

2016

Service Implementation Plan



Executive Summary

This coming year is shaping up to be one of the most significant in Sound Transit's history. In 2016, Link service will extend north to the University of Washington campus in Seattle and south to the Angle Lake community in SeaTac. A new Sounder round-trip is approved for the busy south line. Additional service has been approved for ST Express to accommodate growing express bus ridership throughout the Sound Transit district.

These multi-modal service enhancements will help meet the demand for fast, dependable public transportation as the region's population and employment continues to increase. To provide some perspective on the scale of the service expansion, total Sound Transit passenger boardings are forecasted to grow from 34.6 million in 2015 to 41.4 million in 2016, an increase of almost 20 percent.

In 2016, service additions on Link, Sounder south line and ST Express will grow ridership to a forecast annual total of over 41 million boardings.

Increased Transit Integration

Work continues to better integrate the projects and services of the region's transit agencies following King County Executive and Sound Transit Board Chair Dow Constantine's transit integration initiative announced in June 2014. During the past year, Sound Transit and King County Metro have worked closely together to develop a bus-rail service integration plan for U Link. King County Metro focused on bus service changes in Seattle, while Sound

Sound Transit continues to work together with our transit partners to increase passenger capacity, improve reliability and provide new connections.

Transit developed service changes for expanded express bus connections between East King County and U Link. Staff from both agencies collaborated on an analysis to ensure that adequate light rail capacity was provided for connecting bus passengers during peak demand times. The Metro bus service proposals were finalized and the King County Council action approved the package in October 2015.



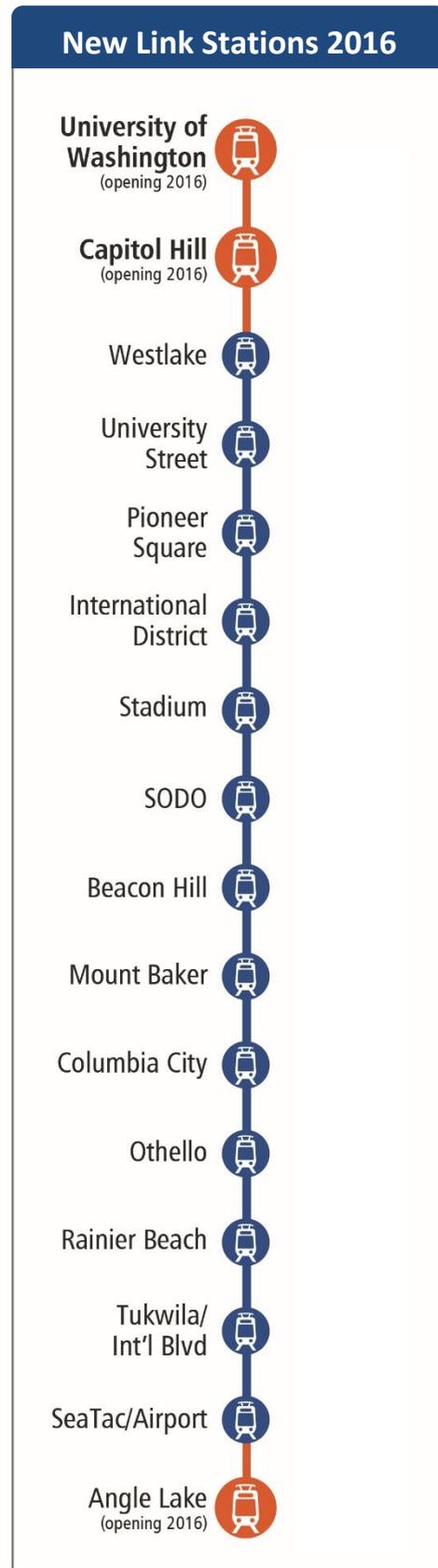
2016 Service Changes

The 2016 SIP includes both major and administrative service changes to Link, Sounder and ST Express service. Consistent with Sound Transit’s *Service Standards and Performance Measures* major service changes were approved by the Sound Transit Board in November 2015. With approval, these changes will be implemented in March 2016 and September 2016. Other service changes planned for 2016 will be implemented administratively and are listed on the following pages, as well as in Chapter 2.

