.67     | 3.67   |

**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 performance measures have been trending upwards. It is useful to note that Route 535 is one of only a small handful of ST Express routes that provide suburb-to-suburb service all day, seven days a week.

***Additional Data Pertinent to Route***

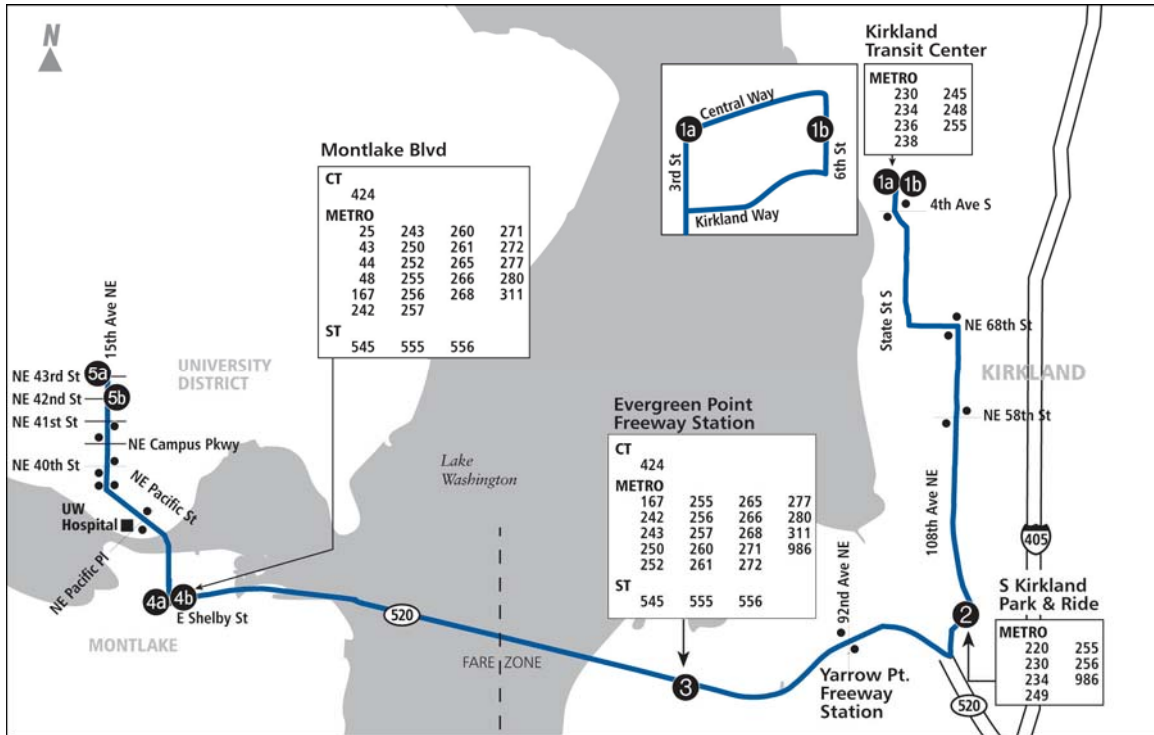
The following table looks at each direction by time period on weekdays.

[To be added in Final version.]

**Service Change Concepts**

No changes are proposed for Route 535 at this time.

## Route 540: Kirkland – U. District



### Description

The Kirkland to University District service started in September 2000, originally traveling as far east as Bear Creek Park-and-Ride in Redmond. It currently operates between the Kirkland Transit Center and the 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 85th Street. All weekend service was discontinued at that time due to low productivity.

**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

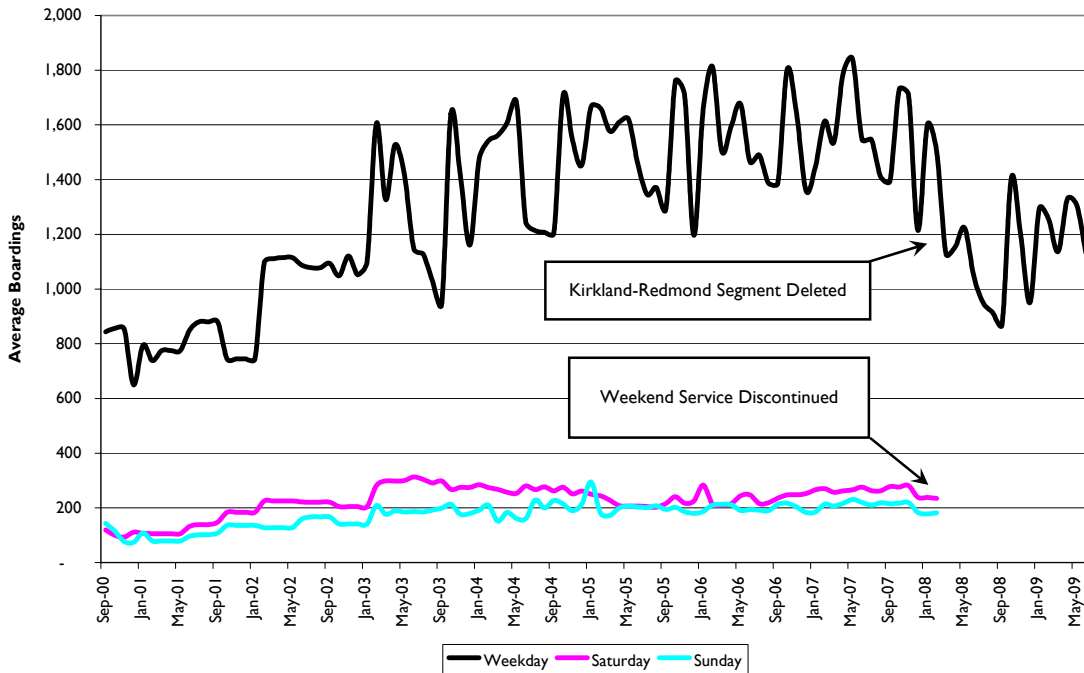
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 1,390   | 237      | 214     |
| Passengers per Trip                        | 18.40   | 18.96   | 9.89     | 7.44    |
| 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    | 3.33    | 4.00     | 4.00    |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,227   | N/A      | N/A    |
| Passengers per Trip                        | 16.59   | 16.59   | N/A      | N/A    |
| Passengers per Revenue Hour                | 18.81   | 18.81   | N/A      | N/A    |
| Purchased Transportation Cost per Boarding | \$7.17  | \$7.17  | N/A      | N/A    |
| Route Assessment                           | 3.33    | 3.33    | N/A      | N/A    |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | - 12%   | N/A      | N/A    |
| Passengers per Trip                        | - 10%   | - 13%   | N/A      | N/A    |
| Passengers per Revenue Hour                | + 3%    | - <1%   | N/A      | N/A    |
| Purchased Transportation Cost per Boarding | + 11%   | + 15%   | N/A      | N/A    |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,255   | N/A      | N/A    |
| Passengers per Trip                        | 16.95   | 16.95   | N/A      | N/A    |
| Passengers per Revenue Hour                | 19.45   | 19.45   | N/A      | N/A    |
| Purchased Transportation Cost per Boarding | \$7.01  | \$7.01  | N/A      | N/A    |
| Route Assessment                           | 3.33    | 3.33    | N/A      | N/A    |

**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 more Kirkland-Redmond riders than before and ST Express Route 545 absorbing most 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 Spring 2009 service change.

***Passenger Activity by Time Period***

| Weekday          | AM Peak | Midday | PM Peak | Evening | Night            |
|------------------|---------|--------|---------|---------|------------------|
| <b>Eastbound</b> |         |        |         |         |                  |
| Pass/Trip        | 7.78    | 13.31  | 21.97   | 14.37   | 11.64            |
| Pass/ Rev Hr     | 14.97   | 25.24  | 34.97   | 31.65   | 26.85            |
| <b>Westbound</b> |         |        |         |         |                  |
| Pass/Trip        | 26.13   | 15.81  | 10.25   | 4.70    | No night service |
| Pass/ Rev Hr     | 57.30   | 35.80  | 22.43   | 11.75   |                  |

***Passenger Miles per Revenue Hour***

[To be added in Final Version]

**Service Change Concepts**



No service changes planned for Route 540 at this time. 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 the impact of tolls on travel across the SR 520 Bridge.

## Route 542: Redmond – I-5/65th Street Park-and-Ride via U District (NEW)



### *Description*

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

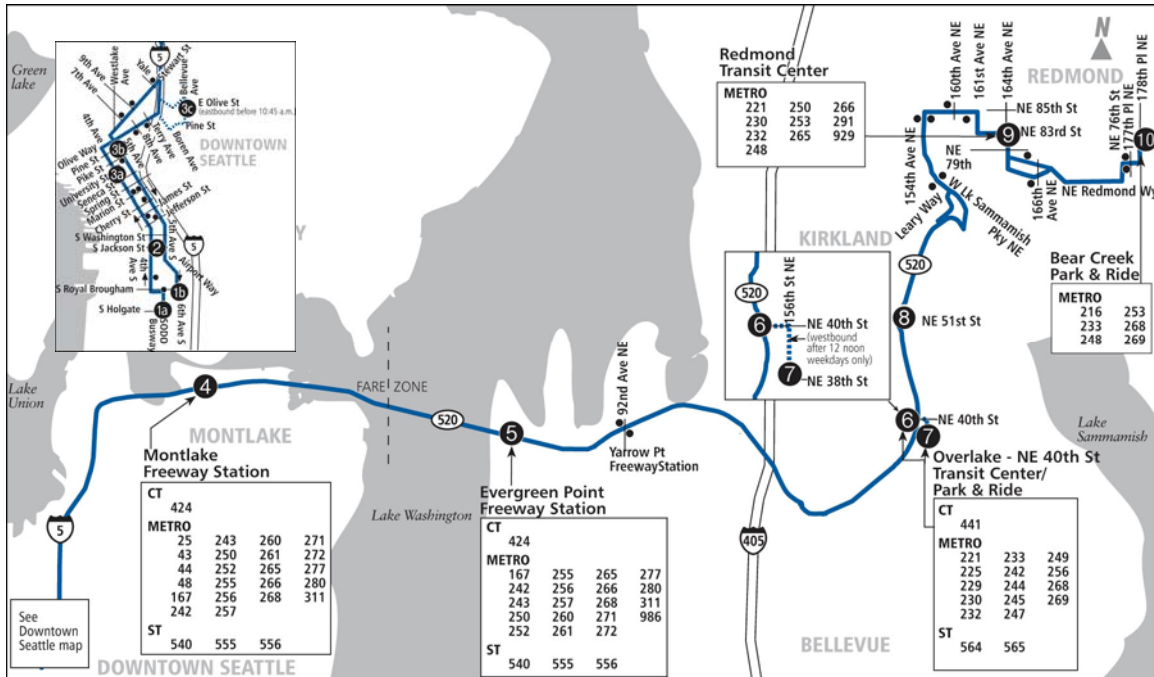
Service would be provided every 15 minutes in both directions on weekdays from about 6 a.m. to 10 a.m., and from about 2 p.m. to 7 p.m. Serving major employment and education centers at both ends, the new route would address overcrowding on existing ST Express Route 545 (Redmond-Seattle) and help address construction-related traffic impacts when work begins on replacing the SR 520 bridge. The new route would also accommodate increased ridership when vehicle tolls are implemented on the bridge in 2011. Tolls are expected to increase overall transit demand on the bridge by 15 to 30 percent.

Under the SR 520 Urban Partnership Agreement between U.S. DOT, King County Metro and the Washington State Department of Transportation, buses used for Route 542 service are eligible for full grant funding.

### *Service Change Highlights*

- Implement new Route 542 between Redmond Transit Center and I-5/NE 65th Street Park-and-Ride via the University District.
- Operate 2-way weekday service every 15 minutes between about 6 a.m. and 10 a.m. and from 2 p.m. to 7 p.m.
- Target September 2010 for implementation prior to the start-up of vehicle tolls on the SR 520 bridge and in time for the Fall 2010 Quarter at the University of Washington.

## 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

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

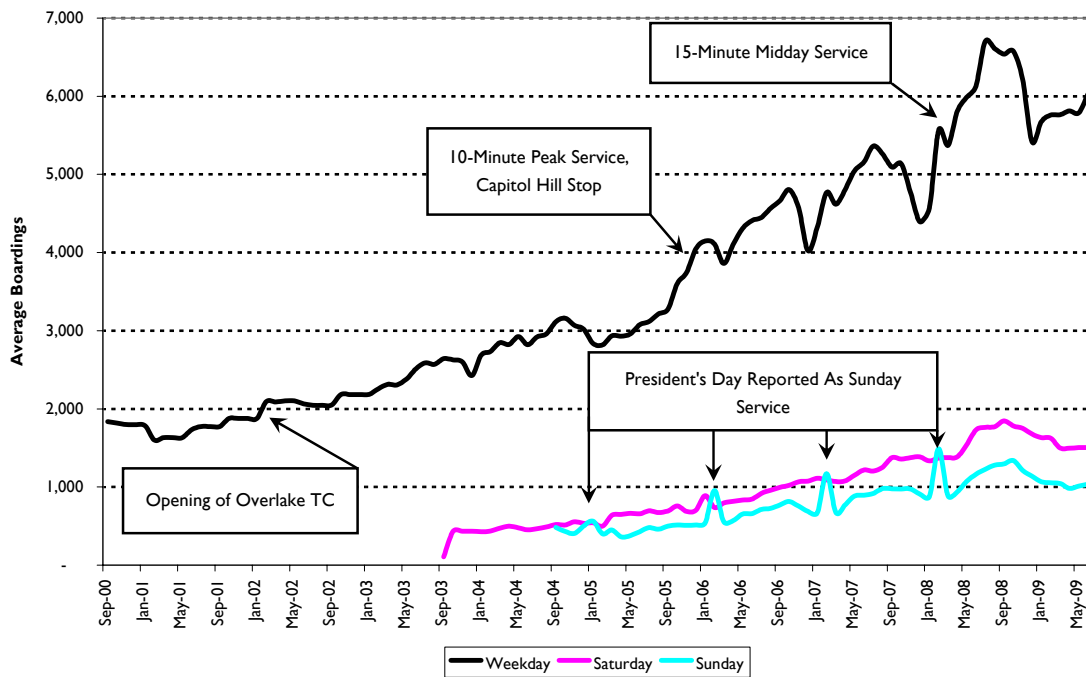
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,074   | 1,360    | 1,162  |
| Passengers per Trip                        | 33.23   | 36.30   | 21.72    | 15.73  |
| 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    | 2.00    | 2.33     | 3.00   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,732   | 1,590    | 1,056  |
| Passengers per Trip                        | 34.05   | 36.31   | 25.24    | 16.76  |
| Passengers per Revenue Hour                | 26.12   | 27.32   | 22.00    | 14.37  |
| Purchased Transportation Cost per Boarding | \$4.87  | \$4.71  | \$5.36   | \$8.15 |
| Route Assessment                           | 2.00    | 2.00    | 2.33     | 3.00   |
| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |

|  |      |       |       |       |
|--|------|-------|-------|-------|
| Daily Boardings                            |      | + 13% | + 17% | - 9%  |
| Passengers per Trip                        | + 2% | + <1% | + 16% | + 7%  |
| Passengers per Revenue Hour                | + 3% | - <1% | + 17% | + 21% |
| Purchased Transportation Cost per Boarding | + 3% | + 6%  | - 9%  | - 4%  |

|  |         |         |          |        |
|--|---------|---------|----------|--------|
| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
| Daily Boardings                            |         | 5,880   | 1,502    | 1,011  |
| Passengers per Trip                        | 34.39   | 36.82   | 23.85    | 16.04  |
| Passengers per Revenue Hour                | 26.31   | 27.65   | 20.70    | 13.73  |
| Purchased Transportation Cost per Boarding | \$4.82  | \$4.63  | \$5.69   | \$8.53 |
| Route Assessment                           | 2.00    | 2.00    | 3.00     | 3.33   |

**Route 545 (Redmond-Seattle)**



**Additional Data Pertinent to Route**

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

**Passenger Activity by Time Period**

| Weekday          | AM Peak* | Midday* | PM Peak** | Evening** | Night** |
|------------------|----------|---------|-----------|-----------|---------|
| <b>Eastbound</b> |          |         |           |           |         |
| Pass/Trip        | 51.40    | 36.13   | 45.19     | 26.33     | 14.01   |
| Pass/ Rev Hr     | 48.99    | 37.88   | 42.59     | 33.62     | 19.78   |
| <b>Westbound</b> |          |         |           |           |         |
| Pass/Trip        | 43.91    | 28.47   | 50.72     | 26.64     | 16.31   |
| Pass/ Rev Hr     | 50.80    | 30.70   | 46.03     | 31.51     | 21.75   |

- \* - Includes Bellevue & Olive stop eastbound
- \*\* - Includes Overlake Transit Center westbound
- ♦ - See below

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

| Weekday          | Midday with Bellevue & Olive | Midday without Bellevue & Olive | Midday without Overlake TC | Midday with Overlake TC |
|------------------|------------------------------|---------------------------------|----------------------------|-------------------------|
| <b>Eastbound</b> |                              |                                 |                            |                         |
| Pass/Trip        | 47.43                        | 46.32                           |                            |                         |
| Pass/ Rev Hr     | 31.97                        | 34.44                           |                            |                         |
| <b>Westbound</b> |                              |                                 |                            |                         |
| Pass/Trip        |                              |                                 | 31.15                      | 26.00                   |
| Pass/ Rev Hr     |                              |                                 | 35.99                      | 26.41                   |

***Passenger Miles per Revenue Hour***

[To be added in Final version.]

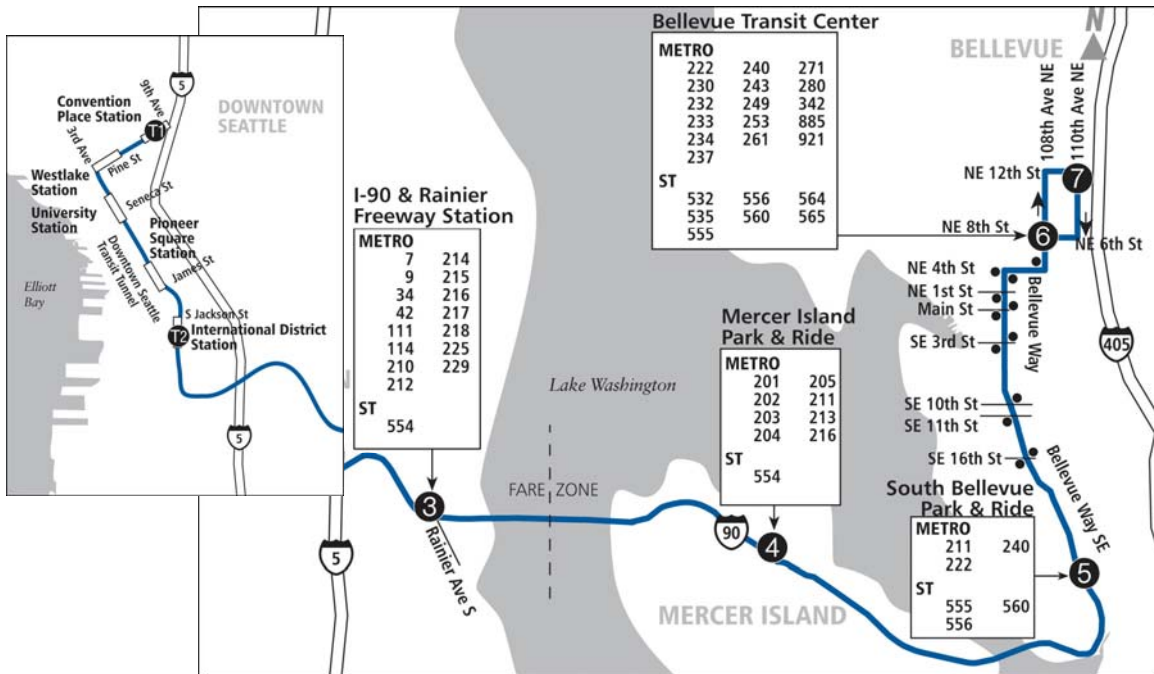
**Service Change Concepts**

Route 545 ridership continued to increase between First Quarter 2008 and First Quarter 2009, although at a lower rate than in previous years. With the exception of Route 550 (Seattle-Bellevue), Route 545 carries more passengers than any other ST Express route.

Sound Transit is working with the City of Seattle DOT and WSDOT on developing a new stop and bus shelter for Route 545 near the Olive/I-5 on-ramp. If the project is approved and funded, the new stop would continue access to Capitol Hill while eliminating the lengthy route deviation now needed to reach the Bellevue Avenue/Olive Street stop, decreasing one-way travel time by more than 5 minutes.

No other service changes are planned for Route 545 at this time. Staff will continue to monitor ridership and productivity closely, particularly after vehicle tolls begin on the SR 520 Bridge.

## 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 part of a corridor slated for light rail transit in the future.

### Performance Assessment

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

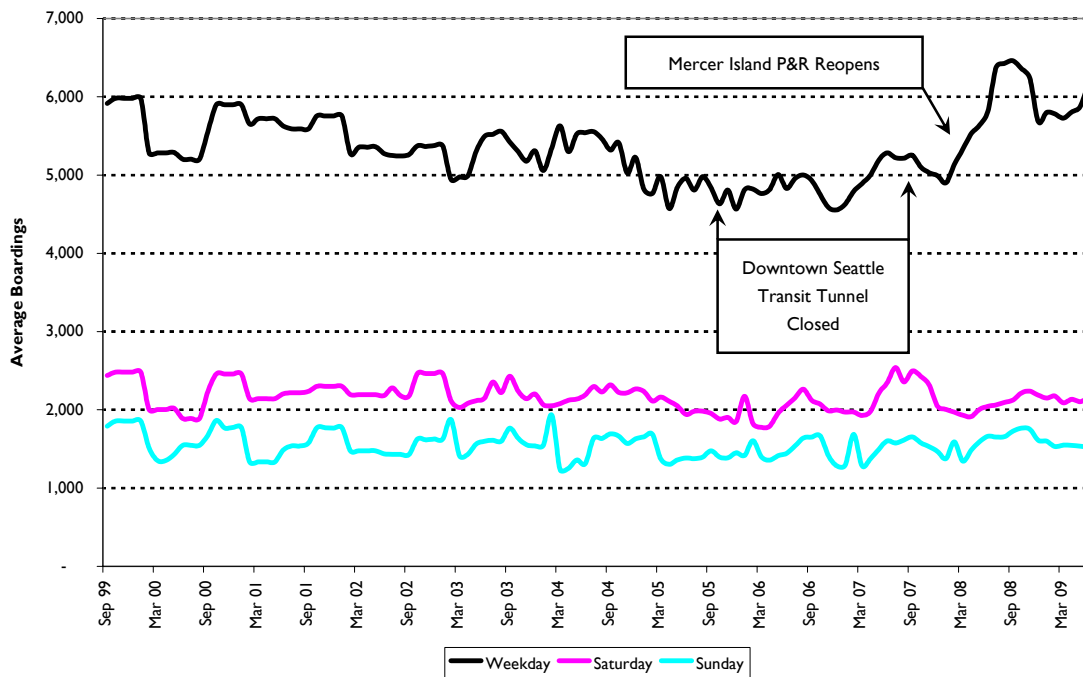
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,038   | 1,967    | 1,540  |
| Passengers per Trip                        | 31.23   | 33.02   | 27.31    | 19.08  |
| 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    | 1.33    | 1.33     | 2.00   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,768   | 2,140    | 1,563  |
| Passengers per Trip                        | 34.74   | 36.54   | 29.72    | 21.71  |
| Passengers per Revenue Hour                | 35.49   | 38.22   | 27.13    | 19.79  |
| Purchased Transportation Cost per Boarding | \$3.53  | \$3.34  | \$4.28   | \$5.81 |
| Route Assessment                           | 1.33    | 1.33    | 1.33     | 2.00   |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + 14%   | + 9%     | + 1%   |
| Passengers per Trip                        | + 11%   | + 11%   | + 9%     | + 14%  |
| Passengers per Revenue Hour                | + 12%   | + 10%   | + 10%    | + 19%  |
| Purchased Transportation Cost per Boarding | - 5%    | - 4%    | - 3%     | - 7%   |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,952   | 2,128    | 1,536  |
| Passengers per Trip                        | 35.48   | 37.43   | 29.56    | 21.33  |
| Passengers per Revenue Hour                | 36.82   | 39.47   | 28.60    | 20.24  |
| Purchased Transportation Cost per Boarding | \$3.41  | \$3.23  | \$4.09   | \$5.67 |
| Route Assessment                           | 1.33    | 1.33    | 1.33     | 2.33   |

Route 550 (Bellevue-Seattle)



**Additional Data Pertinent to Route**

The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the Spring 2009 service change. The tables following include stop level information for Route 550.

**Passenger Activity by Time Period**

| Weekday          | AM Peak | Midday | PM Peak | Evening | Night |
|------------------|---------|--------|---------|---------|-------|
| <b>Eastbound</b> |         |        |         |         |       |
| Pass/Trip        | 48.53   | 38.26  | 58.83   | 28.64   | 21.15 |
| Pass/ Rev Hr     | 77.91   | 64.06  | 94.41   | 45.67   | 35.25 |
| <b>Westbound</b> |         |        |         |         |       |
| Pass/Trip        | 47.46   | 31.94  | 52.32   | 31.68   | 18.45 |
| Pass/ Rev Hr     | 80.56   | 50.83  | 78.76   | 53.05   | 33.74 |

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

[To be added in Final version.]

### **Service Change Concepts**

Route 550 continues to be the most popular ST Express route, averaging almost 5,800 average weekday boardings. With its operation through the Downtown Seattle Transit Tunnel, limited stops and extensive use of I-90 HOV facilities, Route 550 has many bus rapid transit characteristics. Ridership and productivity increased between First Quarter 2008 and First Quarter 2009, helped by the re-opening of the Mercer Island Park-and-Ride with 200 additional parking stalls. With the May 30, 2009 service change, Route 550 now operates in the Downtown Seattle Transit Tunnel at all times, not just during daytime weekday hours.

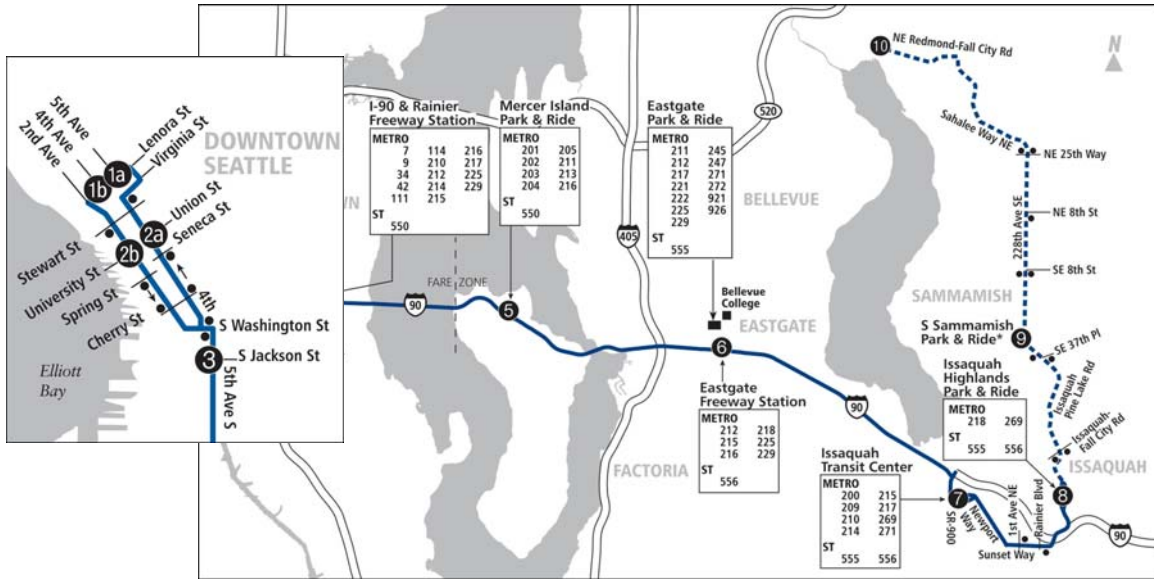
Sound Transit continues to work with the City of Bellevue and King County Metro staff on the current express stop pattern on Bellevue Way. The stop pattern has not been evaluated since 1999, and Sound Transit has received complaints that there are too many stops along this section of the route. In counter to this, 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, a leased park-and-ride on Bellevue Way has closed and is no longer available to commuters, so the stop adjacent to the lot is now lightly used. 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.

### ***Service Change Highlights (Administrative Change)***

- Discontinue serving the stop at Bellevue Way NE at NE 1st St.
- Relocate the stop on Bellevue Way SE at SE 3rd Street and SE 10th Street to Bellevue Way SE and SE 8th Street.



## Route 554: Issaquah – Seattle



### Description

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

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

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

**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

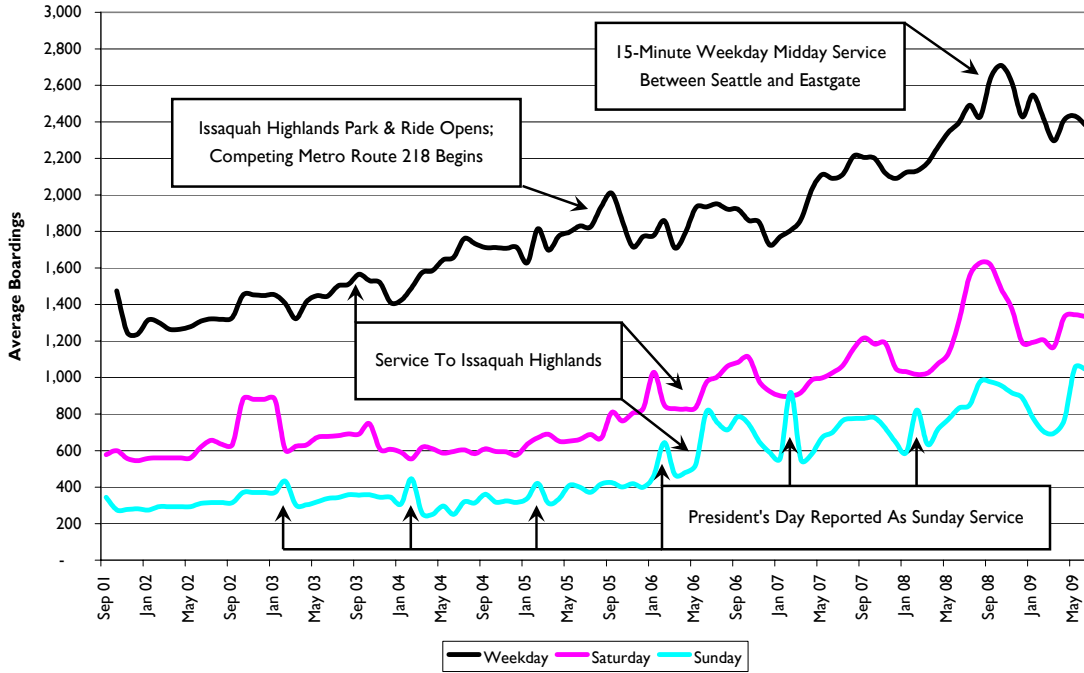
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 2,110   | 1,025    | 731     |
| Passengers per Trip                        | 24.74   | 28.29   | 16.53    | 12.30   |
| 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    | 2.67    | 4.00     | 4.00    |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 2,420   | 1,189    | 729     |
| Passengers per Trip                        | 23.80   | 25.74   | 19.18    | 13.49   |
| Passengers per Revenue Hour                | 19.84   | 21.93   | 15.16    | 10.13   |
| Purchased Transportation Cost per Boarding | \$6.16  | \$5.63  | \$7.72   | \$11.67 |
| Route Assessment                           | 3.00    | 2.67    | 4.00     | 4.00    |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + 15%   | + 16%    | - <1%  |
| Passengers per Trip                        | - 4%    | - 9%    | + 16%    | + 10%  |
| Passengers per Revenue Hour                | + 1%    | - 4%    | + 16%    | + 11%  |
| Purchased Transportation Cost per Boarding | + 6%    | + 10%   | - 9%     | - 3%   |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,408   | 1,337    | 971    |
| Passengers per Trip                        | 24.43   | 25.62   | 21.57    | 17.98  |
| Passengers per Revenue Hour                | 20.88   | 22.30   | 17.61    | 14.08  |
| Purchased Transportation Cost per Boarding | \$5.87  | \$5.56  | \$6.62   | \$8.38 |
| Route Assessment                           | 3.00    | 2.67    | 3.00     | 3.00   |

**Route 554 (Issaquah-Seattle)**



Major improvements to off-peak service have attracted new riders, but the ridership increase has not been large enough yet to offset the large increase in trips and platform hours. Several notes in the trend graph require further explanation. In early 2006, some Route 554 riders shifted to new King County Metro Route 218, since the Metro route provided faster service from Issaquah Highlands to Seattle. However, weekday Route 554 ridership later rebounded with boardings increasing at other stops. The large increase in Sunday/Holiday boardings during February is caused by the heavy ridership experienced on President’s Day. King County Metro operates a Sunday schedule on President’s Day, a semi-holiday, 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 Spring 2009 service change.

**Passenger Activity by Time Period**

| Weekday          | AM Peak | Midday | PM Peak | Evening | Night |
|------------------|---------|--------|---------|---------|-------|
| <b>Eastbound</b> |         |        |         |         |       |
| Pass/Trip        | 30.12   | 22.04  | 27.74   | 32.70   | 17.05 |
| Pass/ Rev Hr     | 36.89   | 31.86  | 27.81   | 37.26   | 20.19 |
| <b>Westbound</b> |         |        |         |         |       |
| Pass/Trip        | 36.13   | 26.25  | 29.27   | 19.62   | 15.72 |
| Pass/ Rev Hr     | 38.18   | 35.87  | 30.58   | 23.73   | 20.28 |

Below is passenger activity (by trip and by revenue hour) for both the Eastgate service operated during the Spring 2009 service change, as well as the trips serving South Sammamish.

| Weekday      | AM Peak<br>(Sammamish trips<br>only) | Eastgate only<br>(Midday) | Evening/Night<br>(Sammamish<br>trips only) |
|--------------|--------------------------------------|---------------------------|--|
| Eastbound    |                                      |                           |  |
| Pass/Trip    |                                      | 9.84                      | 28.31                                      |
| Pass/ Rev Hr |                                      | 22.71                     | 30.66                                      |
| Westbound    |                                      |                           |  |
| Pass/Trip    | 39.13                                | 16.73                     |  |
| Pass/ Rev Hr | 40.83                                | 34.02                     |  |

***Passenger Miles per Revenue Hour***

[To be added in Final version.]

**Service Change Concepts**

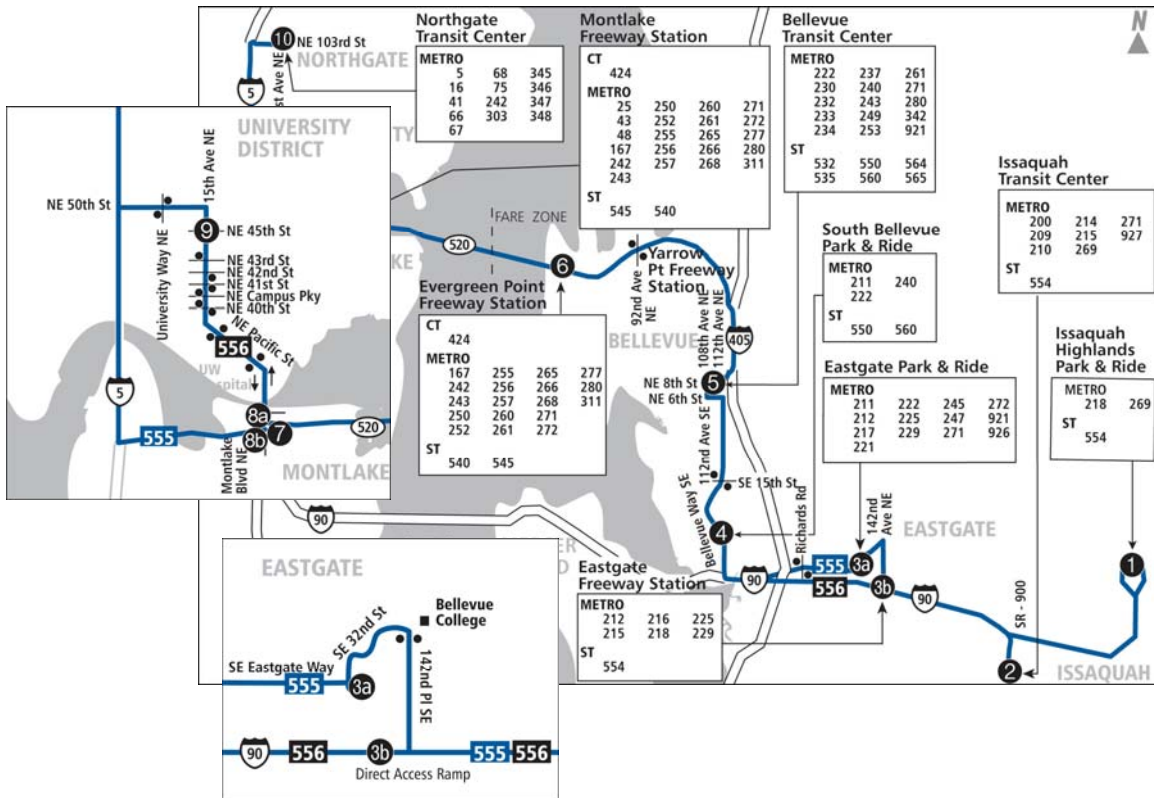
The Eastgate-area route streamlining that began in June 2009 is expected to improve productivity and attract new customers, particularly during rush hours. Potential King County Metro changes in the corridor would both reduce service duplication and improve connections between Route 554 and neighborhood routes. Subject to the delivery of additional buses, staff proposes to extend the current 15-minute midday frequency on Route 554 to cover weekday peak periods. Service east of Issaquah Transit Center would remain at every 30 minutes. The expanded peak service would be coordinated with potential changes to King County Metro routes to reduce service duplication and provide better local connections with Route 554. Considerable parking capacity remains at both the Issaquah Transit Center and the Eastgate Park-and-Ride.

While the limited trips operating to and from Redmond cost relatively little to operate (see Description section), they have the potential to reduce Route 554 productivity since what were formerly “deadhead” bus hours are now counted as revenue bus hours. Given the early morning/late night times the extended trips operate, the ridership potential on the segment between Issaquah Highlands and Redmond is small. Staff will closely monitor the performance of these trips.

***Service Change Highlights***

- |   |
|---|
| <ul style="list-style-type: none"> <li>• Expand 15-minute frequency westbound from Issaquah Transit Center to downtown Seattle from approximately 5:30 a.m. until 7:00 p.m. on weekdays.</li> <li>• Expand 15-minute frequency eastbound from Lenora Street at 5th Avenue to Issaquah Transit Center from approximately 5:45 a.m. until 7:00 p.m. on weekdays.</li> </ul> |
|---|

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



### Description

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

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

**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

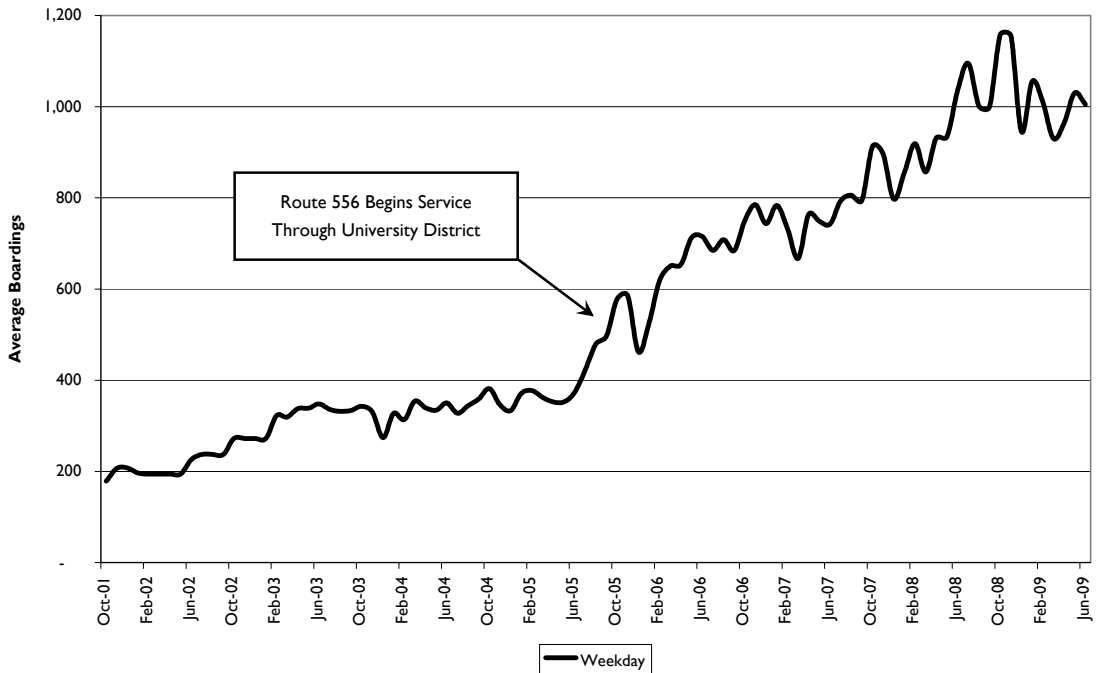
| 1st Quarter 2008                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 863     | No weekend service |        |
| Passengers per Trip                        | 33.72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

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 998     | No weekend service |        |
| Passengers per Trip                        | 38.39   | 38.39   |                    |        |
| Passengers per Revenue Hour                | 25.52   | 25.52   |                    |        |
| Purchased Transportation Cost per Boarding | \$5.36  | \$5.36  |                    |        |
| Route Assessment                           | 1.67    | 2.00    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | + 16%   | No weekend service |        |
| Passengers per Trip                        | + 14%   | + 14%   |                    |        |
| Passengers per Revenue Hour                | + 11%   | + 11%   |                    |        |
| Purchased Transportation Cost per Boarding | - 5%    | - 5%    |                    |        |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 999     | No weekend service |        |
| Passengers per Trip                        | 37.44   | 37.44   |                    |        |
| Passengers per Revenue Hour                | 24.86   | 24.86   |                    |        |
| Purchased Transportation Cost per Boarding | \$5.53  | \$5.53  |                    |        |
| Route Assessment                           | 2.00    | 2.33    |                    |        |

**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, last year’s 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 Spring 2009 service change.

**Passenger Activity by Time Period**

| Weekday      | Route 555         |                   | Route 556         |                   |
|--------------|-------------------|-------------------|-------------------|-------------------|
|              | AM Peak Eastbound | PM Peak Westbound | AM Peak Westbound | PM Peak Eastbound |
| Pass/Trip    | 34.23             | 30.97             | 39.60             | 40.38             |
| Pass/ Rev Hr | 31.28             | 24.61             | 34.16             | 31.40             |

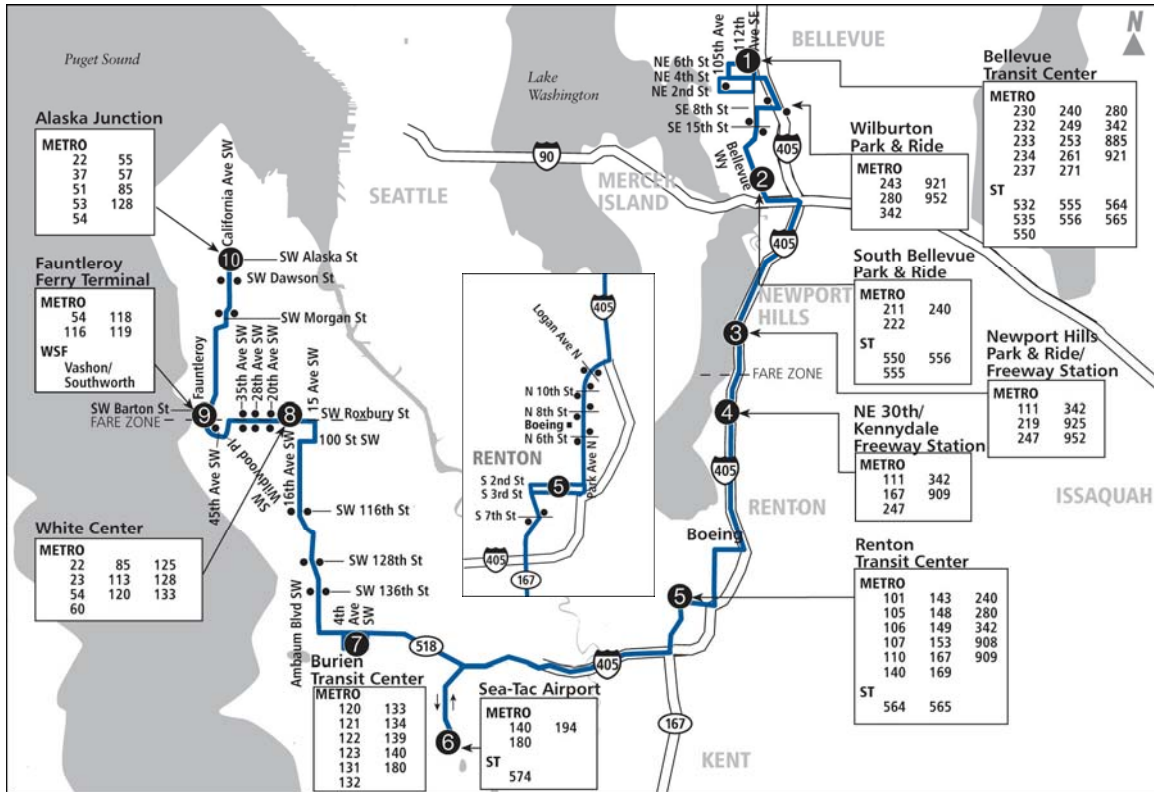
**Passenger Miles per Revenue Hour**

[To be added in Final version.]

**Service Change Concepts**

No changes are proposed for Routes 555 and 556 at this time.

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

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



**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

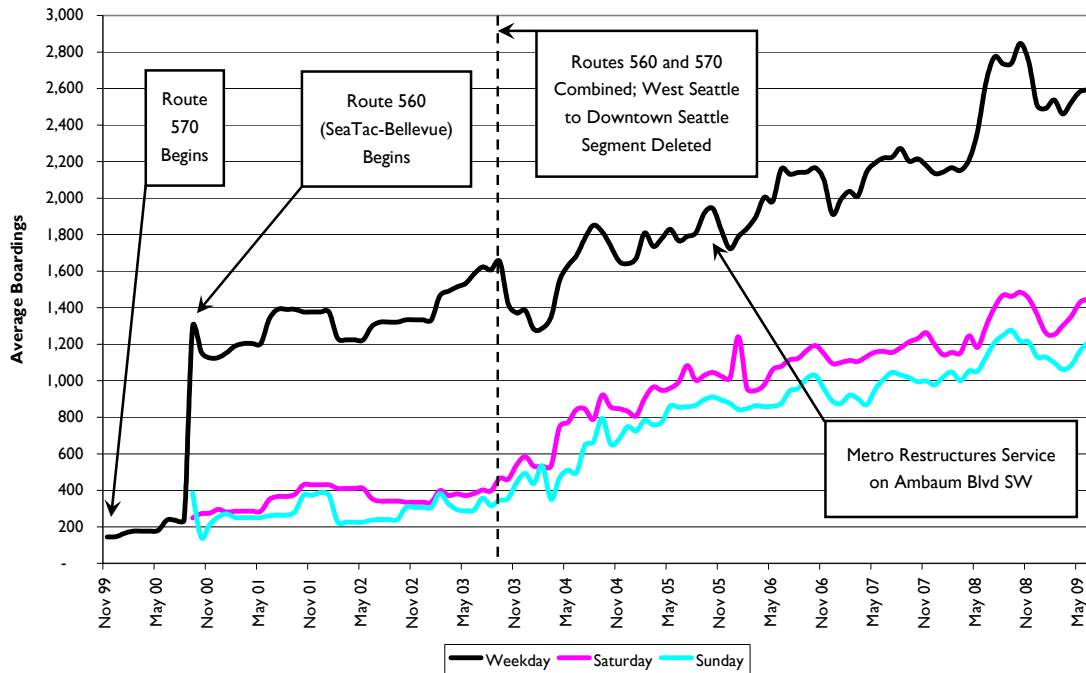
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,120   | 1,150    | 1,096  |
| Passengers per Trip                        | 31.36   | 31.67   | 31.94    | 28.42  |
| 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    | 3.001   | 2.33     | 1.67   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 2,495   | 1,271    | 1,096  |
| Passengers per Trip                        | 35.98   | 36.70   | 35.32    | 30.45  |
| Passengers per Revenue Hour                | 18.94   | 19.24   | 18.97    | 16.35  |
| Purchased Transportation Cost per Boarding | \$6.22  | \$6.08  | \$6.46   | \$7.46 |
| Route Assessment                           | 2.67    | 2.67    | 2.33     | 1.67   |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday    |
|--|---------|---------|----------|-----------|
| Daily Boardings                            |         | + 18%   | + 11%    | No change |
| Passengers per Trip                        | + 15%   | + 16%   | + 11%    | + 7%      |
| Passengers per Revenue Hour                | + 11%   | + 12%   | + 9%     | + 5%      |
| Purchased Transportation Cost per Boarding | - 5%    | - 6%    | - 2%     | + <1%     |

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

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



The trend graph shows ridership of the Westside Express (Route 570) prior to September 2003. After September 2003, all ridership was assigned to Route 560. In general, ridership and productivity has trended upward. 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.