Link

The 2016 Link service expansion represents significant progress towards development of the Link system that is envisioned to connect all of the region’s major population and employment centers. To the north, the University Link (U Link) extension reaches two of the Northwest’s most densely populated areas, Capitol Hill and the University of Washington. To the south, the extension to Angle Lake Station in SeaTac (together with its 1,000-stall park-and-ride) takes Link closer to the South King County communities of Kent, Normandy Park, Federal Way and Des Moines.

In 2016, Sound Transit will open three new Link stations, add a Sounder south line roundtrip, and operate approximately 90 new weekday ST Express trips.



2016 Major Service Changes

The following major service changes have been approved by the Sound Transit Board:

Link

- Continue six minute peak service.
- A new 3.1-mile segment of light rail opens from downtown Seattle serving Capitol Hill Station and University of Washing Station.
- A new 1.6-mile segments of light rail opens south from SeaTac/Airport Station to Angle Lake Station

Sounder South Line

- New round trip leaving Lakewood for Seattle in the late morning and returning from Seattle to Lakewood in the early afternoon.

ST Express

- **New Route 541:** Implement new two-way 15-minute frequency service connecting Overlake Village Park-and-Ride/ Overlake Transit Center with the University of Washington Link Station via SR 520.
- **Route 542:** Mid-day service will be added.

A long-term construction closure of 112th Avenue SE in Bellevue requires route revisions:

- **Routes 555/556:** Revise to use Bellevue Way SE and NE 4th Street instead of 112th Avenue SE and NE 6th Street between South Bellevue Park-and-Ride and Bellevue Transit Center.
- **Route 560:** Revise Bellevue routing to use I-405 and NE 6th Street instead of I-90, Bellevue Way SE and 112th Avenue SE between Newport Hills Park-and-Ride and the Bellevue Transit Center.

ST Express

In response to sustained ridership growth and increasingly crowded conditions on ST Express service, the 2016 SIP will add an addition of 32,000 annual express bus hours starting in March 2016. These new resources would address immediate capacity needs, create new bus connections to U Link and new Sounder trains, along with mitigating impact from East Link construction, and provide schedule maintenance to bring running times up to date.

Sounder South Line

In September 2016, a new Sounder south line round-trip between Lakewood and Seattle accommodates ridership growth and offers new schedule options for commuters. The new round trip leaves Lakewood for Seattle in the late morning and returns from Seattle to Lakewood in the early afternoon.



More service, better connections.

2016 Service Changes

New Connections

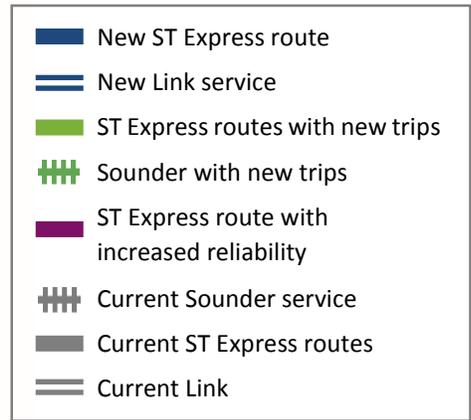
New Trips

Increased Reliability

Construction Re-Routes

Not Shown on Map

See details on the next page →



New Trips

Sounder south line

- In September 2016, add new off-peak round-trip. A new northbound trip leaves Lakewood for Seattle in the late morning. A new southbound trip leaves Seattle for Lakewood in the early afternoon.

Route 545 - 15 new weekday trips

- Additional capacity to address growing ridership between Redmond and downtown Seattle.

Route 554 - 12 new peak weekday trips

- Increased capacity and 15-minute peak service between Issaquah and Seattle to meet growing demand.

Routes 555/556 - 4 new weekday trips

- Continued ridership growth warrants new trips connecting Issaquah and Northgate.