**Additional Data Pertinent to Route**

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

**Passenger Activity by Time Period**

| Weekday          | AM Peak | Midday | PM Peak | Evening | Night |
|------------------|---------|--------|---------|---------|-------|
| <b>Eastbound</b> |         |        |         |         |       |
| Pass/Trip        | 42.54   | 29.05  | 31.36   | 32.04   | 22.49 |
| Pass/ Rev Hr     | 28.64   | 19.47  | 20.34   | 22.27   | 16.16 |
| <b>Westbound</b> |         |        |         |         |       |
| Pass/Trip        | 29.43   | 38.01  | 48.11   | 32.05   | 23.57 |
| Pass/ Rev Hr     | 19.87   | 25.18  | 31.09   | 22.10   | 16.25 |

**Passenger Miles per Revenue Hour**

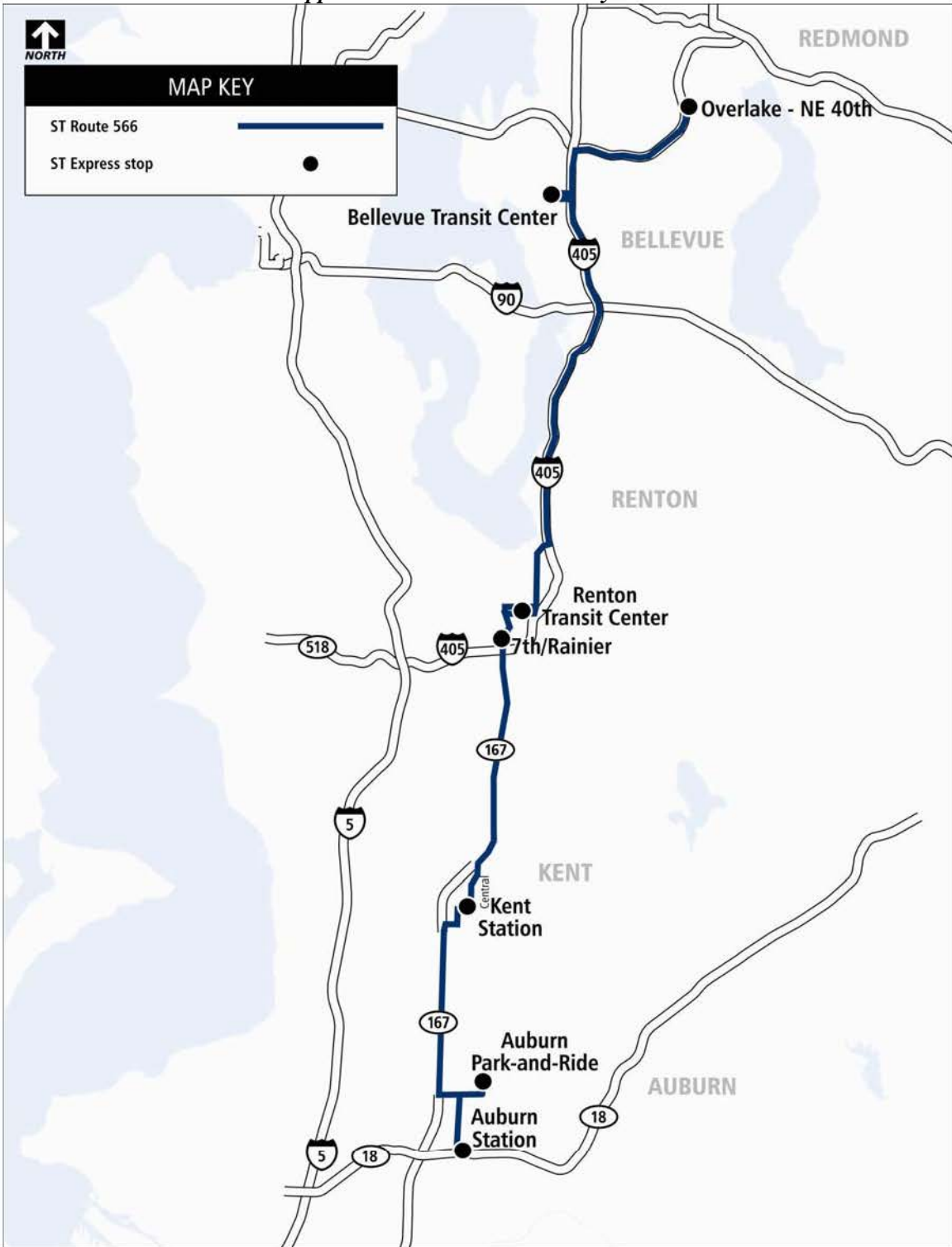
[To be added in Final version.]

**Service Change Concepts**

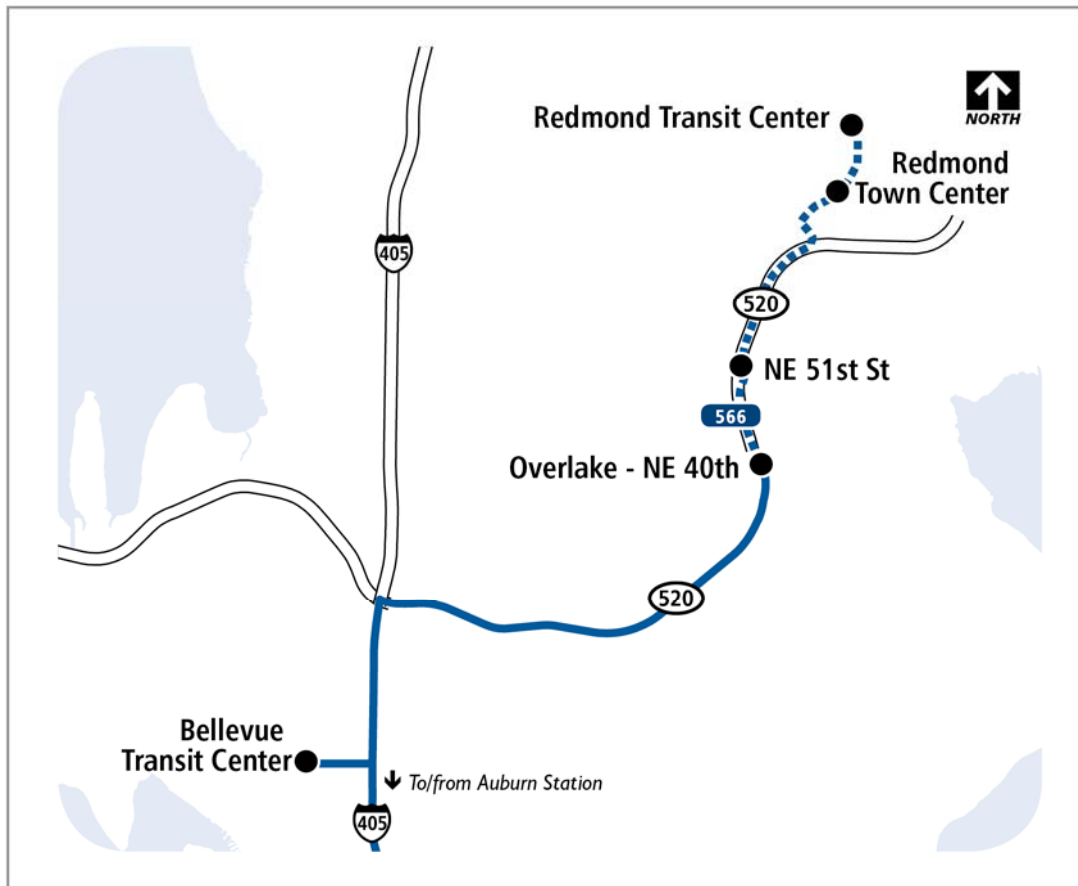
The changes approved in the 2009 SIP will be implemented in February 2010. No other changes are proposed at this time.

**Route 564/565: South Hill / Federal Way – Overlake**  
**Route 566: Auburn-Overlake (Replaces 564/565 in February 2010)**

*Approved Route 566 – February 2010*



*Proposed Route 566 Extension – February 2011*



***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 stop opened in June 2005. In September 2005, service was extended from Bellevue Transit Center to the Overlake Transit Center as part of the 2005 Service Implementation Plan. 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 on the northern end of the corridor, 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 seven to eight minutes during the morning peak hour.

Starting February 2010, this route will be replaced by new Route 566. See “Service Change Concepts” for additional details.

**Performance Assessment- Route 564**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

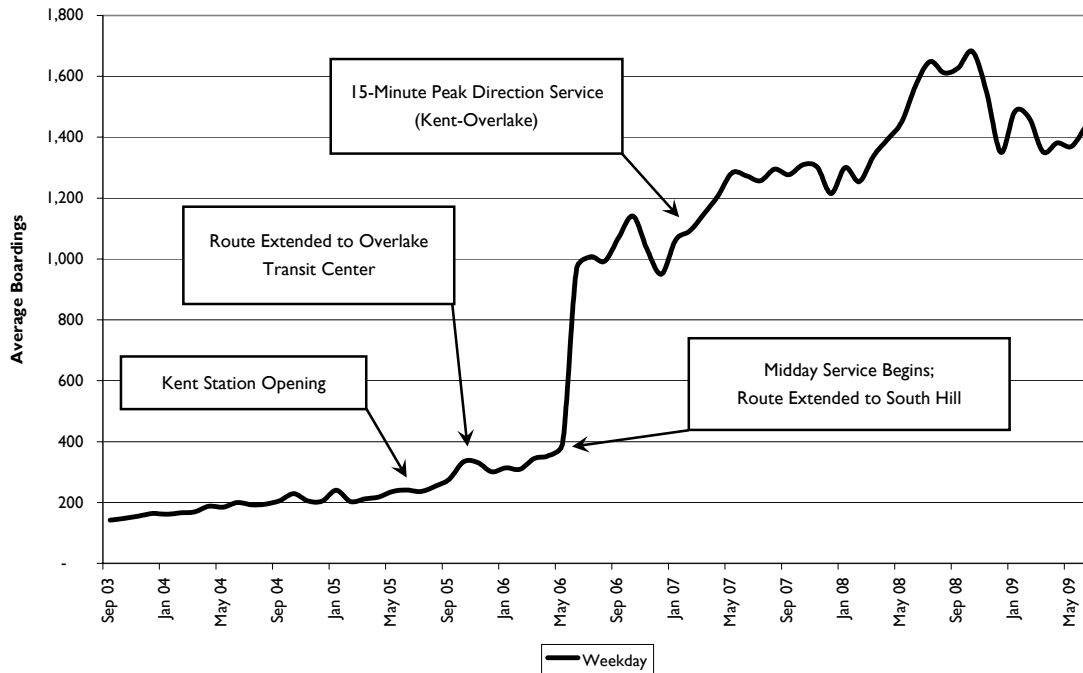
| 1st Quarter 2008                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,298   | No weekend service |        |
| Passengers per Trip                        | 33.28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

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,432   | No weekend service |        |
| Passengers per Trip                        | 36.71   | 36.71   |                    |        |
| Passengers per Revenue Hour                | 17.59   | 17.59   |                    |        |
| Purchased Transportation Cost per Boarding | \$7.83  | \$7.83  |                    |        |
| Route Assessment                           | 3.33    | 3.33    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | + 10%   | No weekend service |        |
| Passengers per Trip                        | + 10%   | + 10%   |                    |        |
| Passengers per Revenue Hour                | + 10%   | + 10%   |                    |        |
| Purchased Transportation Cost per Boarding | - 4%    | - 4%    |                    |        |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,396   | No weekend service |        |
| Passengers per Trip                        | 35.79   | 35.79   |                    |        |
| Passengers per Revenue Hour                | 17.20   | 17.20   |                    |        |
| Purchased Transportation Cost per Boarding | \$8.01  | \$8.01  |                    |        |
| Route Assessment                           | 3.33    | 3.33    |                    |        |

**Route 564 (South Hill-Overlake)**



Productivity increased between 2008 and 2009, although the performance rating continues to be “Marginal.” While the average number of passengers per trip is impressive, the long length of the route keeps the number of passengers per hour relatively low. 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. Identical to Route 564 between Auburn and Overlake, it operates along the SR-167 and I-405 corridors, with major intermediate stops at Auburn Station, Kent Station, Renton Transit Center, North Renton and Bellevue Transit Center. Service operates all day and in both directions on weekdays only. In September 2005, service was extended from Bellevue to the Overlake Transit Center as part of the 2005 SIP package. Routing was revised slightly in February 2006 to serve Sound Transit’s new Federal Way Transit Center at South 316<sup>th</sup> Street.

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. Starting in February 2010, this route will be replaced by new Route 566. See “Service Change Concepts” for additional details.

**Performance Assessment- Route 565**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

|                  |         |         |          |        |
|------------------|---------|---------|----------|--------|
| 1st Quarter 2008 | Overall | Weekday | Saturday | Sunday |
|------------------|---------|---------|----------|--------|

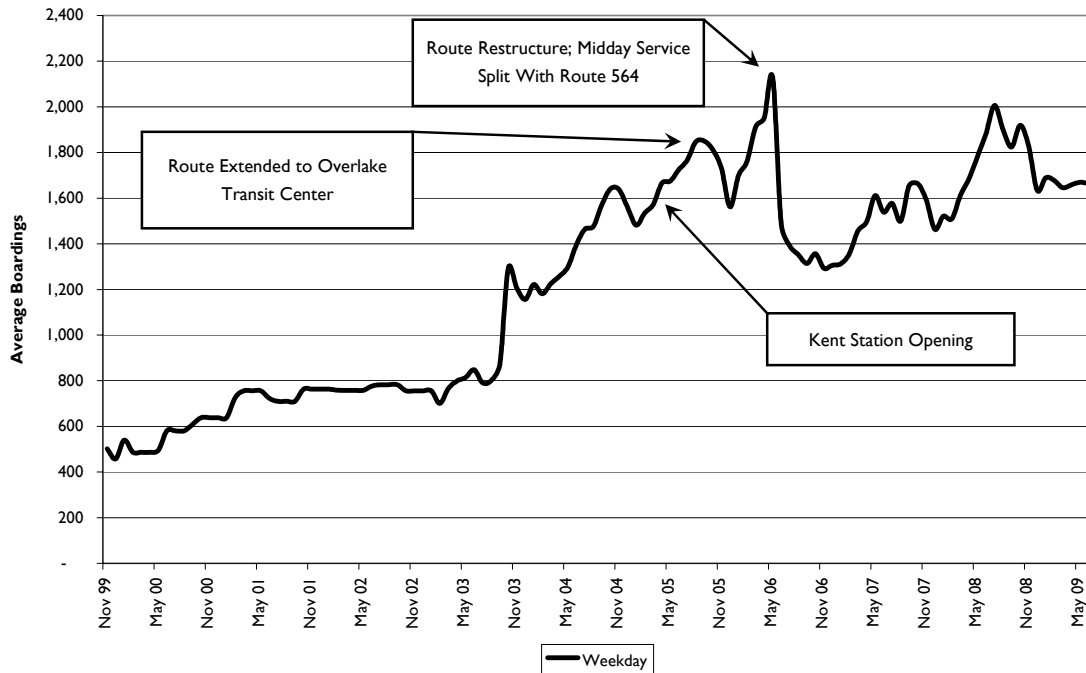
|  |        |        |                    |
|--|--------|--------|--------------------|
| Daily Boardings                            |        | 1,547  | No weekend service |
| Passengers per Trip                        | 37.74  | 37.74  |                    |
| Passengers per Revenue Hour                | 21.73  | 21.73  |                    |
| Purchased Transportation Cost per Boarding | \$5.68 | \$5.68 |                    |
| Route Assessment                           | 2.00   | 2.67   |                    |

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,670   | No weekend service |        |
| Passengers per Trip                        | 40.74   | 40.74   |                    |        |
| Passengers per Revenue Hour                | 23.21   | 23.21   |                    |        |
| Purchased Transportation Cost per Boarding | \$5.65  | \$5.65  |                    |        |
| Route Assessment                           | 2.00    | 2.00    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | + 8%    | No weekend service |        |
| Passengers per Trip                        | + 8%    | + 8%    |                    |        |
| Passengers per Revenue Hour                | + 7%    | + 7%    |                    |        |
| Purchased Transportation Cost per Boarding | - <1%   | - <1%   |                    |        |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,664   | No weekend service |        |
| Passengers per Trip                        | 40.58   | 40.58   |                    |        |
| Passengers per Revenue Hour                | 23.15   | 23.15   |                    |        |
| Purchased Transportation Cost per Boarding | \$5.66  | \$5.66  |                    |        |
| Route Assessment                           | 2.00    | 2.00    |                    |        |

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



Productivity improved for Route 565 between 1<sup>st</sup> Quarter 2008 and 1<sup>st</sup> Quarter 2009. However, like Route 564, the long length of the route tends to keep the number of passengers per hour relatively low, even though the number of passengers per trip averages over 40.

**Additional Data Pertinent to Route**

The two routes share common routing between Auburn Station and 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 2009.

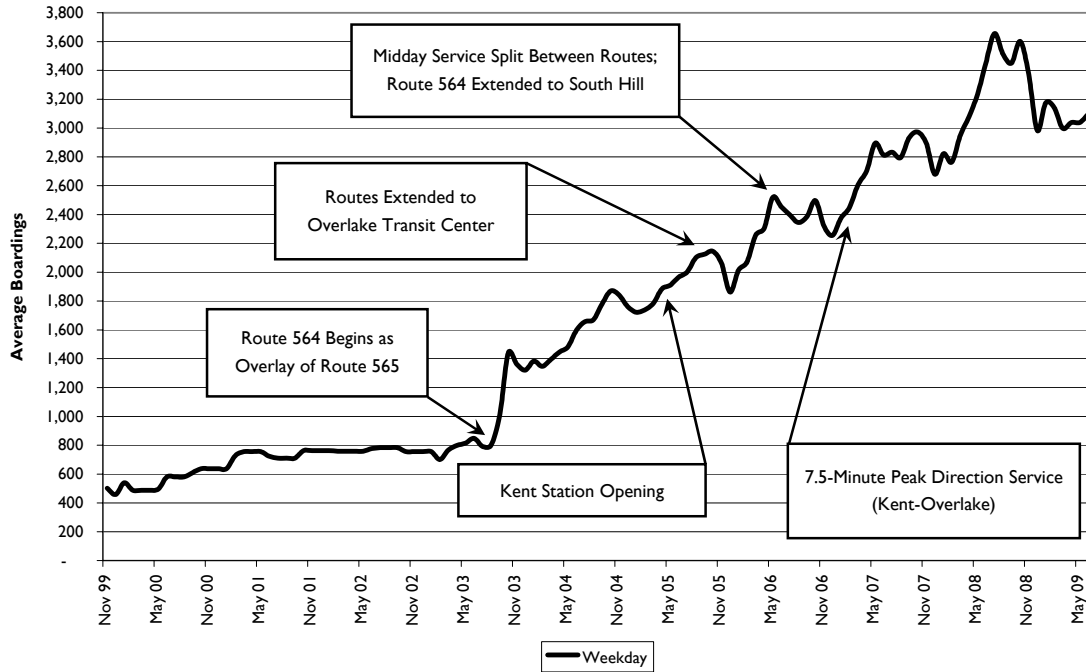
**Passenger Activity by Time Period (Spring 2009)**

| Weekday                 | AM Peak | Midday | PM Peak | Evening | Night |
|-------------------------|---------|--------|---------|---------|-------|
| <b>Northbound</b>       |         |        |         |         |       |
| Route 564               |         |        |         |         |       |
| Pass/Trip               | 37.94   | 25.93  | 23.27   |         |       |
| Pass/Rev Hr             | 27.45   | 16.64  | 14.91   |         |       |
| Route 565               |         |        |         |         |       |
| Pass/Trip               | 53.45   | 30.05  | 30.19   | 22.02   | 17.25 |
| Pass/Rev Hr             | 40.59   | 24.93  | 24.48   | 19.06   | 15.00 |
| Routes 564/565 Combined |         |        |         |         |       |
| Pass/Trip               | 44.14   | 27.99  | 26.73   | 22.02   | 17.25 |
| Pass/Rev Hr             | 32.56   | 20.25  | 19.13   | 19.06   | 15.00 |
| <b>Southbound</b>       |         |        |         |         |       |
| Route 564               |         |        |         |         |       |
| Pass/Trip               | 21.72   | 31.66  | 47.22   | 22.29   |       |
| Pass/Rev Hr             | 12.62   | 16.83  | 22.91   | 12.16   |       |
| Route 565               |         |        |         |         |       |



|                                |       |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|-------|
| Pass/Trip                      | 26.59 | 35.94 | 61.73 | 32.19 | 27.57 |
| Pass/Rev Hr                    | 20.39 | 25.52 | 38.38 | 22.99 | 19.69 |
| <b>Routes 564/565 Combined</b> |       |       |       |       |       |
| Pass/Trip                      | 24.15 | 33.64 | 54.48 | 29.71 | 27.57 |
| Pass/Rev Hr                    | 15.97 | 20.23 | 29.69 | 19.70 | 19.69 |

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



### **Service Change Concepts**

#### *Approved February 2010 Service Change – Route 566 replaces Routes 564/565*

As part of the 2009 SIP, the Sound Transit Board approved a major service restructure along the SR 167 corridor to improve on-time performance, increase productivity and better integrate bus service with Sounder commuter rail. Routes 564 and 565 will be combined into a single route (566) which will operate between Overlake Transit Center and Auburn Station only, using the same routing and stops currently served by Routes 564/565 between these points. Existing Pierce County and Federal Way riders will use Sounder or ST Express Route 578 to connect with Route 566 at Auburn Station. This change will be implemented in February 2010.

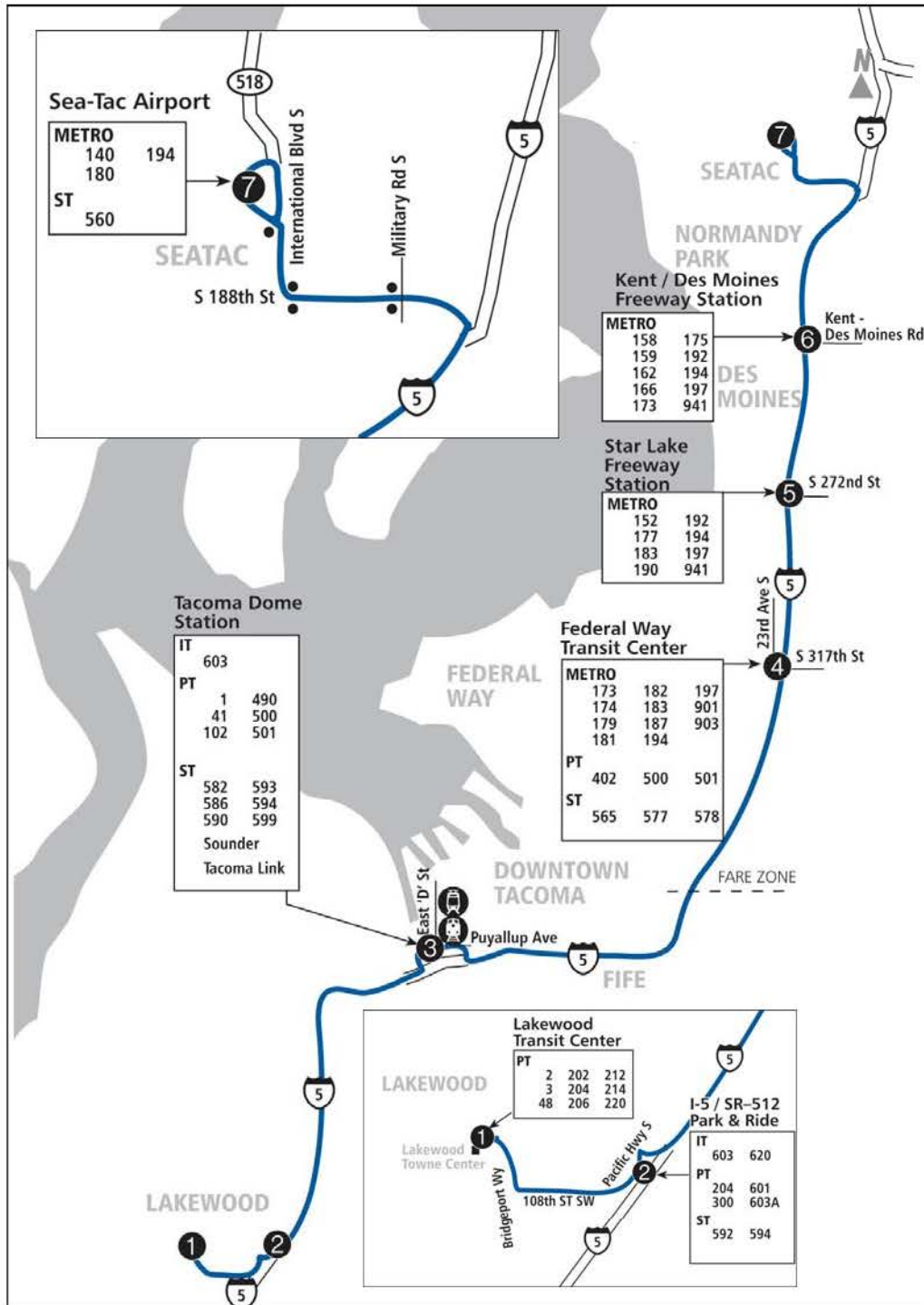
#### *Proposed February 2011 Service Change – Route 566*

Proposed for February 2011 is an extension of new Route 566 from Overlake Transit Center to the Redmond Transit Center during weekday off-peak periods. In combination with King County Metro Route 232, this change addresses the ST2 objective of establishing an all-day express bus connection between downtown Bellevue and downtown Redmond, helping to establish the market for future light rail service between these points. The extension would serve two intermediate stops, at SR 520/NE 51<sup>st</sup> Freeway Station and at Redmond Town Center.

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

- Extend Route 566 from Overlake Transit Center to Redmond Transit Center during weekday off-peak periods.
- Establish intermediate stops at SR 520/NE 51<sup>st</sup> Freeway Station and Redmond Town Center (on Leary Way).
- Work with King County Metro to coordinate service and reduce route duplication where applicable.

## Route 574: Lakewood – SeaTac



### Description

The Lakewood-SeaTac Express began service in September 1999. It operates along the I-5 corridor, with intermediate stops at SR-512 Park-and-Ride, Tacoma Dome Station, Federal Way Transit Center, Star Lake Park-and-Ride, Kent/Des Moines Park-and-Ride and along South 188<sup>th</sup> Street in Sea-Tac. Route 574 operates all day, seven days a week, with early morning trips serving airport employees starting at 3:45 a.m. In June 2005, late morning service was reduced

from every 30 minutes to every 60 minutes due to lower ridership and productivity during that time period. Routing was revised in February 2006 to serve Sound Transit's new Federal Way Transit Center.

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

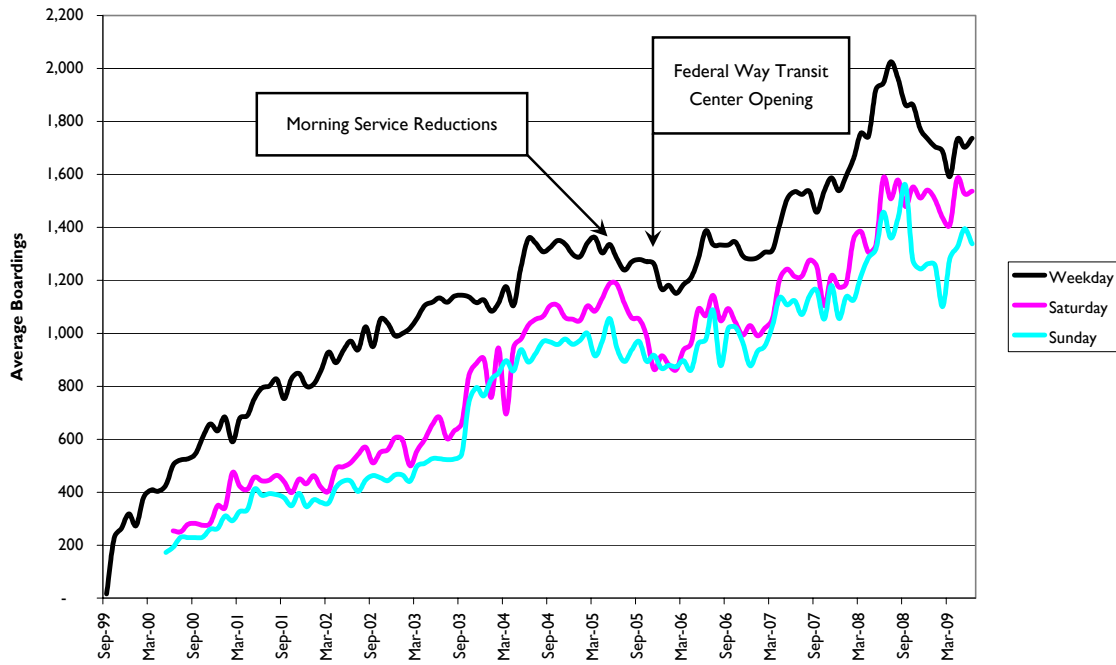
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,644   | 1,420    | 1,162  |
| Passengers per Trip                        | 24.32   | 25.30   | 23.14    | 20.39  |
| 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    | 3.00    | 3.00     | 2.00   |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,660   | 1,454    | 1,222  |
| Passengers per Trip                        | 24.29   | 24.77   | 25.07    | 21.06  |
| Passengers per Revenue Hour                | 17.64   | 18.12   | 17.99    | 14.88  |
| Purchased Transportation Cost per Boarding | \$6.92  | \$6.84  | \$6.51   | \$7.83 |
| Route Assessment                           | 3.33    | 3.33    | 3.00     | 2.67   |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + <1%   | + 2%     | + 5%   |
| Passengers per Trip                        | - <1%   | - 2%    | + 8%     | + 3%   |
| Passengers per Revenue Hour                | - <1%   | - 3%    | + 12%    | + 3%   |
| Purchased Transportation Cost per Boarding | + 5%    | + 8%    | - 3%     | + 3%   |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 1,725   | 1,548    | 1,359  |
| Passengers per Trip                        | 25.24   | 25.74   | 26.68    | 23.42  |
| Passengers per Revenue Hour                | 18.55   | 18.83   | 19.15    | 16.56  |
| Purchased Transportation Cost per Boarding | \$6.58  | \$6.58  | \$6.11   | \$7.04 |
| Route Assessment                           | 3.00    | 3.00    | 3.00     | 2.67   |

### Route 574 (Lakewood-SeaTac)



Average daily boardings and productivity remained largely unchanged between 1<sup>st</sup> Quarter 2008 and 1<sup>st</sup> Quarter 2009. Although this route performs at the “Marginal” level, 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 (see “Service Change Concepts” below).

[Data to be added in Final version.]

### **Service Change Concepts**

#### *Approved February 2010 Service Change – Route 574*

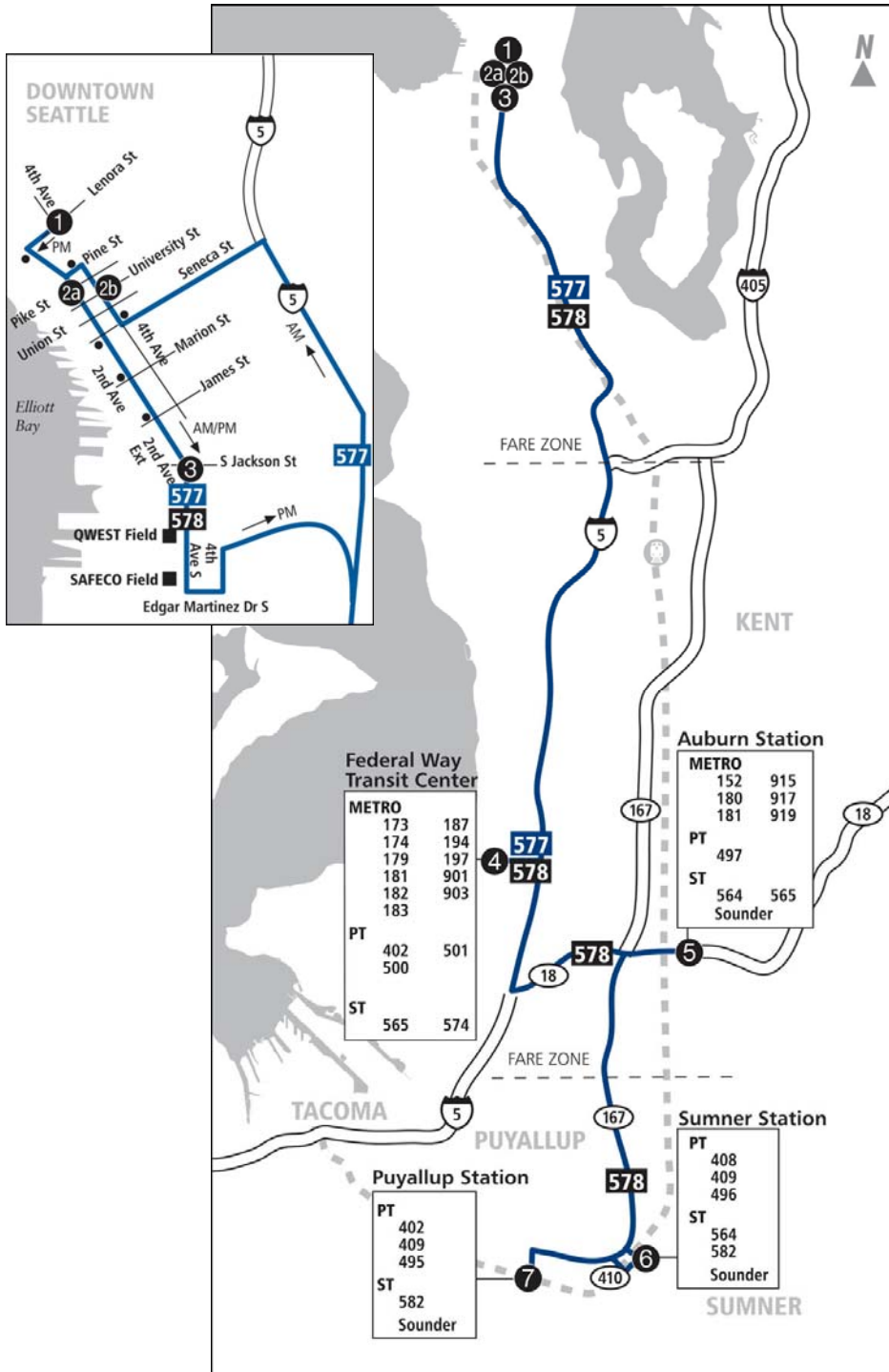
Starting with the February 2010 service change, King County Metro will discontinue Route 194 between downtown Seattle, Sea-Tac Airport and Federal Way. Replacement service will be provided by Link light rail between Sea-Tac Airport and downtown Seattle, ST Express Route 574 between the airport and Federal Way, and ST Routes 577 and 578 between Federal Way and Seattle. With Sound Transit Board approval of the 2009 SIP, weekday levels of service on Route 574 will be increased from every 60 minutes to every 30 minutes between 8:00 a.m. and 12:00 p.m. In addition, new southbound trips will be added in the early afternoon on weekdays to accommodate demand between the airport and Federal Way during a major airport employee shift change time. With the deletion of Metro Route 194, productivity on this route will improve significantly during all hours of operation as this will be the only route between Federal Way and the airport via I-5.

A minor route change, also scheduled for February 2010 implementation, will allow Route 574 to serve both the Sea-Tac Airport terminal and the new SeaTac/Airport light rail station.

#### *Service Change Highlights*

Apart from the February 2010 changes noted above, no further modifications to Route 574 service are proposed at this time.

## Route 577: Federal Way – Seattle



**Routes 577 and 578**

### **Description**

Route 577 began operation as a peak-hour, peak-direction service between the new Federal Way Transit Center and downtown Seattle in February 2006. Adjacent to the transit center is a 1,200 stall park-and-ride garage. The route provides non-stop express service between the transit center

and downtown Seattle, utilizing the I-5 HOV lanes over the entire distance to provide a very time-competitive trip.

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 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    | 1.67    |                    |        |

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,244   | No weekend service |        |
| Passengers per Trip                        | 46.07   | 46.07   |                    |        |
| Passengers per Revenue Hour                | 48.58   | 48.58   |                    |        |
| Purchased Transportation Cost per Boarding | \$4.05  | \$4.05  |                    |        |
| Route Assessment                           | 1.00    | 1.00    |                    |        |

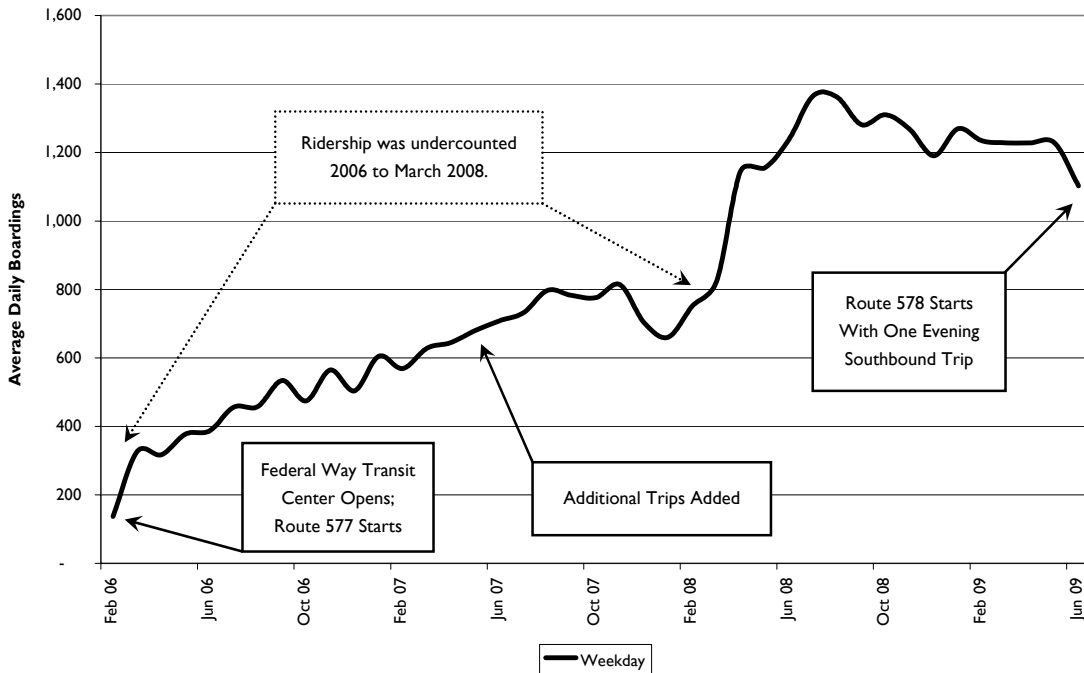
| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | + 67*%  | No weekend service |        |
| Passengers per Trip                        | + 55%   | + 55%   |                    |        |
| Passengers per Revenue Hour                | + 55%   | + 55%   |                    |        |
| Purchased Transportation Cost per Boarding | - 33%   | - 33%   |                    |        |

\* - Ridership was found to be undercounted through to March 2008, so this figure is likely too low.

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 1,182   | No weekend service |        |
| Passengers per Trip                        | 43.76   | 43.76   |                    |        |
| Passengers per Revenue Hour                | 46.05   | 46.05   |                    |        |
| Purchased Transportation Cost per Boarding | \$4.29  | \$4.29  |                    |        |
| Route Assessment                           | 1.00    | 1.33    |                    |        |



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



Overall, Route 577 has improved over time in terms of ridership and productivity, although boardings tended to flatten out after gasoline prices dropped in early 2009. In June 2007, seven trips were added to expand the span of service. 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 Information Pertinent to Route***

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

***Passenger Activity by Time Period***

| Weekday      | AM Peak Northbound | PM Peak Southbound |
|--------------|--------------------|--------------------|
| Pass/Trip    | 42.73              | 26.40              |
| Pass/ Rev Hr | 57.89              | 32.07              |

***Passenger Miles per Revenue Hour***

[To be added in Draft version.]

## **Service Change Concepts**

### *Approved February 2010 Service Change- Route 577*

Following the extension of Link light rail to SeaTac/Airport Station, King County Metro will discontinue Route 194 between downtown Seattle, Sea-Tac Airport and Federal Way as of February 6, 2010. Replacement service will be provided by Link light rail between Sea-Tac Airport and downtown Seattle, ST Express Route 574 between the airport and Federal Way, and ST Routes 577 and 578 between Federal Way and Seattle. Route 577 will provide peak-hour and weekend service between Federal Way and Seattle, while Route 578 will provide off-peak direction service and midday/evening during the week (see Route 578 section). These changes were approved by the Sound Transit Board May 28, 2009 as part of the 2009 SIP.

The added Route 577 weekend service will operate hourly from about 6:15 a.m. to 10:15 p.m. on Saturdays, and from about 6:15 a.m. to 7:15 p.m. on Sundays and holidays. Timetables and other public information materials will emphasize both Routes 577 and 578 as a combined corridor service between Seattle and Federal Way.

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

### *Service Change Highlights*

Apart from the approved February 2010 revisions noted above, no further changes to Route 577 service are proposed at this time.

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

See map in Route 577 section above.

### ***Description***

This route began in June 2009 with one early evening weekday trip departing Seattle for Puyallup via Federal Way, Auburn and Sumner. This service is provided as an alternative for passengers who formerly rode the 6:45 p.m. Sounder train trip from Seattle, since with the June 2009 service change, the Sounder departure time was shifted 30 minutes earlier to 6:15 p.m. About 20 passengers boarded the Route 578 trip on an average weekday during summer 2009.

### ***Service Change Concepts***

#### *Approved February 2010 Service Change- Route 578*

With the extension of Link light rail to SeaTac/Airport Station, King County Metro will discontinue Route 194 between downtown Seattle, Sea-Tac Airport and Federal Way as of February 6, 2010. Replacement service will be provided by Link light rail between Sea-Tac Airport and downtown Seattle, ST Express Route 574 between the airport and Federal Way, and ST Routes 577 and 578 between Federal Way and Seattle. Route 577 will provide peak-hour and weekend service between Federal Way and Seattle, while a greatly-expanded Route 578 will provide off-peak direction and 2-way midday/evening service during the week. Southbound a.m. peak trips will extend from Puyallup to Tacoma, and northbound p.m. peak trips will originate in Tacoma. Route 578 schedules will be designed to avoid direct duplication with Sounder train service.

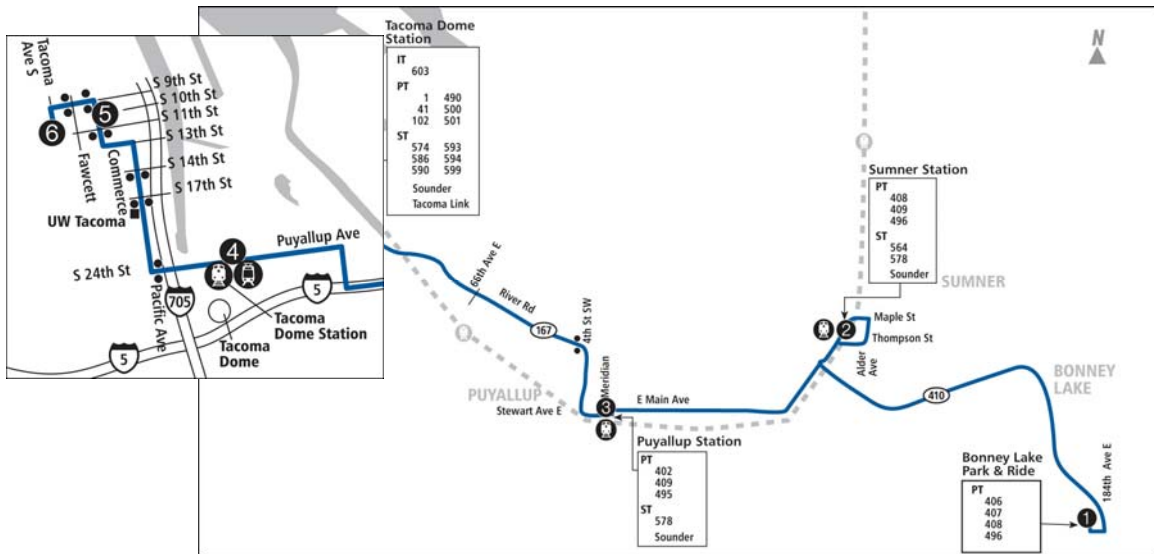
As part of this restructure, Route 578 will consolidate the ridership markets of several existing bus routes, including:

- Metro Route 194 between Federal Way and Seattle
- ST Express Route 564 between Auburn and Sumner
- ST Express Route 565 between Federal Way and Auburn
- ST Express Route 582 between Sumner, Puyallup and Tacoma

By combining the markets for these separate routes into one strong regional bus route oriented towards Seattle and Tacoma, overall ridership and productivity should increase significantly. Route 578 also provides express bus service along a portion of the Sounder South corridor, thus expanding off-peak travel opportunities for Sounder riders who can now use the train in one direction and bus service for return trips or vice versa.

These changes were included in the 2009 SIP and were approved by the Sound Transit Board on May 28, 2009.

## 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 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. Also, a one-way loop routing in downtown Tacoma along A Street was discontinued. In September 2007 Pierce Transit initiated Route 496, which was designed specifically to connect to and from Sounder trains at Sumner Station, and Route 582 trips that operated at the same times as Route 496 between Bonney Lake and Sumner were discontinued. From that time on, the market for Route 582 has largely been oriented towards downtown Tacoma riders.

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

**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

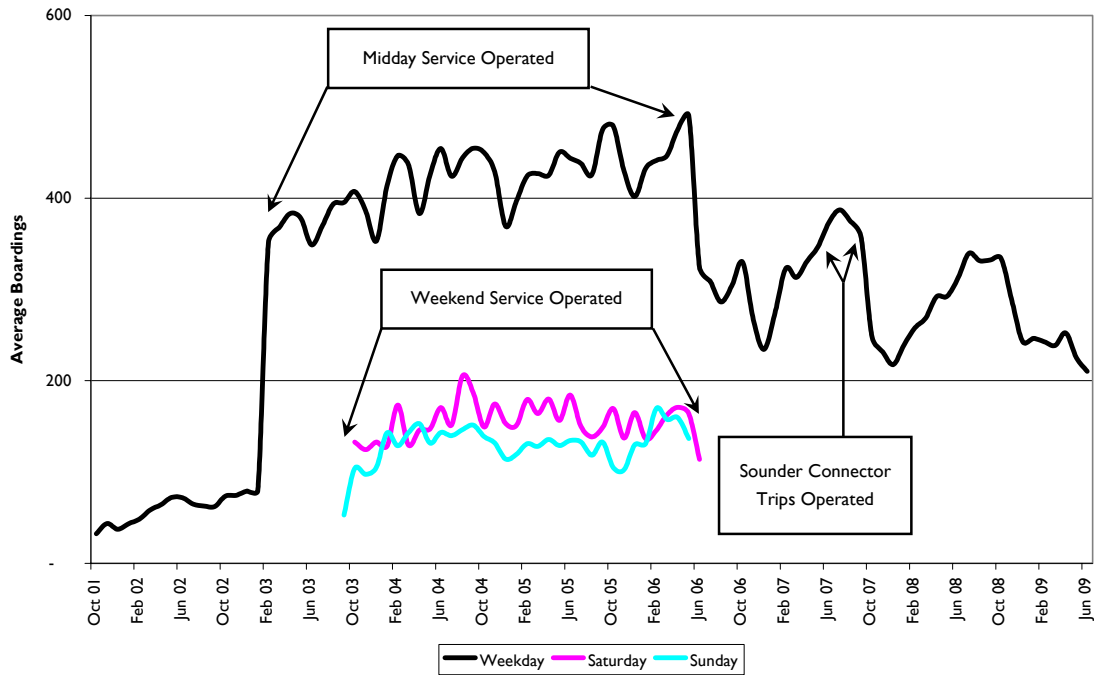
| 1st Quarter 2008                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 255     | No weekend service |        |
| Passengers per Trip                        | 12.76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

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 242     | No weekend service |        |
| Passengers per Trip                        | 13.47   | 13.47   |                    |        |
| Passengers per Revenue Hour                | 13.48   | 13.48   |                    |        |
| Purchased Transportation Cost per Boarding | \$12.48 | \$12.48 |                    |        |
| Route Assessment                           | 4.00    | 4.00    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | - 5%    | No weekend service |        |
| Passengers per Trip                        | + 6%    | + 6%    |                    |        |
| Passengers per Revenue Hour                | + 3%    | + 3%    |                    |        |
| Purchased Transportation Cost per Boarding | - 3%    | - 3%    |                    |        |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 229     | No weekend service |        |
| Passengers per Trip                        | 12.74   | 12.74   |                    |        |
| Passengers per Revenue Hour                | 12.81   | 12.81   |                    |        |
| Purchased Transportation Cost per Boarding | \$13.16 | \$13.16 |                    |        |
| Route Assessment                           | 4.00    | 4.00    |                    |        |

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

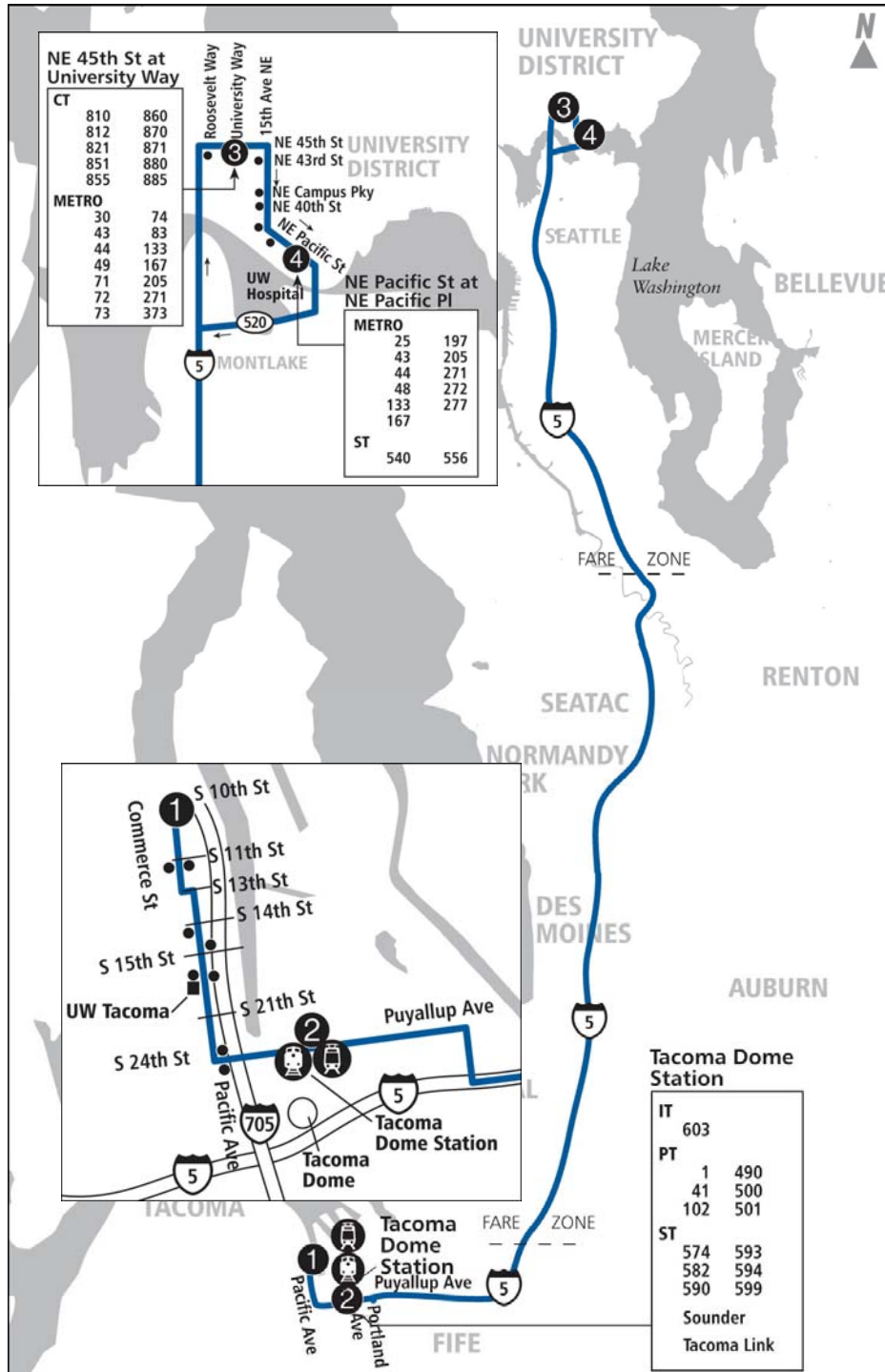


Route 582 is now focused on serving downtown Tacoma commuters and no longer is designed to connect with Sounder trains at Sumner Station. Pierce Transit’s Route 496 now provides a dedicated train connection between Bonney Lake Park-and-Ride and Sumner Station.

**Service Change Concepts**

Route 582 has the lowest ridership and productivity of any ST Express route. As part of the Board approved 2009 SIP, it will be discontinued in February 2010. New Route 578 will replace Route 582 service between Sumner, Puyallup and Tacoma as part of a much longer corridor route that also serves downtown Seattle.

## 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 University 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 University District in the afternoon were added to reach the current totals. In addition, a reduced summer schedule was dropped and the same level of service is provided year-around. Resources for these improvements come from the deletion of Route 585.

***Performance Assessment***

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 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    | 3.67    |                    |        |

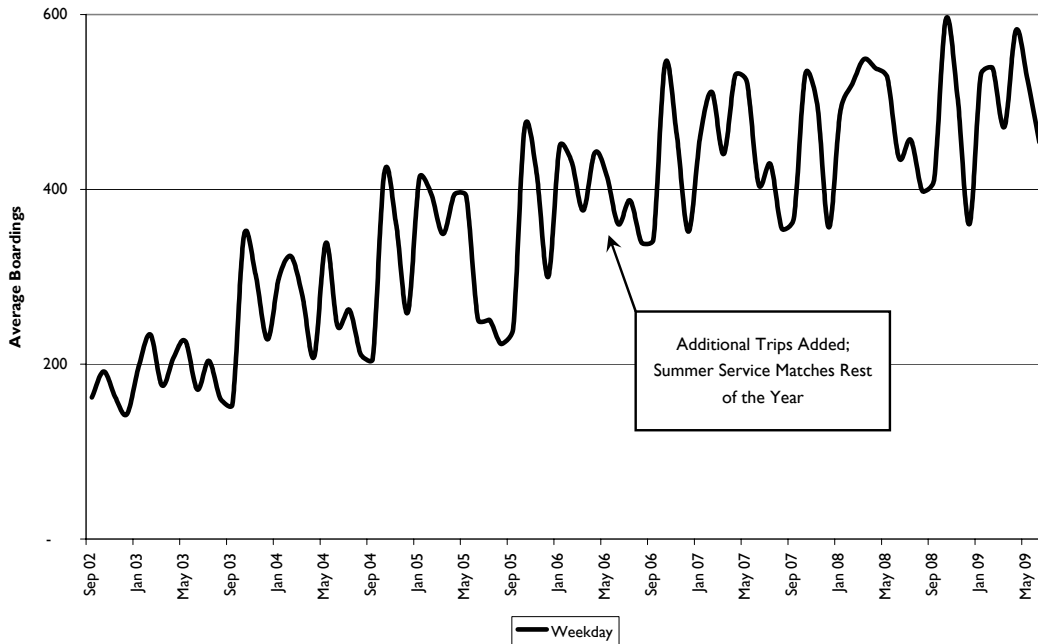
| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 513     | No weekend service |        |
| Passengers per Trip                        | 25.64   | 25.64   |                    |        |
| Passengers per Revenue Hour                | 17.61   | 17.61   |                    |        |
| Purchased Transportation Cost per Boarding | \$12.23 | \$12.23 |                    |        |
| Route Assessment                           | 3.67    | 3.67    |                    |        |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | - 1%    | No weekend service |        |
| Passengers per Trip                        | - 1%    | - 1%    |                    |        |
| Passengers per Revenue Hour                | - 1%    | - 1%    |                    |        |
| Purchased Transportation Cost per Boarding | + 7%    | + 7%    |                    |        |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 520     | No weekend service |        |
| Passengers per Trip                        | 26.01   | 26.01   |                    |        |
| Passengers per Revenue Hour                | 17.94   | 17.94   |                    |        |
| Purchased Transportation Cost per Boarding | \$12.03 | \$12.03 |                    |        |
| Route Assessment                           | 3.67    | 3.67    |                    |        |



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



While ridership and productivity indicators have remained relatively stable, the performance rating of Route 586 has dropped to “Unsatisfactory” since the rest of the ST Express network has improved over the past year. Further analysis will be conducted to determine where high capacity coaches (MCI) are still needed on this route and whether certain low-ridership trips should be deleted. These changes would be implemented administratively as they would affect less than 25% of the route’s daily hours.

***Additional Information Pertinent to Route***

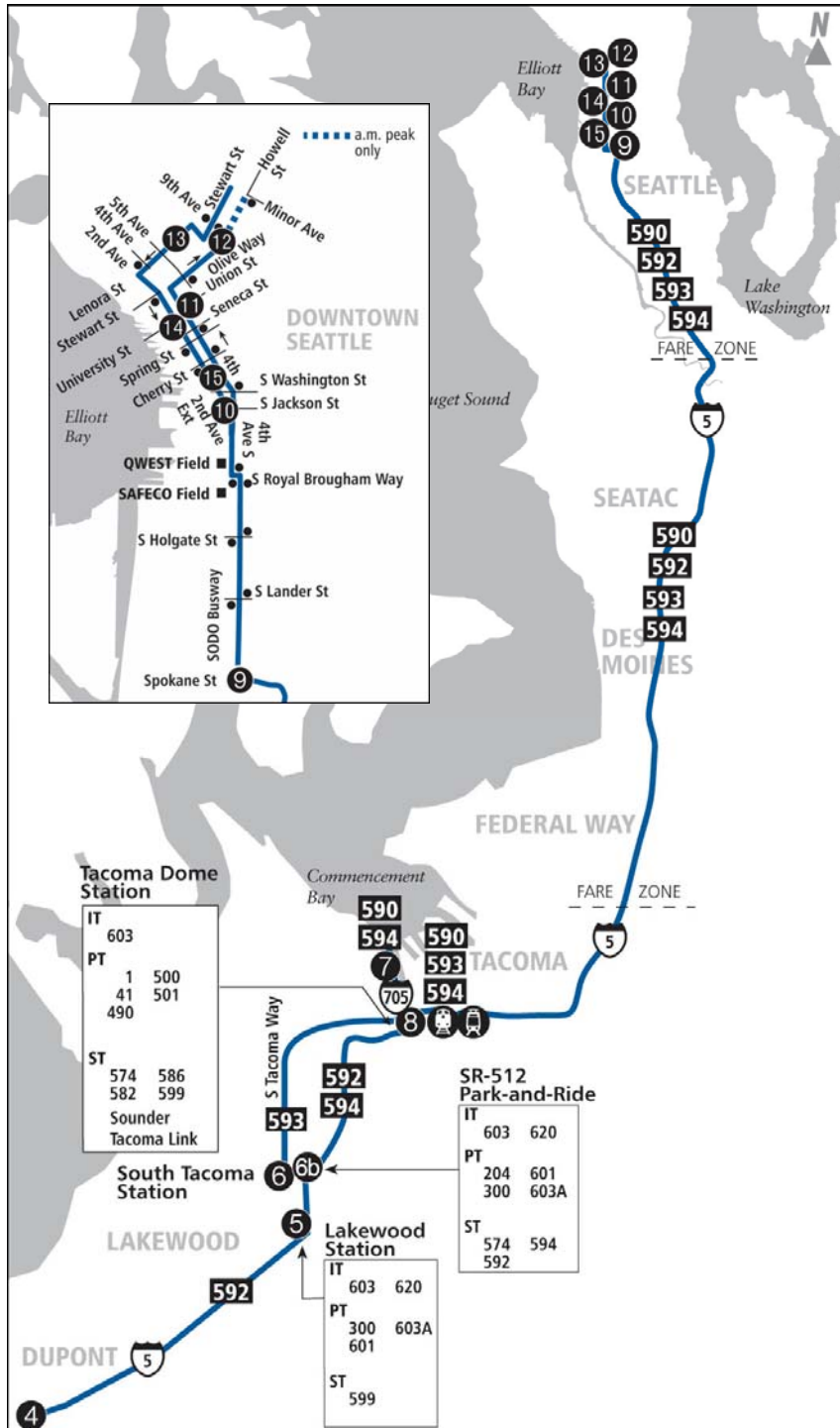
The following table looks at each direction by time period. Trip level information was taken from Automatic Passenger Count (APC) information for the September 2007 service change.

[Data to be added in Final version.]

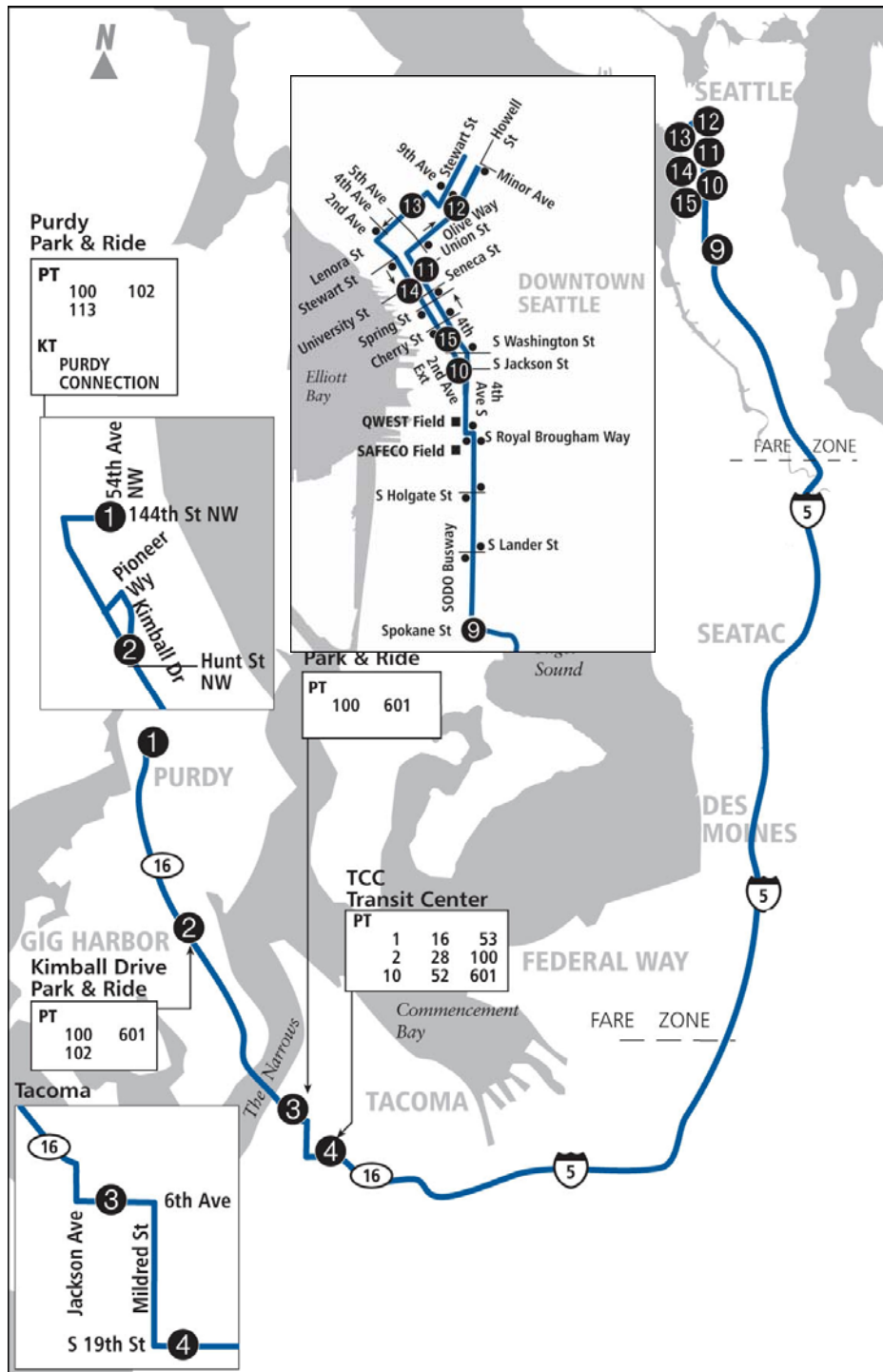
**Service Change Concepts**

There are no specific changes planned for Route 586 in 2010. Data will be reviewed to see if individual trips should be deleted due to low ridership.

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



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



**Route 595 (Gig Harbor Service)**

**Description**

The Tacoma/Lakewood-Seattle Express began as a Pierce Transit service in 1991, and was incorporated into Sound Transit's regional express network in September 1999. The four routes share common routing in Seattle, operate along the I-5 corridor and make limited stops within Pierce County. Route 590 operates only during peak periods, making stops in downtown Tacoma and at the Tacoma Dome Station. Route 592, which also operates only

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

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

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

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

**Performance Assessment**

|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

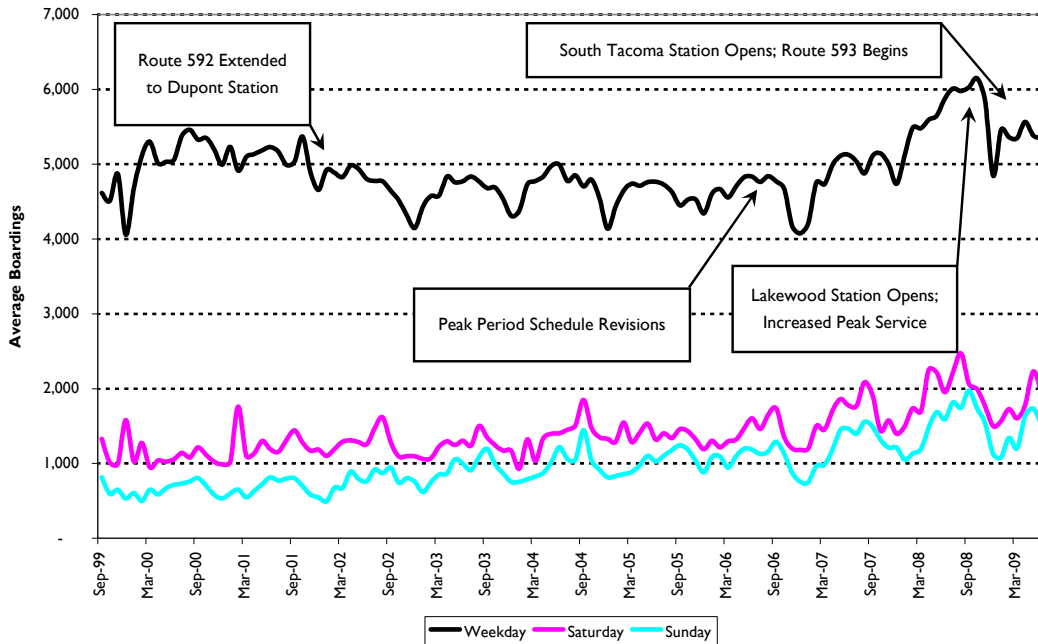
| 1st Quarter 2008                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 5,359   | 1,654    | 1,123   |
| Passengers per Trip                        | 28.56   | 29.94   | 24.33    | 16.51   |
| 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    | 3.33    | 2.671    | 3.67    |

| 1st Quarter 2009                           | Overall | Weekday | Saturday | Sunday  |
|--|---------|---------|----------|---------|
| Daily Boardings                            |         | 5,389   | 1,627    | 1,200   |
| Passengers per Trip                        | 26.04   | 26.81   | 23.93    | 17.65   |
| Passengers per Revenue Hour                | 16.73   | 17.45   | 13.97    | 10.55   |
| Purchased Transportation Cost per Boarding | \$9.00  | \$8.94  | \$8.22   | \$11.12 |
| Route Assessment                           | 3.67    | 3.67    | 3.67     | 3.67    |

| 2008-2009 Comparison                       | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | + <1%   | - 2%     | + 7%   |
| Passengers per Trip                        | - 9%    | - 10%   | - 2%     | + 7%   |
| Passengers per Revenue Hour                | - 9%    | - 11%   | - 5%     | + 6%   |
| Purchased Transportation Cost per Boarding | + 20%   | + 21%   | + 8%     | + <1%  |

| 2nd Quarter 2009                           | Overall | Weekday | Saturday | Sunday |
|--|---------|---------|----------|--------|
| Daily Boardings                            |         | 5,434   | 2,009    | 1,646  |
| Passengers per Trip                        | 27.00   | 27.04   | 29.54    | 24.21  |
| Passengers per Revenue Hour                | 16.41   | 16.48   | 17.22    | 14.59  |
| Purchased Transportation Cost per Boarding | \$9.08  | \$9.32  | \$6.66   | \$8.12 |
| Route Assessment                           | 3.67    | 3.67    | 2.67     | 2.67   |

**Routes 590/591/592/593/594/595 (Lakewood/Tacoma-Seattle)**

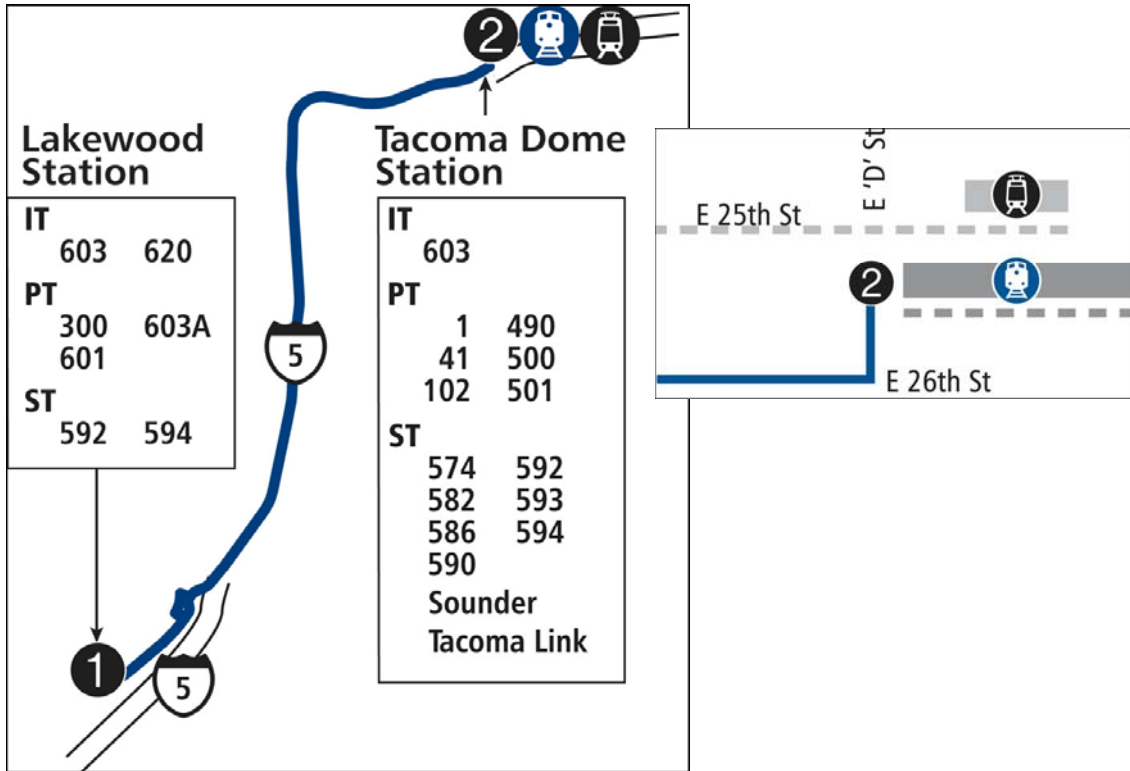


Ridership has not increased significantly despite the addition of added peak period service to Lakewood and South Tacoma; thus overall productivity has declined compared with 2008.

**Service Change Concepts**

With the extension of all Route 592 and 594 trips to Lakewood Station in September 2008, additional peak “shoulder” trips were added and some have not been particularly productive, indicating that trip-level rationalization may be desirable. Staff will be evaluating potential deletion of selected low-ridership trips on Routes 590, 592 and 594 to improve productivity. These changes would be implemented administratively during 2010. Also, Sound Transit’s Marketing Division is developing a promotion campaign for Route 593 service at South Tacoma Station, which has been lightly used since it started in February 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 and to develop the market for future Sounder service operating directly to Lakewood. Each train arrival and departure connects with a trip on Route 599 to or from Lakewood Station, and afternoon buses will wait for late trains if necessary. Service is funded by Sound Transit, but operated by Pierce Transit under a purchased transportation service agreement. Pierce Transit buses are normally assigned to the route.

**Performance Assessment**

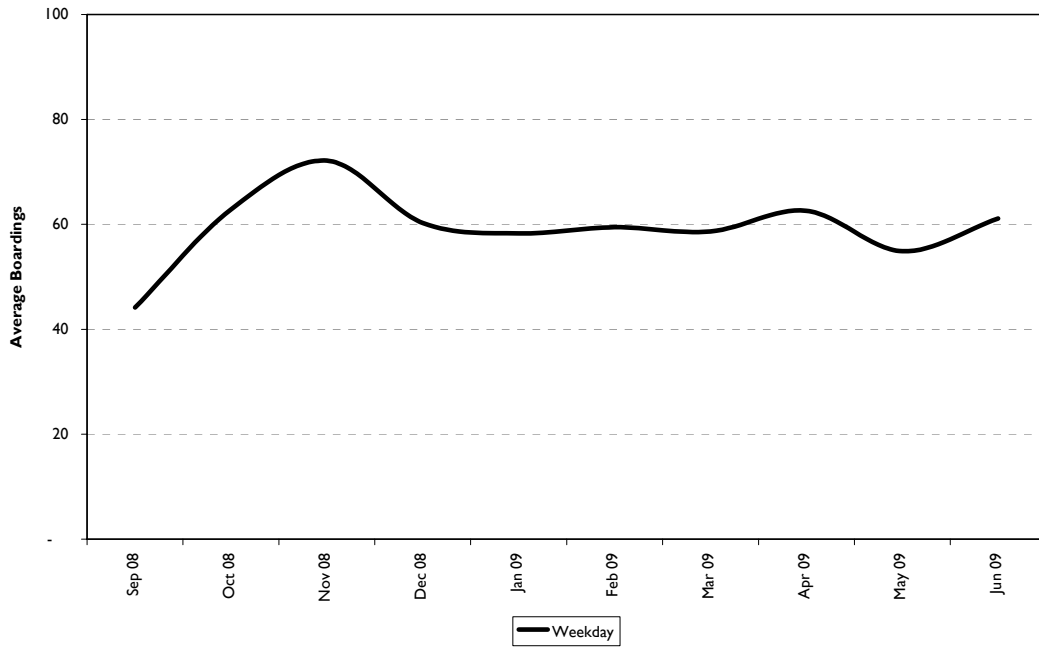
|                            |      |              |          |                |
|----------------------------|------|--------------|----------|----------------|
| Performance Measure Rating | Good | Satisfactory | Marginal | Unsatisfactory |
|----------------------------|------|--------------|----------|----------------|

| 1st Quarter 2009                           | Overall | Weekday | Saturday           | Sunday |
|--|---------|---------|--------------------|--------|
| Daily Boardings                            |         | 59      | No weekend service |        |
| Passengers per Trip                        | 3.78    | 3.78    |                    |        |
| Passengers per Revenue Hour                | 7.48    | 7.48    |                    |        |
| Purchased Transportation Cost per Boarding | \$23.73 | \$23.73 |                    |        |
| Route Assessment                           | 4.00    | 4.00    |                    |        |

| 2nd Quarter 2009                  | Overall | Weekday | Saturday           | Sunday |
|-----------------------------------|---------|---------|--------------------|--------|
| Daily Boardings                   |         | 60      | No weekend service |        |
| Passengers per Trip               | 3.58    | 3.58    |                    |        |
| Passengers per Revenue Hour       | 6.83    | 6.83    |                    |        |
| Purchased Transportation Cost per | \$25.07 | \$25.07 |                    |        |

|                  |  |      |      |
|------------------|--|------|------|
| Boarding         |  |      |      |
| Route Assessment |  | 4.00 | 4.00 |

**Route 599 (Lakewood-Tacoma)**



**Service Change Concepts**

Ridership and productivity on this route has been disappointing so far. Following an initial growth spurt, ridership leveled off and has hovered at about 60 boardings per day since December 2008, or fewer than 4 passengers per trip. Sound Transit’s Marketing staff will be developing a promotion campaign for Route 599 next year to increase awareness of the service.



## Chapter 3: Preliminary Service Plan 2011-2015

### Link Light Rail

Central Link service levels are expected to remain stable through 2015. Extra trains may be operated for large-scale public events, particularly after 27 additional light rail cars are delivered in 2010/2011. Construction near the Pine Street train layover facility now limits trains to 2 cars, but once this work is completed in 2015, additional capacity can be provided through the use of 3-car trains.

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

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

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

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

**Tacoma Link**

Tacoma Link service levels are expected to remain stable through 2015, although construction of the “D to M Street” Sounder extension to Lakewood may impair the ability to provide 10-minute frequencies because of changes to traffic signals on South 25<sup>th</sup> Street. Large-scale special events, such as Tacoma Dome and Convention Center activities, may result in the need for additional service from time to time (see Tacoma Link section in Chapter 2).

**Tacoma Link Regular Service Schedule 2010 – 2015**

| <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 2015. 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 late 2012. In addition, the ST2 plan includes additional South Line trains, but considerable work is necessary to move forward with implementation, including negotiations with BNSF for track easements and the procurement of additional cars and locomotives. The uncertainties associated with these tasks make it difficult to predict the exact start-up dates for added trains.

For purposes of preliminary planning, it was assumed that Lakewood service would start in early 2013, and that the first new ST2-funded round trip would begin at the same time, followed by a second new round trip in 2015. The Souder ridership/revenue estimates reflect these assumptions. Since the Tacoma-Lakewood segment of the South Line is largely single-track, changes to some existing schedules may be necessary to accommodate train meets at passing sidings. As work moves forward, more details on the Lakewood schedule and added South Line service will be presented in the 2011 SIP.

## **ST Express Bus**

Preliminary ST Express service change concepts for late 2011 through 2015 are described below. These proposals are not proposed for implementation at this time, but are shown for preliminary planning purposes and are subject to change.

### **2011 (September)**

- Potential changes to Route 513 service on Highway 99 in South Everett to avoid duplication with Community Transit *Swift* service between downtown Everett and South Everett.
- Potential service improvements on Routes 540, 542, 545, 555 and 556 during SR 520 bridge replacement, pending availability of state or Federal construction mitigation funds.
- Potential changes to Route 560 to avoid duplication with King County Metro's "Rapid Ride" bus rapid transit service in West Seattle.

### **2012**

- Potential improvements to Route 550 coordinated with the start-up of King County Metro's "Rapid Ride" bus rapid transit service between Bellevue, Crossroads and Redmond.

## 2013

- Temporary bus routes 593 and 599 discontinued with the extension of Sounder train service to South Tacoma and Lakewood. Route 593 trips converted to Route 590 trips operating between Tacoma Dome Station and Seattle only.

## 2014-2015

Proposals still under development.

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

|                |   |
|----------------|---|
| Route 510      | Extend minimum of 30-minute frequency at all times<br>Extend span of service later in the evenings  |
| Route 511      | Extend minimum of 30-minute frequency at all times<br>Extend span of service later in the evenings  |
| Route 513      | Add up to 14 round trips between Eastmont and downtown Seattle  |
| Route 522      | Extend 30-minute frequency in the evenings<br>Extend span of service later in the evenings  |
| Route 545      | Extend span of service later in the evenings  |
| Route 550      | Extend 15-minute frequency weekdays until 10:00 p.m.<br>Add peak period trips to better coordinate with Link light rail schedule in downtown Seattle transit tunnel<br>Extend span of service later in the evenings |
| Route 554      | Extend minimum of 30-minute frequency at all times  |
| Route 556      | Improve peak-hour, peak direction frequency to every 15-minutes<br>Add midday service every 30-minutes on weekdays  |
| Route 560      | Improve frequency between Burien and Bellevue to every 15-minutes on weekdays   |
| Route 566      | Add trips in the afternoon peak period from Redmond Transit Center to Kent Station  |
| Route 574      | Improve weekday service to 15-minute frequency<br>Improve weekend service to 30-minute frequency all day  |
| Route 577      | Improve peak-hour, peak-direction frequency   |
| Route 578      | Extend weekday span of service later in the evenings<br>Provide 30-minute service on weekends between 5:00 a.m. and 1:00 a.m. (replacing Route 577)   |
| Routes 590-594 | Improve midday service to every 15-minutes between Tacoma and Seattle<br>Extend span of service later in the evenings   |

## **Upcoming Issues**

- Tacoma Link- Construction of the D-to-M Street Sounder project during the next two years may impact the ability to maintain signal priority for Tacoma Link. Signal priority is vital in providing reliable and frequent (10 minute) light rail service. Staff will work closely with the City of Tacoma and other partners and stakeholders to see if these impacts can be mitigated.
- SR 520 Bridge Replacement- The SR 520 Bridge replacement project will eliminate the Montlake Freeway Station, impacting the ability to provide direct connections between University District/Capitol Hill neighborhoods and many parts of East King County. Both Sound Transit and King County Metro have urged the Washington State Department of Transportation to help mitigate this impact by funding expanded service between the University District and the Eastside.

## **Bus Fleet and Base Capacity Issues**

- Fleet- A total of 40 additional buses are needed for the proposed expansion of ST Express bus service. Three of these buses have been delivered and are now in service, and 13 are on order for mid-2010 delivery. Sound Transit staff will be requesting Board approval for purchase of the remaining 24 buses needed as part of the 2010 budget request.
- Base capacity- Sound Transit has signed an agreement with Pierce Transit that allows use of PT's Lakewood base for ST Express service through 2015, including the added ST fleet needed for service expansion. Sound Transit staff will be requesting Board approval of an agreement with Community Transit that will expand and improve CT's Kasch Park maintenance base. At King County Metro, no near-term base expansion or improvement projects may be needed due to anticipated Metro service reductions.

## **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**

Estimated ridership, fare revenue and operations and maintenance costs are shown in this chapter for 2009 through 2015.

### **Link Light Rail**

#### **Tacoma Link**

##### **Ridership Assumptions**

Short-term ridership estimates through 2015 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- Table A-1**

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**

Ridership information for the segment is provided by Planning, Environment and Project Development Department staff.

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

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

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

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

## **Souder Commuter Rail**

### **Ridership Assumptions**

It is assumed that Souder ridership will grow to fill existing capacity and as additional service is implemented, and that by 2015 ridership will be 3.3 million annual boardings. Ridership estimates are revised each year based on three factors:

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

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

### **Fare Revenue Assumptions**

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

### **Operating & Maintenance Cost Assumptions- Table A-5**

Expenditures for operations and maintenance increase each year at the estimated rate of inflation, together with the cost of any added service. Souder operating and maintenance costs are subcategorized in Appendix Table A-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 2015) 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 Souder, 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- Table A-6**

Bus operating and maintenance costs include purchased transportation, program costs and contingency.

### **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 2009 SIP was published to include negotiated costs for 2009 and preliminary costs for 2010 and 2011 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.

### **Paratransit (placeholder)**

Text to be provided in Final SIP

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

On Tacoma Link, no fares are 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. Central Link light rail ridership numbers were provided by the Planning, Environment and Project Development Department.

|                          | Actual  | Estimated |         |          |          |          |          |          |
|--------------------------|---------|-----------|---------|----------|----------|----------|----------|----------|
| Tacoma Line              | 2008    | 2009      | 2010    | 2011     | 2012     | 2013     | 2014     | 2015     |
| <b>Weekday Boardings</b> | 3,014   | 3,191     | 3,216   | 3,235    | 3,252    | 3,267    | 3,281    | 3,294    |
| <b>Annual Boardings</b>  | 919,364 | 1.0 mil   | 1.0 mil | 1.0 mil  | 1.0 mil  | 1.0 mil  | 1.0 mil  | 1.0 mil  |
| Central Line             | 2008    | 2009      | 2010    | 2011     | 2012     | 2013     | 2014     | 2015     |
| <b>Weekday Boardings</b> |         | 15,900*   | 26,600  | 33,800   | 36,400   | 37,500   | 38,600   | 39,700   |
| <b>Annual Boardings</b>  |         | 2.4 mil   | 8.1 mil | 10.3 mil | 11.1 mil | 11.4 mil | 11.8 mil | 12.1 mil |

\* Average over first six-months of operation

### Souder Commuter Rail

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

- One more year of operating experience
- Park-and-ride capacity constraints
- South Line service to Lakewood deferred until early 2013
- A new South Line round trip starting in early 2013, followed by a second new round trip in 2015

|                | Actual    | Estimated Boardings |         |         |         |         |         |         |
|----------------|-----------|---------------------|---------|---------|---------|---------|---------|---------|
|                | 2008      | 2009                | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| <b>Weekday</b> | 9,947     | 9,946               | 10,215  | 10,298  | 10,374  | 11,061  | 12,020  | 12,599  |
| <b>Annual</b>  | 2,667,005 | 2.7 mil             | 2.7 mil | 2.8 mil | 2.8 mil | 3.0 mil | 3.2 mil | 3.3 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 |          |          |          |          |          |          |
|----------------|------------|---------------------|----------|----------|----------|----------|----------|----------|
|                | 2008       | 2009                | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
| <b>Weekday</b> | 42,025     | 42,048              | 46,633   | 49,657   | 52,174   | 52,575   | 52,911   | 53,212   |
| <b>Annual</b>  | 12,528,989 | 12.6 mil            | 13.7 mil | 14.6 mil | 15.2 mil | 15.4 mil | 15.5 mil | 15.6 mil |

### Annual Projections – Fare Revenue (millions)

Fare revenue projections are provided by the Finance Department.

| Year        | Link   | Sounder | ST Express | Total  |
|-------------|--------|---------|------------|--------|
| 2008 actual |        | \$8.2   | \$18.4     | \$26.6 |
| 2009 est.   | \$3.1  | \$11.5  | \$19.6     | \$34.2 |
| 2010 est.   | \$10.5 | \$12.5  | \$23.1     | \$46.1 |
| 2011 est.   | \$13.9 | \$12.4  | \$24.5     | \$50.8 |
| 2012 est.   | \$15.1 | \$12.9  | \$25.9     | \$53.9 |
| 2013 est.   | \$15.8 | \$14.1  | \$26.5     | \$56.4 |
| 2014 est.   | \$16.6 | \$15.6  | \$27.1     | \$59.3 |
| 2015 est.   | \$17.3 | \$16.6  | \$27.7     | \$61.6 |

# APPENDIX A: Tables

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

| Route Description        | Annual Vehicle Miles |                  |                  |                  |                  |                  |                  |                  |
|--------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                          | 2008                 | 2009             | 2010             | 2011             | 2012             | 2013             | 2014             | 2015             |
|                          | 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                    | 1,029,534        | 2,059,069        | 2,059,069        | 2,059,069        | 2,059,069        | 2,059,069        | 2,059,069        |
| <b>Subarea Total</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>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                    | 273,674          | 547,348          | 547,348          | 547,348          | 547,348          | 547,348          | 547,348          |
| <b>Subarea Total</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>547,348</b>   |
| <b>Pierce County</b>     |                      |                  |                  |                  |                  |                  |                  |                  |
| Tacoma Link              | 94,508               | 97,442           | 97,442           | 97,442           | 97,442           | 97,442           | 97,442           | 97,442           |
| <b>Subarea Total</b>     | <b>94,508</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>94,508</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> | <b>2,703,859</b> |

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

| Route Description        | Annual Train Miles |                |                |                |                |                |                |                |
|--------------------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                          | 2008               | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           |
|                          | Actual             | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      |
| <b>Snohomish</b>         |                    |                |                |                |                |                |                |                |
| Everett/Seattle          | 60,552             | 73,564         | 74,736         | 74,736         | 73,564         | 73,564         | 73,564         | 73,564         |
| <b>Subarea Total</b>     | <b>60,552</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>73,564</b>  |
| <b>South King County</b> |                    |                |                |                |                |                |                |                |
| Lakewood/Seattle         | 73,747             | 101,941        | 101,550        | 101,981        | 102,091        | 102,091        | 102,091        | 102,091        |
| <b>Subarea Total</b>     | <b>73,747</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>102,091</b> |
| <b>Pierce County</b>     |                    |                |                |                |                |                |                |                |
| Lakewood/Seattle         | 60,339             | 83,541         | 83,221         | 93,810         | 122,331        | 122,331        | 122,331        | 122,331        |
| <b>Subarea Total</b>     | <b>60,339</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>122,331</b> |
| <b>SOUNDER TOTAL</b>     | <b>194,638</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> | <b>297,986</b> |

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

| Route            | Route Description           | Annual Platform Hours |                |                |                |                |                |                |                |
|------------------|-----------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                  |                             | 2008                  | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           |
|                  |                             | Estimated             | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      | Estimated      |
| <b>Snohomish</b> |                             |                       |                |                |                |                |                |                |                |
| 510              | Everett/Seattle             | 43,640                | 44,864         | 45,206         | 45,206         | 45,304         | 45,206         | 45,206         | 45,206         |
| 511              | Lynnwood/Seattle            | 33,448                | 37,480         | 42,834         | 51,161         | 52,243         | 52,161         | 52,161         | 52,161         |
| 513              | Everett/Seattle             | 4,691                 | 5,960          | 6,648          | 9,392          | 9,690          | 9,690          | 9,690          | 9,690          |
| 532              | Everett/Bellevue            | 7,502                 | 11,228         | 11,228         | 13,409         | 13,735         | 13,735         | 13,735         | 13,735         |
| 535              | Lynnwood/Issaquah Highlands | 9,404                 | 9,750          | 9,644          | 9,662          | 9,676          | 9,662          | 9,662          | 9,662          |
|                  | <b>Subarea Total</b>        | <b>98,684</b>         | <b>109,282</b> | <b>115,559</b> | <b>128,830</b> | <b>130,648</b> | <b>130,454</b> | <b>130,454</b> | <b>130,454</b> |

|                  |                               |                |                |                |                |                |                |                |                |
|------------------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>East King</b> |                               |                |                |                |                |                |                |                |                |
| 532              | Everett/Bellevue              | 5,894          | 6,831          | 6,831          | 6,831          | 6,831          | 6,831          | 6,831          | 6,831          |
| 535              | Lynnwood/Bellevue             | 16,012         | 16,601         | 16,420         | 16,452         | 16,475         | 16,452         | 16,452         | 16,452         |
| 522              | Woodinville/Seattle           | 46,184         | 49,645         | 49,958         | 53,767         | 54,272         | 54,175         | 54,175         | 54,175         |
| 540              | Kirkland/U. District          | 20,429         | 20,006         | 19,886         | 20,028         | 20,107         | 20,028         | 20,028         | 20,028         |
| 542              | Redmond/U. District           | 0              | 0              | 5,198          | 19,291         | 19,783         | 19,783         | 19,783         | 19,783         |
| 545              | Redmond/Seattle               | 69,306         | 70,392         | 70,242         | 70,407         | 70,484         | 70,407         | 70,407         | 70,407         |
| 550              | Bellevue/Seattle              | 53,376         | 52,710         | 54,220         | 54,393         | 54,458         | 54,386         | 54,386         | 54,386         |
| 554              | Issaquah/Seattle              | 37,453         | 39,316         | 39,071         | 50,728         | 52,071         | 51,986         | 51,986         | 51,986         |
| 555/556          | Northgate/Issaquah            | 11,888         | 12,901         | 13,100         | 13,152         | 13,152         | 13,152         | 13,152         | 13,152         |
| 560              | West Seattle/Airport/Bellevue | 19,612         | 19,661         | 19,745         | 19,757         | 19,793         | 19,757         | 19,757         | 19,757         |
| 564              | South Hill/Overlake           | 11,309         | 11,272         | 1,105          | 0              | 0              | 0              | 0              | 0              |
| 565              | Federal Way/Overlake          | 11,025         | 10,851         | 1,064          | 0              | 0              | 0              | 0              | 0              |
| 566              | Auburn/Redmond                | 0              | 0              | 24,689         | 32,197         | 32,329         | 32,329         | 32,329         | 32,329         |
|                  | <b>Subarea Total</b>          | <b>302,487</b> | <b>310,185</b> | <b>321,529</b> | <b>357,002</b> | <b>359,754</b> | <b>359,285</b> | <b>359,285</b> | <b>359,285</b> |

|                          |                               |               |               |               |               |               |               |               |               |
|--------------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>South King County</b> |                               |               |               |               |               |               |               |               |               |
| 560                      | West Seattle/Airport/Bellevue | 23,022        | 23,080        | 21,566        | 21,404        | 21,442        | 21,404        | 21,404        | 21,404        |
| 564                      | South Hill/Overlake           | 8,996         | 8,967         | 879           | 0             | 0             | 0             | 0             | 0             |
| 565                      | Federal Way/Overlake          | 10,592        | 10,425        | 1,022         | 0             | 0             | 0             | 0             | 0             |
| 566                      | Auburn/Redmond                | 0             | 0             | 11,092        | 12,704        | 12,572        | 12,572        | 12,572        | 12,572        |
| 574                      | Lakewood/Sea-Tac              | 19,256        | 19,095        | 24,290        | 25,369        | 25,427        | 25,369        | 25,369        | 25,369        |
| 577                      | Federal Way/Seattle           | 11,102        | 11,509        | 14,346        | 14,681        | 14,707        | 14,681        | 14,681        | 14,681        |
|                          | <b>Subarea Total</b>          | <b>72,969</b> | <b>73,076</b> | <b>73,195</b> | <b>74,159</b> | <b>74,149</b> | <b>74,026</b> | <b>74,026</b> | <b>74,026</b> |

|                      |                            |                |                |                |                |                |                |                |                |
|----------------------|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Pierce County</b> |                            |                |                |                |                |                |                |                |                |
| 564                  | South Hill/Overlake        | 5,397          | 5,380          | 527            | 0              | 0              | 0              | 0              | 0              |
| 574                  | Lakewood/Sea-Tac           | 16,403         | 16,266         | 20,692         | 21,611         | 21,660         | 21,611         | 21,611         | 21,611         |
| 578                  | Seattle/Puyallup           | 0              | 465            | 24,194         | 26,941         | 26,941         | 26,941         | 26,941         | 26,941         |
| 582                  | Bonney Lake/Tacoma         | 7,905          | 6,942          | 680            | 0              | 0              | 0              | 0              | 0              |
| 586                  | Tacoma/U. District         | 14,422         | 14,351         | 14,277         | 14,390         | 14,390         | 14,390         | 14,390         | 14,390         |
| 590-595              | Lakewood/Tacoma/Seattle    | 116,576        | 121,719        | 121,241        | 121,525        | 121,645        | 121,525        | 121,525        | 121,525        |
| 599                  | Lakewood Sounder Connector | 910            | 3,678          | 3,934          | 3,950          | 2,892          | 0              | 0              | 0              |
|                      | <b>Subarea Total</b>       | <b>161,613</b> | <b>168,801</b> | <b>185,545</b> | <b>188,416</b> | <b>187,528</b> | <b>184,467</b> | <b>184,467</b> | <b>184,467</b> |

|                         |  |                |                |                |                |                |                |                |                |
|-------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>ST EXPRESS TOTAL</b> |  | <b>635,753</b> | <b>661,344</b> | <b>695,828</b> | <b>748,407</b> | <b>752,079</b> | <b>748,232</b> | <b>748,232</b> | <b>748,232</b> |
|-------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|

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

|                             | Actual<br>2007     | Estimated<br>2008  | Estimated<br>2009   | Estimated<br>2010   | Estimated<br>2011   | Estimated<br>2012   | Estimated<br>2013   | Estimated<br>2014   |
|-----------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>North King County</b>    |                    |                    |                     |                     |                     |                     |                     |                     |
| Purchased Transportation    |                    |                    | \$7,693,031         | \$13,978,731        | \$13,950,367        | \$14,456,061        | \$14,963,698        | \$15,489,079        |
| Program Costs               |                    |                    | \$6,603,151         | \$12,652,871        | \$12,635,722        | \$13,129,320        | \$13,465,180        | \$13,938,458        |
| Contingency                 |                    |                    | \$713,700           |                     |                     |                     |                     |                     |
| <b>Subarea Total</b>        |                    |                    | <b>\$15,009,882</b> | <b>\$26,631,602</b> | <b>\$26,586,089</b> | <b>\$27,585,381</b> | <b>\$28,428,878</b> | <b>\$29,427,537</b> |
| <b>Proposed 2009 Budget</b> |                    |                    | <b>\$15,009,882</b> | <b>\$26,631,602</b> | <b>\$26,586,089</b> | <b>\$27,585,381</b> | <b>\$28,428,878</b> | <b>\$29,427,537</b> |
| <b>South King County</b>    |                    |                    |                     |                     |                     |                     |                     |                     |
| Purchased Transportation    |                    |                    | \$3,620,250         | \$9,149,547         | \$9,130,981         | \$9,461,975         | \$9,794,240         | \$10,138,120        |
| Program Costs               |                    |                    | \$3,074,734         | \$8,281,727         | \$8,270,502         | \$8,593,579         | \$8,813,410         | \$9,123,186         |
| Contingency                 |                    |                    | \$335,859           |                     |                     |                     |                     |                     |
| <b>Subarea Total</b>        |                    |                    | <b>\$7,030,842</b>  | <b>\$17,431,274</b> | <b>\$17,401,484</b> | <b>\$18,055,554</b> | <b>\$18,607,650</b> | <b>\$19,261,306</b> |
| <b>Proposed 2009 Budget</b> |                    |                    | <b>\$7,030,842</b>  | <b>\$17,431,274</b> | <b>\$17,401,484</b> | <b>\$18,055,554</b> | <b>\$18,607,650</b> | <b>\$19,261,306</b> |
| <b>Pierce County</b>        |                    |                    |                     |                     |                     |                     |                     |                     |
| Purchased Transportation    |                    |                    |                     |                     |                     |                     |                     |                     |
| Program Costs               | \$3,153,968        | \$3,634,918        | \$4,188,684         | \$4,142,949         | \$4,243,397         | \$4,382,217         | \$4,537,770         | \$4,614,815         |
| Contingency                 |                    | \$180,655          | \$190,510           |                     | \$212,170           | \$219,111           | \$226,889           | \$230,741           |
| <b>Subarea Total</b>        | <b>\$3,153,968</b> | <b>\$3,815,573</b> | <b>\$4,379,194</b>  | <b>\$4,142,949</b>  | <b>\$4,455,567</b>  | <b>\$4,601,328</b>  | <b>\$4,764,659</b>  | <b>\$4,845,556</b>  |
| <b>Proposed 2009 Budget</b> | <b>\$3,153,968</b> | <b>\$3,815,573</b> | <b>\$4,379,194</b>  | <b>\$4,142,949</b>  | <b>\$4,455,567</b>  | <b>\$4,601,328</b>  | <b>\$4,764,659</b>  | <b>\$4,845,556</b>  |
| <b>Link Total</b>           |                    |                    |                     |                     |                     |                     |                     |                     |
| Purchased Transportation    |                    |                    | \$11,313,281        | \$23,128,278        | \$23,081,348        | \$23,918,037        | \$24,757,938        | \$25,627,199        |
| Program Costs               | \$3,153,968        | \$3,634,918        | \$13,866,569        | \$25,077,547        | \$25,149,621        | \$26,105,116        | \$26,816,360        | \$27,676,459        |
| Contingency                 |                    | \$180,655          | \$1,240,069         |                     | \$212,170           | \$219,111           | \$226,889           | \$230,741           |
| <b>Link Total</b>           | <b>\$3,153,968</b> | <b>\$3,815,573</b> | <b>\$26,419,919</b> | <b>\$48,205,825</b> | <b>\$48,443,139</b> | <b>\$50,242,264</b> | <b>\$51,801,187</b> | <b>\$53,534,399</b> |
| <b>Proposed 2009 Budget</b> | <b>\$3,153,968</b> | <b>\$3,815,573</b> | <b>\$26,419,919</b> | <b>\$48,205,825</b> | <b>\$48,443,139</b> | <b>\$50,242,264</b> | <b>\$51,801,187</b> | <b>\$53,534,399</b> |



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

|                             | <b>Actual<br/>2007</b> | <b>Estimated<br/>2008</b> | <b>Estimated<br/>2009</b> | <b>Estimated<br/>2010</b> | <b>Estimated<br/>2011</b> | <b>Estimated<br/>2012</b> | <b>Estimated<br/>2013</b> | <b>Estimated<br/>2014</b> |
|-----------------------------|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Snohomish</b>            |                        |                           |                           |                           |                           |                           |                           |                           |
| Purchased Transportation    | \$2,052,635            | \$2,588,443               | \$2,738,744               | \$2,665,972               | \$2,953,317               | \$2,996,420               | \$3,085,951               | \$3,150,756               |
| Program Costs               | \$5,099,526            | \$5,003,557               | \$5,351,894               | \$5,110,147               | \$5,425,336               | \$5,430,533               | \$5,383,092               | \$5,089,311               |
| Contingency                 |                        | \$230,745                 | \$246,005                 |                           | \$167,573                 | \$168,539                 | \$407,043                 | \$402,463                 |
| <b>Subarea Total</b>        | <b>\$7,152,161</b>     | <b>\$7,822,744</b>        | <b>\$8,336,643</b>        | <b>\$7,776,119</b>        | <b>\$8,546,225</b>        | <b>\$8,595,493</b>        | <b>\$8,876,086</b>        | <b>\$8,642,531</b>        |
| <b>Proposed 2009 Budget</b> | <b>\$7,152,161</b>     | <b>\$7,822,744</b>        | <b>\$8,336,643</b>        | <b>\$7,776,119</b>        | <b>\$8,546,225</b>        | <b>\$8,595,493</b>        | <b>\$8,876,086</b>        | <b>\$8,642,531</b>        |
| <b>South King County</b>    |                        |                           |                           |                           |                           |                           |                           |                           |
| Purchased Transportation    | \$2,646,217            | \$2,668,868               | \$2,495,013               | \$2,556,420               | \$2,759,022               | \$2,819,354               | \$3,259,462               | \$3,327,911               |
| Program Costs               | \$9,518,653            | \$9,858,989               | \$13,397,458              | \$13,542,993              | \$13,901,884              | \$13,872,901              | \$12,653,745              | \$12,470,266              |
| Contingency                 |                        | \$379,078                 | \$246,005                 |                           | \$167,573                 | \$(33,077)                | \$201,450                 | \$200,300                 |
| <b>Subarea Total</b>        | <b>\$12,164,870</b>    | <b>\$12,906,935</b>       | <b>\$16,138,476</b>       | <b>\$16,099,412</b>       | <b>\$16,828,480</b>       | <b>\$16,659,177</b>       | <b>\$16,114,657</b>       | <b>\$15,998,477</b>       |
| <b>Proposed 2009 Budget</b> | <b>\$12,164,870</b>    | <b>\$12,906,935</b>       | <b>\$16,138,476</b>       | <b>\$16,099,412</b>       | <b>\$16,828,480</b>       | <b>\$16,659,177</b>       | <b>\$16,114,657</b>       | <b>\$15,998,477</b>       |
| <b>Pierce County</b>        |                        |                           |                           |                           |                           |                           |                           |                           |
| Purchased Transportation    | \$15,015,596           | \$15,960,422              | \$2,044,650               | \$2,094,998               | \$2,759,022               | \$2,531,230               | \$3,499,577               | \$3,573,068               |
| Program Costs               | \$1,881,418            | \$2,226,387               | \$10,194,167              | \$10,156,813              | \$10,308,463              | \$10,788,753              | \$13,723,817              | \$13,444,858              |
| Contingency                 |                        | \$482,788                 | \$441,087                 |                           | \$261,350                 | \$266,400                 | \$898,621                 | \$894,512                 |
| <b>Subarea Total</b>        | <b>\$16,897,014</b>    | <b>\$18,669,597</b>       | <b>\$12,679,904</b>       | <b>\$12,251,812</b>       | <b>\$13,328,835</b>       | <b>\$13,586,382</b>       | <b>\$18,122,014</b>       | <b>\$17,912,438</b>       |
| <b>Proposed 2009 Budget</b> | <b>\$16,897,014</b>    | <b>\$18,669,597</b>       | <b>\$12,679,904</b>       | <b>\$12,251,812</b>       | <b>\$13,328,835</b>       | <b>\$13,586,382</b>       | <b>\$18,122,014</b>       | <b>\$17,912,438</b>       |
| <b>Sounder Total</b>        |                        |                           |                           |                           |                           |                           |                           |                           |
| Purchased Transportation    | \$19,714,448           | \$21,217,732              | \$7,278,407               | \$7,317,390               | \$8,471,361               | \$8,347,004               | \$9,844,990               | \$10,051,735              |
| Program Costs               | \$16,499,597           | \$17,088,933              | \$28,943,519              | \$28,809,953              | \$29,635,683              | \$30,092,187              | \$31,760,653              | \$31,004,436              |
| Contingency                 |                        | \$1,092,611               | \$933,097                 |                           | \$596,496                 | \$401,861                 | \$1,507,114               | \$1,497,275               |
| <b>Sounder Total</b>        | <b>\$36,214,045</b>    | <b>\$39,399,276</b>       | <b>\$37,155,023</b>       | <b>\$36,127,343</b>       | <b>\$38,703,540</b>       | <b>\$38,841,052</b>       | <b>\$43,112,758</b>       | <b>\$42,553,446</b>       |
| <b>Proposed 2009 Budget</b> | <b>\$36,214,045</b>    | <b>\$39,399,276</b>       | <b>\$37,155,023</b>       | <b>\$36,127,343</b>       | <b>\$38,703,540</b>       | <b>\$38,841,052</b>       | <b>\$43,112,758</b>       | <b>\$42,553,446</b>       |

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

|                             | Actual<br>2007      | Estimated<br>2008   | Estimated<br>2009   | Estimated<br>2010   | Estimated<br>2011    | Estimated<br>2012    | Estimated<br>2013    | Estimated<br>2014    |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Snohomish</b>            |                     |                     |                     |                     |                      |                      |                      |                      |
| Purchased<br>Transportation | \$7,943,489         | \$8,830,111         | \$10,154,058        | \$11,298,557        | \$13,314,395         | \$14,288,723         | \$14,628,870         | \$16,295,786         |
| Program Costs               | \$1,105,427         | \$1,250,541         | \$1,395,063         | \$1,531,852         | \$1,793,782          | \$1,849,695          | \$1,892,211          | \$1,943,400          |
| Bus Contingency             |                     | \$86,068            | \$343,860           |                     | \$604,327            | \$806,921            | \$826,054            | \$911,959            |
| <b>Subarea Total</b>        | <b>\$9,048,916</b>  | <b>\$10,166,720</b> | <b>\$11,892,981</b> | <b>\$12,830,409</b> | <b>\$15,712,505</b>  | <b>\$16,945,339</b>  | <b>\$17,347,136</b>  | <b>\$19,151,145</b>  |
| <b>Proposed 2009 Budget</b> | <b>\$9,048,916</b>  | <b>\$10,166,720</b> | <b>\$11,892,981</b> | <b>\$12,830,409</b> | <b>\$15,712,505</b>  | <b>\$16,945,339</b>  | <b>\$17,347,136</b>  | <b>\$19,151,145</b>  |
| <b>East King</b>            |                     |                     |                     |                     |                      |                      |                      |                      |
| Purchased<br>Transportation | \$32,486,814        | \$34,059,392        | \$38,493,852        | \$40,953,037        | \$44,960,921         | \$47,802,724         | \$52,766,875         | \$55,141,256         |
| Program Costs               | \$3,368,268         | \$8,035,074         | \$6,479,734         | \$6,690,036         | \$7,028,165          | \$7,135,126          | \$7,244,594          | \$7,376,762          |
| Bus Contingency             |                     | \$187,991           | \$1,354,357         |                     | \$2,079,563          | \$2,746,892          | \$3,000,573          | \$3,125,901          |
| <b>Subarea Total</b>        | <b>\$35,855,082</b> | <b>\$42,282,457</b> | <b>\$46,327,943</b> | <b>\$47,643,074</b> | <b>\$54,068,649</b>  | <b>\$57,684,742</b>  | <b>\$63,012,042</b>  | <b>\$65,643,919</b>  |
| <b>Proposed 2009 Budget</b> | <b>\$35,855,082</b> | <b>\$42,282,457</b> | <b>\$46,327,943</b> | <b>\$47,643,074</b> | <b>\$54,068,649</b>  | <b>\$57,684,742</b>  | <b>\$63,012,042</b>  | <b>\$65,643,919</b>  |
| <b>South King County</b>    |                     |                     |                     |                     |                      |                      |                      |                      |
| Purchased<br>Transportation | \$7,640,439         | \$8,034,420         | \$8,685,487         | \$9,626,964         | \$9,245,482          | \$9,749,591          | \$9,982,920          | \$11,481,214         |
| Program Costs               | \$1,100,471         | \$989,450           | \$1,617,943         | \$2,198,245         | \$1,747,040          | \$1,783,146          | \$1,831,443          | \$1,874,760          |
| Bus Contingency             |                     | \$125,807           | \$315,554           |                     | \$109,925            | \$115,327            | \$118,144            | \$133,560            |
| <b>Subarea Total</b>        | <b>\$8,740,910</b>  | <b>\$9,149,677</b>  | <b>\$10,618,984</b> | <b>\$11,825,209</b> | <b>\$11,102,447</b>  | <b>\$11,648,064</b>  | <b>\$11,932,507</b>  | <b>\$13,489,534</b>  |
| <b>Proposed 2009 Budget</b> | <b>\$8,740,910</b>  | <b>\$9,149,677</b>  | <b>\$10,618,984</b> | <b>\$11,825,209</b> | <b>\$11,102,447</b>  | <b>\$11,648,064</b>  | <b>\$11,932,507</b>  | <b>\$13,489,534</b>  |
| <b>Pierce County</b>        |                     |                     |                     |                     |                      |                      |                      |                      |
| Purchased<br>Transportation | \$15,015,596        | \$15,960,422        | \$19,520,633        | \$22,005,012        | \$21,885,045         | \$22,984,963         | \$24,493,195         | \$25,594,962         |
| Program Costs               | \$1,881,418         | \$2,226,387         | \$2,446,945         | \$2,903,731         | \$2,972,859          | \$3,015,799          | \$3,100,467          | \$3,194,396          |
| Bus Contingency             |                     | \$482,788           | \$645,450           |                     | \$994,316            | \$1,300,038          | \$1,379,683          | \$1,439,468          |
| <b>Subarea Total</b>        | <b>\$16,897,014</b> | <b>\$18,669,597</b> | <b>\$22,613,028</b> | <b>\$24,908,743</b> | <b>\$25,852,221</b>  | <b>\$27,300,800</b>  | <b>\$28,973,345</b>  | <b>\$30,228,826</b>  |
| <b>Proposed 2009 Budget</b> | <b>\$16,897,014</b> | <b>\$18,669,597</b> | <b>\$22,613,028</b> | <b>\$24,908,743</b> | <b>\$25,852,221</b>  | <b>\$27,300,800</b>  | <b>\$28,973,345</b>  | <b>\$30,228,826</b>  |
| <b>ST Express Total</b>     |                     |                     |                     |                     |                      |                      |                      |                      |
| Purchased<br>Transportation | \$63,086,338        | \$66,884,346        | \$76,854,031        | \$83,883,570        | \$89,405,844         | \$94,826,001         | \$101,871,859        | \$108,513,218        |
| Program Costs               | \$7,455,584         | \$12,501,452        | \$11,939,684        | \$13,323,864        | \$13,541,846         | \$13,783,766         | \$14,068,716         | \$14,389,318         |
| Bus Contingency             |                     | \$882,653           | \$2,659,221         |                     | \$3,788,132          | \$4,969,179          | \$5,324,454          | \$5,610,888          |
| <b>ST Express Total</b>     | <b>\$70,541,922</b> | <b>\$80,268,451</b> | <b>\$91,452,936</b> | <b>\$97,207,434</b> | <b>\$106,735,822</b> | <b>\$113,578,946</b> | <b>\$121,265,029</b> | <b>\$128,513,424</b> |
| <b>Proposed 2009 Budget</b> | <b>\$70,541,922</b> | <b>\$80,268,451</b> | <b>\$91,452,936</b> | <b>\$97,207,434</b> | <b>\$106,735,822</b> | <b>\$113,578,946</b> | <b>\$121,265,029</b> | <b>\$128,513,424</b> |

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

|                              | <b>Actual<br/>2007</b> | <b>Estimated<br/>2008</b> | <b>Estimated<br/>2009*</b> | <b>Estimated<br/>2010</b> | <b>Estimated<br/>2011</b> | <b>Estimated<br/>2012</b> | <b>Estimated<br/>2013</b> | <b>Estimated<br/>2014</b> |
|------------------------------|------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>South King County 31%</b> |                        |                           |                            |                           |                           |                           |                           |                           |
| Purchased Transportation     |                        |                           | \$186,000                  | \$651,000                 | \$748,650                 | \$860,948                 | \$990,090                 | \$1,138,603               |
| <b>Subarea Total</b>         |                        |                           | \$186,000                  | \$651,000                 | \$748,650                 | \$860,948                 | \$990,090                 | \$1,138,603               |
| <b>Proposed 2009 Budget</b>  |                        |                           | \$186,000                  | \$651,000                 | \$748,650                 | \$860,948                 | \$990,090                 | \$1,138,603               |
| <b>North King County 69%</b> |                        |                           |                            |                           |                           |                           |                           |                           |
| Purchased Transportation     |                        |                           | \$414,000                  | \$1,449,000               | \$1,666,350               | \$1,916,303               | \$2,203,748               | \$2,534,310               |
| <b>Subarea Total</b>         |                        |                           | \$414,000                  | \$1,449,000               | \$1,666,350               | \$1,916,303               | \$2,203,748               | \$2,534,310               |
| <b>Paratransit Total</b>     |                        |                           |                            |                           |                           |                           |                           |                           |
| Purchased Transportation     |                        |                           | \$600,000                  | \$2,100,000               | \$2,415,000               | \$2,777,250               | \$3,193,838               | \$3,672,913               |
| <b>Proposed 2009 Budget</b>  |                        |                           | \$600,000                  | \$2,100,000               | \$2,415,000               | \$2,777,250               | \$3,193,838               | \$3,672,913               |

\*Based on six-months of service



# APPENDIX B: Fleet Management

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

|                  | Coach Number                     | Manufacturer | Year in Service | Type                    | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------|----------------------------------|--------------|-----------------|-------------------------|------|------|------|------|------|------|------|------|
| Existing Fleet   | 9000-9069                        | Gillig       | 1999            | 40-foot Diesel          | 70   | 70   | 70   | 70   |      |      |      |      |
|                  | 9500-9524                        | New Flyer    | 1999            | 60-foot Diesel          | 25   | 25   | 25   | 25   |      |      |      |      |
|                  | 9525-9536                        | New Flyer    | 2000            | 60-foot Diesel          | 12   | 12   | 12   | 12   | 12   |      |      |      |
|                  | 9070-9089                        | Gillig       | 2001            | 40-foot Diesel          | 20   | 20   | 20   | 20   | 20   | 20   |      |      |
|                  | 9400-9419                        | New Flyer    | 2001            | 40-foot LF CNG          | 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   | 30   |
|                  | 9622-9623                        | New Flyer    | 2008            | 60-foot Hybrid          | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
|                  | 9713-9719                        | MCI          | 2008            | 45-foot Diesel          | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    |
| 9720-9722        | MCI                              | 2009         | 45-foot Diesel  |                         | 3    | 3    | 3    | 3    | 3    | 3    | 3    |      |
| Replacement      | 10600-10612                      | New Flyer    | 2010            | 60-foot Hybrid          |      |      | 13   | 13   | 13   | 13   | 13   | 13   |
|                  | 11500-11520                      |              | 2011            | 60-foot Diesel          |      |      |      | 24   | 24   | 24   | 24   | 24   |
|                  | 12000-12034                      |              | 2012            | 40-foot Bus Replacement |      |      |      |      | 35   | 35   | 35   | 35   |
|                  | 12500-12559                      |              | 2012            | 60-foot Bus Replacement |      |      |      |      | 60   | 60   | 60   | 60   |
|                  | 13500-13511                      |              | 2013            | 60-foot Bus Replacement |      |      |      |      |      | 12   | 12   | 12   |
|                  | 14000-14039                      |              | 2014            | 40-foot Bus Replacement |      |      |      |      |      |      | 40   | 40   |
|                  |                                  |              | 2016            | 40-foot Bus Replacement |      |      |      |      |      |      |      |      |
|                  |                                  |              | 2017            | 60-foot Bus Replacement |      |      |      |      |      |      |      |      |
|                  |                                  |              | 2018            | 40-foot Bus Replacement |      |      |      |      |      |      |      |      |
| Fleet Statistics | Total Assigned Fleet:            |              |                 |                         | 240  | 243  | 256  | 280  | 280  | 280  | 280  | 280  |
|                  | Peak Bus Requirements:           |              |                 |                         | 197  | 199  | 210  | 230  | 230  | 230  | 230  | 230  |
|                  | Spares:                          |              |                 |                         | 43   | 44   | 46   | 50   | 50   | 50   | 50   | 50   |
|                  | Spare Ratio (in assigned fleet): |              |                 |                         | 22%  | 22%  | 22%  | 22%  | 22%  | 22%  | 22%  | 22%  |

Note: High Capacity Diesel buses purchased in 2012 replace 35 of the 40-foot Gillig coaches and 60-foot New Flyer coaches purchased in 1999.

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

|                                  | Vehicle Number                                       | Manufacturer | Year in Service | Type       | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------------------------|--|--------------|-----------------|------------|------|------|------|------|------|------|------|------|
| Actual                           | 901-911  | GM           | 2000-2001       | Locomotive | 11   | 11   | 11   | 11   | 11   | 11   | 11   | 11   |
|                                  | 101-111, 301-307                                     | Bombardier   | 2000-2003       | Cab Car    | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   |
|                                  | 201-240, 401-410                                     | Bombardier   | 2000-2003       | Coach      | 40   | 40   | 40   | 40   | 40   | 40   | 40   | 40   |
| Planned                          | 912-915  |              | 2012            | Locomotive |      |      |      |      | 4    | 4    | 4    | 4    |
|                                  | 308-310  |              | 2012            | Cab Car    |      |      |      |      | 3    | 3    | 3    | 3    |
|                                  | 411-417  |              | 2012            | Coach      |      |      |      |      | 7    | 7    | 7    | 7    |
|                                  | 418-424  |              | 2015            | Coach      |      |      |      |      |      |      |      | 7    |
|                                  | 311  |              | 2015            | Coach      |      |      |      |      |      |      |      | 1    |
| Fleet Statistics                 | Total Locomotives on Property:                       |              |                 |            | 11   | 11   | 11   | 11   | 15   | 15   | 15   | 15   |
|                                  | Peak Vehicle Requirements (including ready reserve): |              |                 |            | 9    | 10   | 10   | 10   | 12   | 12   | 12   | 13   |
|                                  | Spares:  |              |                 |            | 2    | 1    | 1    | 1    | 3    | 3    | 3    | 2    |
|                                  | Spare Ratio (in assigned fleet):                     |              |                 |            | 22%  | 10%  | 10%  | 10%  | 25%  | 25%  | 25%  | 15%  |
|                                  | Total Passenger Cars on Property:                    |              |                 |            | 58   | 58   | 58   | 58   | 68   | 68   | 68   | 76   |
|                                  | Peak Vehicle Requirements (including ready reserve): |              |                 |            | 46   | 49   | 52   | 52   | 60   | 60   | 60   | 67   |
|                                  | Spares:  |              |                 |            | 6    | 3    | 6    | 6    | 8    | 8    | 8    | 9    |
|                                  | Leased:  |              |                 |            | 6    | 6    |      |      |      |      |      |      |
| Spare Ratio (in assigned fleet): |  |              |                 | 13%        | 6%   | 12%  | 12%  | 13%  | 13%  | 13%  | 13%  |      |

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

|                  | Coach No.                 | Manufacturer | Year in Service | Type       | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------|---------------------------|--------------|-----------------|------------|------|------|------|------|------|------|------|------|
| Actual           | 1001-1003                 | Skoda        | 2003            | 66-foot LR | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
|                  | 101-135                   | Kinkisharyo  | 2009            | 95-foot LR |      | 35   | 35   | 35   | 35   | 35   | 35   | 35   |
| Planned          | 136-162                   | Kinkisharyo  | 2011            | 95-foot LR |      |      |      | 27   | 27   | 27   | 27   | 27   |
| Fleet Statistics | Total Assigned Fleet      |              |                 |            | 3    | 38   | 38   | 65   | 65   | 65   | 65   | 65   |
|                  | Peak Vehicle Requirements |              |                 |            | 2    | 30   | 30   | 30   | 30   | 30   | 30   | 30   |
|                  | Spares                    |              |                 |            | 1    | 8    | 8    | 35   | 35   | 35   | 35   | 35   |
|                  | Spare Ratio               |              |                 |            | 50%  | 27%  | 27%  | 117% | 117% | 117% | 117% | 117% |

# APPENDIX C: Public Outreach Summary Report

## Introduction/Background

The Sound Transit Service Implementation Plan (SIP) is updated annually to reflect Sound Transit's progress as it rolls out its vision of the regional transit system. Sound Transit continues to improve service by revising and refining ST Express regional bus routes, and enhancing service on Sounder commuter rail and Link light rail trains. The changes to Sound Transit service in the Draft 2010 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.

## 2010 SIP Outreach

A key element of the outreach is the *Regional Transit News (RTN)*, a tabloid that will be distributed at bus and train platforms and public and transportation information events to be held in fall 2009. Five thousand copies will be printed for distribution. An electronic version will be posted on Sound Transit's website, provided by *E-Wave* and e-mailed to a Sound Transit subscription list. The *RTN* will contain an explanation and map (when necessary) of each proposal, and will encourage riders and the public to contact Sound Transit with comments and inquiries about the changes proposed in the 2010 SIP.

As part of the outreach process, Sound Transit staff will participate in a number of meetings with stakeholder groups. The stakeholders will include 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* will be distributed at three Open Houses, convenient for ST Express riders who may be impacted by the proposals. In addition, the *RTN* will be distributed at transit centers and park-and-ride lots in areas impacted by the proposed changes. Distribution will also be done through the Employee Transportation Network, and Sound Transit meetings and events and on-board specific bus routes as well as on Sounder. There is no survey planned as a part of the 2010 SIP process. The *RTN* and website will 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 2010 SIP concludes on November 19, 2009.

The Draft 2010 SIP will be posted on the Sound Transit Web site on Oct. 19, 2009, and a formal public hearing will be held on November 19, 2009 at Sound Transit to give the public additional opportunity to comment on the 2010 SIP proposals.

The 2010 SIP is planned to go to the Sound Transit Board on Dec. 10, 2009

# 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 2009-2010 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.



# APPENDIX E: ST Express Stop and Screenline Data

I-5 North Service: Routes 510/511/513 Stop Level Boardings and Alightings – Northbound

|   | Route 510 |      | Route 511 |      | Route 513 |      | Total |      |
|---|-----------|------|-----------|------|-----------|------|-------|------|
|   | Ons       | Offs | Ons       | Offs | Ons       | Offs | Ons   | Offs |
| Busway at S Royal Brougham                |           |      |           |      |           |      |       |      |
| 4 <sup>th</sup> Ave S at S Royal Brougham |           |      |           |      |           |      |       |      |
| 4th Ave S at S Jackson St                 |           |      |           |      |           |      |       |      |
| 4th Ave S at S Washington St              |           |      |           |      |           |      |       |      |
| 4th Ave at Cherry St                      |           |      |           |      |           |      |       |      |
| 4th Ave at Seneca St                      |           |      |           |      |           |      |       |      |
| 4th Ave at Union St                       |           |      |           |      |           |      |       |      |
| Olive Way at 6th Ave                      |           |      |           |      |           |      |       |      |
| Olive Way at Terry Ave                    |           |      |           |      |           |      |       |      |
| Howell St at 9th Ave                      |           |      |           |      |           |      |       |      |
| Howell St at Yale Ave                     |           |      |           |      |           |      |       |      |
| I-5 at NE 45 <sup>th</sup> St             |           |      |           |      |           |      |       |      |
| I-5 at NE 145th St                        |           |      |           |      |           |      |       |      |
| Lynnwood Transit Center                   |           |      |           |      |           |      |       |      |
| Ash Way P&R                               |           |      |           |      |           |      |       |      |
| Eastmont P&R                              |           |      |           |      |           |      |       |      |
| Evergreen Way at 79th Pl                  |           |      |           |      |           |      |       |      |
| Evergreen Way at 75th St                  |           |      |           |      |           |      |       |      |
| Evergreen Way at Madison St               |           |      |           |      |           |      |       |      |
| Evergreen Way at Berkshire Dr             |           |      |           |      |           |      |       |      |
| Evergreen Way at 50th St                  |           |      |           |      |           |      |       |      |
| Rucker Ave at 40th St                     |           |      |           |      |           |      |       |      |
| Rucker Ave at 35th St                     |           |      |           |      |           |      |       |      |
| Rucker Ave at 33rd St                     |           |      |           |      |           |      |       |      |
| Pacific Ave at Wetmore Ave                |           |      |           |      |           |      |       |      |
| Broadway at 38th St                       |           |      |           |      |           |      |       |      |
| Everett Station                           |           |      |           |      |           |      |       |      |
| Pacific Ave at Rockefeller Ave            |           |      |           |      |           |      |       |      |
| Wetmore Ave at Wall St                    |           |      |           |      |           |      |       |      |
| Hewitt Ave at Lombard St                  |           |      |           |      |           |      |       |      |
| Hewitt Ave at Virginia Ave                |           |      |           |      |           |      |       |      |

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.

Screenline ridership:

|                               | Early AM    | AM Peak     | Midday       | PM Peak       | Evening     | Total |
|-------------------------------|-------------|-------------|--------------|---------------|-------------|-------|
|                               | Before 6:00 | 6:00 – 9:00 | 9:00 – 15:00 | 15:00 – 18:00 | After 18:00 |       |
| I-5 at N 205 <sup>th</sup> St |             |             |              |               |             |       |
| I-5 at Ship Canal             |             |             |              |               |             |       |

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          |
| 4th Ave S at S Royal Brougham Way | 29        | 1          | 6         | 0          | 35        | 1          |
| 4th Ave S at S Jackson St         | 204       | 16         | 19        | 2          | 223       | 18         |
| 4th Ave S at S Washington St      | 4         | 2          | 0         | 0          | 4         | 2          |
| 4th Ave at Cherry St              | 115       | 55         | 39        | 2          | 154       | 57         |
| 4th Ave at Seneca St              | 130       | 47         | 60        | 1          | 190       | 48         |
| 4th Ave at Union St               | 233       | 61         | 52        | 3          | 285       | 64         |
| Olive Way at 6th Ave              | 144       | 28         | 39        | 1          | 183       | 29         |
| Olive Way at Terry Ave            | 60        | 8          |           |            | 60        | 8          |
| Howell St at 9th Ave              | 38        | 4          | 19        | 4          | 57        | 8          |
| Howell St at Yale Ave             | 8         | 36         | 6         | 0          | 14        | 36         |
| I-5 at NE 45th St                 | 85        | 21         |           |            | 85        | 21         |
| I-5 at NE 145th St                | 25        | 17         |           |            | 25        | 17         |
|                                   |           |            |           |            |           |            |
|                                   |           |            |           |            |           |            |
| Eastmont P&R                      | 67        | 319        | 7         | 150        | 74        | 469        |
| Evergreen Way at 79th Pl          |           |            | 1         | 14         | 1         | 14         |
| Evergreen Way at 75th St          |           |            | 0         | 6          | 0         | 6          |
| Evergreen Way at Madison St       |           |            | 0         | 7          | 0         | 7          |
| Evergreen Way at Berkshire Dr     |           |            | 1         | 4          | 1         | 4          |
| Evergreen Way at 50th St          |           |            | 1         | 7          | 1         | 7          |
| Rucker Ave at 40th St             |           |            | 0         | 5          | 0         | 5          |
| Rucker Ave at 35th St             |           |            | 0         | 0          | 0         | 0          |
| Rucker Ave at 33rd St             |           |            | 0         | 0          | 0         | 0          |
| Pacific Ave at Wetmore Ave        |           |            | 0         | 1          | 0         | 1          |
| Broadway at 38th 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 38th 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 35th St             |           |            | 1         | 0          | 1         | 0          |
| Rucker Ave at 42nd St             |           |            | 8         | 0          | 8         | 0          |
| Evergreen Way at 50th 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 75th St          |           |            | 6         | 0          | 6         | 0          |
| Evergreen Way at 79th Pl          |           |            | 18        | 1          | 18        | 1          |
| Eastmont P&R                      | 332       | 41         | 127       | 5          | 459       | 46         |
| I-5 at NE 145th St                | 30        | 26         |           |            | 30        | 26         |
| I-5 at NE 45th St                 | 32        | 77         |           |            | 32        | 77         |
| Stewart St at Yale Ave            | 18        | 91         | 2         | 35         | 20        | 126        |
| Stewart St at 9th Ave             | 12        | 56         | 1         | 10         | 13        | 66         |
| Stewart St at 7th Ave             | 8         | 51         | 1         | 20         | 9         | 71         |
| 5th Ave at Pine St                | 83        | 250        | 7         | 32         | 90        | 282        |
| 5th Ave at Pike St                | 27        | 101        | 3         | 22         | 30        | 123        |
| 5th Ave at Seneca St              | 17        | 113        | 1         | 24         | 18        | 137        |
| 5th Ave at Spring St              | 12        | 109        | 1         | 19         | 13        | 128        |
| 5th Ave at Marion St              | 2         | 62         | 0         | 10         | 2         | 72         |
| 5th Ave at Cherry St              | 7         | 58         | 0         | 19         | 7         | 77         |
| 5th Ave at Jefferson St           | 3         | 34         | 2         | 7          | 5         | 41         |
| 5th Ave S at S Jackson St         | 5         | 120        | 0         | 16         | 5         | 136        |
| 6th Ave S at S Royal Brougham Way | 0         | 34         | 0         | 5          | 0         | 39         |

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

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          |
| 4th Ave S at S Royal Brougham Way | 35            | 1          | 9         | 0          | 44        | 1          |
| 4th Ave S at S Jackson St         | 223           | 18         | 217       | 2          | 440       | 20         |
| 4th Ave S at S Washington St      | 4             | 2          | 14        | 3          | 18        | 5          |
| 4th Ave at Cherry St              | 154           | 57         | 185       | 48         | 339       | 105        |
| 4th Ave at Seneca St              | 190           | 48         | 202       | 59         | 392       | 107        |
| 4th Ave at Union St               | 285           | 64         | 305       | 65         | 590       | 129        |
| Olive Way at 6th Ave              | 183           | 29         | 227       | 22         | 410       | 51         |
| Olive Way at Terry Ave            | 60            | 8          | 88        | 15         | 148       | 23         |

|                         |    |    |     |     |     |     |
|-------------------------|----|----|-----|-----|-----|-----|
| Howell St at 9th Ave    | 57 | 8  | 38  | 1   | 95  | 9   |
| Howell St at Yale Ave   | 14 | 36 |     |     | 14  | 36  |
| I-5 at NE 45th St       | 85 | 21 | 110 | 23  | 195 | 44  |
| I-5 at NE 145th 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 145th St                | 30            | 26         | 14        | 8          | 44        | 34         |
| I-5 at NE 45th St                 | 32            | 77         | 26        | 96         | 58        | 173        |
| Stewart St at Yale Ave            | 20            | 126        | 20        | 92         | 40        | 218        |
| Stewart St at 9th Ave             | 13            | 66         | 5         | 36         | 18        | 102        |
| Stewart St at 7th Ave             | 9             | 71         | 6         | 64         | 15        | 135        |
| 5th Ave at Pine St                | 90            | 282        | 48        | 279        | 138       | 561        |
| 5th Ave at Pike St                | 30            | 123        | 17        | 150        | 47        | 273        |
| 5th Ave at Seneca St              | 18            | 137        | 29        | 122        | 47        | 259        |
| 5th Ave at Spring St              | 13            | 128        | 13        | 98         | 26        | 226        |
| 5th Ave at Marion St              | 2             | 72         | 1         | 71         | 3         | 143        |
| 5th Ave at Cherry St              | 7             | 77         | 5         | 84         | 12        | 161        |
| 5th Ave at Jefferson St           | 5             | 41         | 6         | 46         | 11        | 87         |
| 5th Ave S at S Jackson St         | 5             | 136        | 4         | 159        | 9         | 295        |
| 6th 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.

Route 522 Weekday Stop Level Boardings and Alightings – Northbound

|                                     | Boardings | Alightings |
|-------------------------------------|-----------|------------|
| SODO Busway at S Holgate St         | 35        | 0          |
| SODO Busway at S Royal Brougham Way | 77        | 59         |
| 4th Ave S at S Royal Brougham Way   | 12        | 1          |
| 4th Ave S at S Jackson St           | 187       | 25         |
| 3rd Ave at James St                 | 214       | 26         |
| 3rd Ave at Madison St               | 259       | 59         |
| 3rd Ave at Union St                 | 364       | 126        |
| Pike St at 6th Ave                  | 421       | 68         |
| Lake City Way NE at NE 125th St     | 68        | 183        |
| Lake City Way NE at NE 130th St     | 78        | 103        |
| Lake City Way NE at NE 137th St     | 7         | 88         |
| Bothell Way NE at NE 145th St       | 32        | 153        |
| Bothell Way NE at NE 153rd St       | 6         | 41         |
| Bothell Way NE at NE 165th St       | 2         | 25         |
| Bothell Way NE at NE 170th St       | 10        | 77         |
| Bothell Way NE at Ballinger Way NE  | 16        | 15         |
| NE Bothell Way at 61st Ave NE       | 10        | 67         |
| NE Bothell Way at 68th Ave NE       | 38        | 91         |
| NE Bothell Way at 73rd Ave NE       | 23        | 172        |
| NE Bothell Way at 80th Ave NE       | 17        | 33         |
| Bothell Way NE at NE 180th St       | 7         | 67         |

|   |    |     |
|---|----|-----|
| Main St at 103rd Ave NE                 | 16 | 130 |
| UW-Bothell/Cascadia CC                  | 40 | 101 |
| Beardslee Blvd at NE 195th St           | 7  | 29  |
| SR-522 at 132nd Ave NE                  | 4  | 34  |
| Woodinville-Snohomish Rd at NE 195th St | 6  | 33  |
| Mill Pl at 138th Pl NE                  | 3  | 45  |
| Woodinville P&R                         | 0  | 108 |

Route 522 Weekday Stop Level Boardings and Alightings – Southbound

|  | Boardings | Alightings |
|--|-----------|------------|
| Woodinville P&R                                | 107       | 0          |
| Mill Pl at NE 180th Pl                         | 32        | 1          |
| Woodinville-Snohomish Rd at NE Woodinville Way | 32        | 1          |
| SR-522 at 132nd Ave NE                         | 11        | 0          |
| Beardslee Blvd at Ross Rd                      | 31        | 6          |
| UW-Bothell/Cascadia CC                         | 86        | 28         |
| Bothell P&R                                    | 129       | 9          |
| Bothell Way NE at Ormbrek St                   | 79        | 14         |
| NE Bothell Way at 80th Ave NE                  | 39        | 14         |
| Kenmore P&R                                    | 195       | 22         |
| NE Bothell Way at 68th Ave NE                  | 74        | 32         |
| NE Bothell Way at 61st Ave NE                  | 68        | 11         |
| Bothell Way NE at Ballinger Way NE             | 29        | 7          |
| Bothell Way NE at NE 170th St                  | 65        | 8          |
| Bothell Way NE at NE 165th St                  | 27        | 3          |
| Bothell Way NE at NE 153rd St                  | 39        | 6          |
| Lake City Way NE at NE 145th St                | 158       | 34         |
| Lake City Way NE at NE 137th St                | 103       | 8          |
| Lake City Way NE at NE 130th St                | 119       | 55         |
| Lake City Way NE at NE 125th St                | 239       | 113        |
| Union St at 6th Ave                            | 28        | 436        |
| Union St at 4th Ave                            | 29        | 494        |
| 2nd Ave at Seneca St                           | 10        | 121        |
| 2nd Ave at Marion St                           | 9         | 93         |
| 2nd Ave at James St                            | 4         | 77         |
| 2nd Ave Extension S at S Jackson St            | 7         | 114        |
| 6th Ave S at S Royal Brougham Way              | 0         | 32         |

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.

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 160th St (Brickyard P&R) (morning peak service only) | 10        | 1          |
| I-405 at NE 195th 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 38th St   | 1  | 11  |
| Everett Station   | 0  | 115 |
| Pacific Ave at Rockefeller Ave<br>(morning peak service only) | 0  | 3   |
| Wetmore Ave at Wall St<br>(morning peak service only)         | 0  | 4   |
| Hewitt Ave at Lombard Ave<br>(morning peak service only)      | 0  | 0   |
| Hewitt Ave at Virginia Ave<br>(Morning peak service only)     | 0  | 4   |

Route 532 Stop Level Boardings and Alightings – Southbound

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

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Route 540 Weekday Stop Level Boardings and Alightings – Eastbound

|                                       | Boardings | Alightings |
|---------------------------------------|-----------|------------|
| 15th Ave NE at NE 43 <sup>rd</sup> St | 89        | 0          |
| 15th Ave NE at NE Campus Pkwy         | 139       | 3          |
| 15th Ave NE at NE 40 <sup>th</sup> St | 51        | 1          |
| 15th Ave NE at NE Pacific St          | 26        | 2          |
| NE Pacific St at 15th Ave NE          | 58        | 6          |
| NE Pacific St at NE Pacific Pl        | 135       | 13         |
| Montlake Blvd E at SR-520             | 29        | 28         |
| SR-520 at Evergreen Point             | 22        | 34         |
| SR-520 at Yarrow Point                | 1         | 9          |
| South Kirkland P&R                    | 25        | 266        |
| 108th Ave NE at NE 58th St            | 1         | 10         |
| NE 68th St at 108th Ave NE            | 4         | 43         |

|                         |   |     |
|-------------------------|---|-----|
| State St at 4th Ave S   | 0 | 21  |
| Kirkland Transit Center | 0 | 143 |

Route 540 Weekday Stop Level Boardings and Alightings – Westbound

|                                | Boardings | Alightings |
|--------------------------------|-----------|------------|
| Kirkland Transit Center        | 111       | 0          |
| State St at 4th Ave S          | 28        | 1          |
| NE 68th St at 108th Ave NE     | 43        | 4          |
| 108th Ave NE at NE 58th St     | 10        | 2          |
| South Kirkland P&R             | 280       | 13         |
| SR-520 at Yarrow Point         | 11        | 2          |
| SR-520 at Evergreen Point      | 86        | 31         |
| Montlake Blvd E at E Shelby St | 5         | 24         |
| NE Pacific St at NE Pacific Pl | 25        | 175        |
| NE Pacific St at 15th Ave NE   | 3         | 41         |
| 15th Ave NE at NE Pacific St   | 2         | 42         |
| 15th Ave NE at NE 40th St      | 7         | 154        |
| 15th Ave NE at NE 41st St      | 5         | 53         |
| 15th Ave NE at NE 42nd St      | 0         | 74         |

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Route 545 Weekday Stop Level Boardings and Alightings – Eastbound

|  | Boardings | Alightings |
|--|-----------|------------|
| SODO Busway at S Holgate St              | 106       | 0          |
| SODO Busway at S Royal Brougham Way      | 92        | 71         |
| 4th Ave S at S Royal Brougham Way        | 45        | 6          |
| 4th Ave S at S Jackson St                | 354       | 54         |
| 4th Ave at James St                      | 170       | 68         |
| 4th Ave at Madison St                    | 307       | 133        |
| 4th Ave at University St                 | 313       | 101        |
| 4th Ave at Pike St                       | 631       | 145        |
| Olive Way at 8th Ave                     | 84        | 23         |
| Olive Way at Terry Ave                   | 317       | 45         |
| Bellevue Ave at E Olive St*              | 268       | 6          |
| SR-520 at Montlake Blvd E                | 557       | 71         |
| SR-520 at Evergreen Point                | 50        | 56         |
| SR-520 at Yarrow Point                   | 4         | 18         |
| SR-520 at NE 40th St                     | 115       | 1176       |
| SR-520 at NE 51st St                     | 24        | 297        |
| West Lake Sammamish Pkwy NE at Leary Way | 7         | 98         |
| NE 85th St at 154th Ave NE               | 3         | 68         |
| NE 85th St at 161st Ave NE               | 7         | 215        |
| Redmond P&R                              | 37        | 315        |
| Cleveland St at 166th Ave NE             | 11        | 99         |
| NE 76th St at 177th Pl NE                | 7         | 97         |
| Bear Creek P&R                           | 0         | 350        |

\* - Stop served until 10:45.

Route 545 Weekday Stop Level Boardings and Alightings – Westbound

|  | Boardings | Alightings |
|--|-----------|------------|
|--|-----------|------------|

|   |     |     |
|---|-----|-----|
| Bear Creek P&R                              | 358 | 0   |
| NE 76th St at 177th Pl NE                   | 56  | 4   |
| NE Redmond Way at NE 79th Pl                | 67  | 10  |
| Redmond P&R                                 | 256 | 31  |
| NE 85th St at 160th Ave NE                  | 259 | 13  |
| 154th Ave NE at NE 85th St                  | 102 | 5   |
| West Lake Sammamish Parkway NE at Leary Way | 104 | 7   |
| SR-520 at NE 51st St                        | 293 | 32  |
| Overlake Transit Center†                    | 428 | 28  |
| SR-520 at NE 40th St                        | 595 | 75  |
| SR-520 at Yarrow Point                      | 17  | 9   |
| SR-520 at Evergreen Point                   | 69  | 124 |
| SR-520 at Montlake Blvd E                   | 63  | 398 |
| Stewart St at Yale Ave                      | 49  | 312 |
| Stewart St at 9th Ave                       | 30  | 117 |
| Stewart St at 7th Ave                       | 42  | 231 |
| 5th Ave at Pine St                          | 103 | 461 |
| 5th Ave at Pike St                          | 44  | 193 |
| 5th Ave at Seneca St                        | 32  | 172 |
| 5th Ave at Spring St                        | 24  | 186 |
| 5th Ave at Marion St                        | 12  | 111 |
| 5th Ave at Cherry St                        | 35  | 145 |
| 5th Ave at Jefferson St                     | 17  | 81  |
| 5th Ave S at S Jackson St                   | 29  | 297 |
| 6th Ave S at S Royal Brougham Wy            | 0   | 40  |

† - Stop served after 12:00.

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Route 550 Weekday Stop Level Boardings and Alightings – Eastbound

|  | Boardings | Alightings |
|--|-----------|------------|
| Blanchard St at 8th Ave                  | 5         | 0          |
| Convention Place Station                 | 322       | 0          |
| Stewart St at 4th Ave*                   | 16        | 0          |
| 2nd Ave at Stewart St*                   | 24        | 1          |
| Westlake Station                         | 625       | 28         |
| University Street Station                | 663       | 31         |
| 2nd Ave at University St*                | 53        | 1          |
| 2nd Ave at Spring St*                    | 6         | 1          |
| 2nd Ave at Cherry St*                    | 15        | 0          |
| Pioneer Square Station                   | 419       | 71         |
| S Washington St at 4th Ave S*            | 11        | 2          |
| International District/Chinatown Station | 527       | 274        |
| 5th Ave S at S Jackson St*               | 73        | 2          |
| Rainier Avenue Freeway Station           | 150       | 46         |
| Mercer Island Park-and-Ride              | 142       | 600        |
| South Bellevue Park-and-Ride             | 120       | 530        |
| Bellevue Way SE at SE 16th St            | 15        | 73         |
| Bellevue Way SE at SE 10th St            | 11        | 24         |
| Bellevue Way SE at SE 3rd St             | 32        | 71         |
| Bellevue Way NE at Main St               | 20        | 121        |
| NE 4th St at 105th Ave NE                | 22        | 404        |



|                            |    |     |
|----------------------------|----|-----|
| Bellevue Transit Center    | 41 | 875 |
| NE 12th St at 110th Ave NE | 0  | 162 |

Route 550 Weekday Stop Level Boardings and Alightings – Westbound

|  | Boardings | Alightings |
|--|-----------|------------|
| 110th Ave NE at NE 12th St               | 145       | 0          |
| Bellevue Transit Center                  | 781       | 70         |
| NE 4th St at 108th Ave NE                | 287       | 12         |
| Bellevue Way NE at NE 4th St             | 203       | 9          |
| Bellevue Way NE at NE 1st St             | 39        | 9          |
| Bellevue Way SE at Main St               | 100       | 10         |
| Bellevue Way SE at SE 3rd St             | 90        | 23         |
| Bellevue Way SE at SE 11th St            | 27        | 9          |
| Bellevue Way SE at SE 16th St            | 39        | 12         |
| South Bellevue Park-and-Ride             | 558       | 113        |
| Mercer Island Park-and-Ride              | 597       | 120        |
| Rainier Avenue Freeway Station           | 47        | 144        |
| 5th Ave S at S Jackson St*               | 2         | 39         |
| International District/Chinatown Station | 139       | 263        |
| 4th Ave S at S Washington St*            | 0         | 5          |
| Pioneer Square Station                   | 89        | 415        |
| 4th Ave at Cherry St*                    | 1         | 26         |
| 4th Ave at Seneca St*                    | 0         | 18         |
| University Street Station                | 54        | 588        |
| 4th Ave at Union St*                     | 2         | 63         |
| Westlake Station                         | 36        | 661        |
| 4th Ave at Stewart St*                   | 0         | 28         |
| Convention Place Station                 | 0         | 570        |
| 4th Ave at Lenora St*                    | 0         | 29         |

\* - Stop when Downtown Seattle Transit Tunnel not open

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Route 554 Weekday Stop Level Boardings and Alightings – Eastbound

|  | Boardings | Alightings |
|--|-----------|------------|
| Lenora St at 5th Ave                       | 82        | 0          |
| Lenora St at 4th Ave                       | 16        | 4          |
| 2nd Ave at Stewart St                      | 154       | 5          |
| 2nd Ave at University St                   | 268       | 7          |
| 2nd Ave at Spring St                       | 40        | 2          |
| 2nd Ave at Cherry St                       | 85        | 13         |
| S Washington St at 4th Ave S               | 26        | 6          |
| 5th Ave S at S Jackson St                  | 243       | 22         |
| Rainier Avenue Freeway Station             | 57        | 5          |
| Mercer Island P&R                          | 65        | 107        |
| Eastgate Freeway Station                   | 11        | 111        |
| 142nd Pl SE at SE 32nd St/Bellevue College | 9         | 49         |
| Eastgate Park-and-Ride                     | 64        | 250        |
| 142nd Pl SE at SE 32nd St/Bellevue College | 63        | 122        |
| Issaquah Park-and-Ride                     | 26        | 243        |
| E Sunset Way at Rainier Blvd S             | 8         | 84         |
| Issaquah Highlands Park-and-Ride           | 3         | 181        |

|   |   |   |
|---|---|---|
| Issaquah Pine Lake Rd at Issaquah-Fall City Rd* | 0 | 2 |
| Issaquah Pine Lake Rd at SE 37th Pl*            | 0 | 3 |
| South Sammamish Park-and-Ride*                  | 0 | 0 |

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

Route 554 Weekday Stop Level Boardings and Alightings – Westbound

|  | Boardings | Alightings |
|--|-----------|------------|
| Issaquah Highlands Park-and-Ride           | 122       | 0          |
| W Sunset Way at 1st Pl NW                  | 78        | 8          |
| Issaquah Park-and-Ride                     | 209       | 33         |
| 142nd Pl SE at SE 32nd St/Bellevue College | 26        | 21         |
| Eastgate Park-and-Ride                     | 404       | 89         |
| 142nd Pl SE at SE 32nd St/Bellevue College | 98        | 4          |
| Eastgate Freeway Station                   | 54        | 4          |
| Mercer Island Park-and-Ride                | 146       | 55         |
| Rainier Avenue Freeway Station             | 21        | 49         |
| 5th Ave S at S Jackson St                  | 32        | 276        |
| 4th Ave S at S Washington St               | 3         | 10         |
| 4th Ave at Cherry St                       | 34        | 182        |
| 4th Ave at Seneca St                       | 8         | 137        |
| 4th Ave at Union St                        | 11        | 244        |
| 4th Ave at Stewart St                      | 1         | 55         |
| Lenora St at 4th Ave                       | 0         | 80         |

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Route 560 Weekday Stop Level Boardings and Alightings – Eastbound

|  | Boardings | Alightings |
|--|-----------|------------|
| Alaska Junction                        | 97        | 0          |
| California Ave SW at SW Dawson St      | 16        | 1          |
| Fauntleroy Way SW at California Ave SW | 33        | 7          |
| Fauntleroy Ferry Terminal              | 44        | 20         |
| 35th Ave SW at SW Barton St            | 25        | 7          |
| SW Roxbury St at 28th Ave SW           | 36        | 9          |
| SW Roxbury St at 20th Ave SW           | 5         | 1          |
| White Center Transfer Point            | 139       | 33         |
| 16th Ave SW at SW 116th St             | 27        | 9          |
| Ambaum Blvd SW at SW 128th St          | 35        | 20         |
| Ambaum Blvd SW at SW 136th St          | 48        | 20         |
| Burien Transit Center                  | 359       | 282        |
| Sea-Tac Airport                        | 39        | 39         |
| Rainier Ave S at S 7th St              | 16        | 65         |
| Renton Transit Center                  | 107       | 137        |
| Park Ave N at N 6th St                 | 10        | 12         |
| Garden Ave N at N 8th St               | 5         | 16         |
| Garden Ave N at Logan Ave N            | 6         | 8          |
| I-405 at N 30th St (Kennydale)         | 55        | 20         |
| I-405 at 112th Ave SE (Newport Hills)  | 13        | 10         |
| South Bellevue Park-and-Ride           | 44        | 61         |
| 112th Ave SE at SE 15th St             | 8         | 11         |
| I-405 at SE 8th St/Wilburton P&R       | 12        | 12         |
| Bellevue Transit Center                | 1         | 137        |
| 105th Ave NE at NE 2nd St              | 0         | 242        |

Route 560 Weekday Stop Level Boardings and Alightings – Westbound

|  | Boardings | Alightings |
|--|-----------|------------|
| 105th Ave NE at NE 2nd St              | 118       | 0          |
| Bellevue Transit Center                | 244       | 0          |
| SE 8th St at I-405/Wilburton P&R       | 34        | 20         |
| 112th Ave SE at SE 15th St             | 13        | 8          |
| South Bellevue Park-and-Ride           | 58        | 31         |
| I-405 at 112th Ave SE (Newport Hills)  | 14        | 15         |
| I-405 at N 30th St (Kennydale)         | 14        | 46         |
| Garden Ave N at Logan Ave N            | 7         | 6          |
| Garden Ave N at N 8th St               | 20        | 14         |
| Park Ave N at N 6th St                 | 10        | 10         |
| Renton Transit Center                  | 204       | 148        |
| Rainier Ave S at SW 7th St             | 212       | 199        |
| Sea-Tac Airport                        | 51        | 75         |
| Burien Transit Center                  | 142       | 149        |
| Ambaum Blvd SW at SW 136th St          | 22        | 46         |
| Ambaum Blvd SW at SW 128th St          | 22        | 37         |
| Ambaum Blvd SW at SW 116th St          | 6         | 26         |
| White Center Transfer Point            | 37        | 163        |
| SW Roxbury St at 20th Ave SW           | 2         | 9          |
| SW Roxbury St at 27th Ave SW           | 8         | 34         |
| SW Barton St at 35th Ave SW            | 9         | 35         |
| SW Wildwood Pl at 45th Ave SW          | 2         | 4          |
| Fauntleroy Ferry Terminal              | 16        | 36         |
| California Ave SW at Fauntleroy Way SW | 8         | 33         |
| California Ave SW at SW Dawson St      | 2         | 17         |
| Alaska Junction Transfer Point*        | 3         | 116        |

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

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

|                             | Route 564 |            | Route 565 |            | Total     |            |
|-----------------------------|-----------|------------|-----------|------------|-----------|------------|
|                             | Boardings | Alightings | Boardings | Alightings | Boardings | Alightings |
| South Hill Mall TCCenter    | 39        | 0          |           |            | 39        | 0          |
| South Hill Park-and-Ride    | 39        | 0          |           |            | 39        | 0          |
| Sumner Station              | 37        | 8          |           |            | 37        | 8          |
| Federal Way Transit Center  |           |            | 225       | 0          | 225       | 0          |
| Auburn Station              | 91        | 25         | 90        | 36         | 181       | 61         |
| W Smith St at 4th Ave N     | 10        | 16         | 19        | 30         | 29        | 46         |
| Kent Station                | 168       | 45         | 164       | 89         | 332       | 134        |
| Central Ave N at S 228th St | 16        | 12         | 12        | 15         | 28        | 27         |
| Rainier Ave S at S 7th St   | 29        | 30         | 26        | 36         | 55        | 66         |
| Renton Transit Center       | 163       | 87         | 159       | 119        | 322       | 206        |
| Park Ave N at N 6th St      | 31        | 10         | 24        | 9          | 55        | 19         |
| Garden Ave N at N 8th St    | 18        | 16         | 17        | 13         | 35        | 29         |
| Garden Ave N at Logan Ave N | 9         | 9          | 7         | 7          | 16        | 16         |
| Bellevue Transit Center     | 67        | 369        | 56        | 347        | 123       | 716        |
| SR-520 at NE 40th St        | 2         | 73         | 4         | 75         | 6         | 148        |
| Overlake Transit Center*    | 0         | 21         | 0         | 27         | 0         | 48         |

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

Route 564/565 Weekday Stop Level Boardings and Alightings – Southbound

|                                | Route 564 |            | Route 565 |            | Total     |            |
|--------------------------------|-----------|------------|-----------|------------|-----------|------------|
|                                | Boardings | Alightings | Boardings | Alightings | Boardings | Alightings |
| Overlake Transit Center        | 76        | 0          | 83        | 0          | 159       | 0          |
| SR-520 at NE 40th St           | 65        | 3          | 61        | 5          | 126       | 8          |
| Bellevue Transit Center        | 234       | 66         | 329       | 78         | 563       | 144        |
| Garden Ave N at Logan Ave N    | 3         | 9          | 9         | 10         | 12        | 19         |
| Garden Ave N at N 8th St       | 14        | 15         | 19        | 21         | 33        | 36         |
| Park Ave N at N 6th St         | 5         | 16         | 6         | 21         | 11        | 37         |
| Renton Transit Center          | 86        | 125        | 127       | 174        | 213       | 299        |
| Rainier Ave S at SW 7th St     | 18        | 21         | 28        | 26         | 46        | 47         |
| Central Ave N at S 228th St    | 7         | 11         | 9         | 14         | 16        | 25         |
| Kent Station                   | 54        | 128        | 85        | 148        | 139       | 276        |
| 4th Ave N at W Smith St        | 20        | 46         | 24        | 41         | 44        | 87         |
| Auburn Station                 | 28        | 78         | 49        | 90         | 77        | 168        |
| Federal Way Transit Center     |           |            | 0         | 203        | 0         | 203        |
| Sumner Station                 | 13        | 35         |           |            | 13        | 35         |
| South Hill Park-and-Ride       | 0         | 73         |           |            | 0         | 73         |
| South Hill Mall Transit Center | 0         | 0          |           |            | 0         | 0          |

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Route 577 Weekday Stop Level Boardings and Alightings – Northbound

|                               | Boardings | Alightings |
|-------------------------------|-----------|------------|
| Federal Way Transit Center    | 683       | 0          |
| Seneca St at 5th Ave          | 71        | 340        |
| 4th Ave at University St      | 20        | 238        |
| Pine St at 4th Ave            | 6         | 52         |
| 2nd Ave at Pike St            | 0         | 4          |
| 2nd Ave at Seneca St          | 2         | 30         |
| 2nd Ave at Marion St          | 54        | 74         |
| 2nd Ave at James St           | 9         | 19         |
| 2nd Ave Ext S at S Jackson St | 0         | 87         |

Route 577 Weekday Stop Level Boardings and Alightings – Southbound

|                               | Boardings | Alightings |
|-------------------------------|-----------|------------|
| Blanchard St at 8th Ave       | 6         | 0          |
| Lenora St at 4th Ave          | 65        | 5          |
| 2nd Ave at Lenora St          | 42        | 1          |
| 2nd Ave at Pike St            | 223       | 6          |
| 2nd Ave at Seneca St          | 131       | 4          |
| 2nd Ave at Marion St          | 99        | 6          |
| 2nd Ave at James St           | 50        | 7          |
| 2nd Ave Ext S at S Jackson St | 38        | 80         |
| Federal Way Transit Center    | 0         | 546        |

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