Route 567 - 2 new weekday trips

- New trips meet new Sounder south line trips to connect Kent and Overlake.

Route 577 - 3 new weekday trips

- Continued ridership growth warrants new trips connecting Federal Way and Seattle.

Route 578 - 4 new midday weekday trips

- Additional trips to meet midday ridership growth between Puyallup and Seattle.

Route 580 - 2 new weekday trips

- New trips meet new Sounder south line trips at Puyallup.

Route 596 - 2 new weekday trips

- New trips meet new Sounder south line trips at Sumner.



New Connections

New Route 541 -48 new weekday trips

- New two-way peak connection across Lake Washington from Overlake to the University of Washington Station, offering new opportunities to transfer to fast, reliable light rail service

Link-University Link extension & two new stations

- Open 3.1-mile extension in early 2016 with new stations at Capitol Hill and University of Washington.

Link - Angle Lake extension & new station

- Open 1.6-mile extension to Angle Lake Station in late 2016.

Increased Reliability

Routes 510, 511, 512, 513

- Invests in improved reliability and on-time performance in response to growing traffic congestion on I-5 north corridor from Everett to Seattle.
- New double deck buses provide more capacity.

Construction Re-Routes

A long-term construction closure of 112th Avenue SE in Bellevue requires route revisions to ST Express routes.

Route 555/556

- Revise Bellevue route to use Bellevue Way SE and NE 4th Street instead of 112th Avenue SE and NE 6th Street between South Bellevue Park-and-Ride and Bellevue Transit Center.

Route 560

- Revise Bellevue route to use I-405 and NE 6th Street instead of I-90, Bellevue Way SE and 112th Avenue SE between Newport Hills Park-and-Ride and the Bellevue Transit Center.

Quick Guide to the 2016 SIP



Chapter One

Welcome!

Learn more about the SIP proposal process and Sound Transit



Chapter Two

Our system in numbers

Charts by mode and then by route



Chapter Three

Service Integration

A look at inter-agency planning to prepare for the opening of U Link



Chapter Four

Title VI Analysis

This year's Title VI evaluation of approved service changes



Chapter Five

Preliminary Service Plan

Service plans through year 2021



Chapter Six

Ridership, Financial Plan, & Revenue Forecast

Find budget projections through year 2021



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Glossary of Terms

Average Maximum Load: The average number of passengers on board a bus or train when it is at its most crowded point on a particular trip.

BNSF – Burlington Northern Santa Fe (Railway)

Boarding: A boarding is counted every time a person gets on a Sound Transit bus or train. For example, a person who rides Link from Rainier Beach to International District Station and transfers to Route 550 to go to Bellevue in the morning and does the opposite in the afternoon is counted as four boardings on the day of travel.

Boardings per platform hour: Total number of passenger boardings divided by the total platform hours. Indicates the productivity for each platform hour of service.

Boardings per trip: Total number of passenger boardings divided by the total number of trips. Indicates the productivity for each trip.

Deadhead time: The total time a transit vehicle is traveling from the operating base to the first passenger stop of the day, between the last stop and base, or when maneuvering between the last stop on one trip and the first stop on the next trip.

Directly operated: Transportation service provided directly by a transit agency, using their employees to supply the necessary labor to operate the revenue vehicles.

DSTT – Downtown Seattle Transit Tunnel

In-service hour: The time in which a transit vehicle is scheduled on a trip from the first time point to the last time point in the public timetable.

Layover time: The time between trips that allows an operator to get back on schedule before beginning the next trip. Sometimes this is referred to as “recovery time.”

O&M – Operations and Maintenance

Operating partner: With the exception of Tacoma Link, Sound Transit services are contracted to a third party to operate. At the time of writing, the four operating partners with whom Sound Transit contracts are Burlington Northern Santa Fe Railway (Sounder), King County Metro (ST Express and Link), Community Transit (ST Express), and Pierce Transit (ST Express). Tacoma Link is directly operated.

Passenger miles per platform vehicle mile: Total passenger miles divided by total platform vehicle miles.

Pass-up: When an operator declines boarding to a transit customer because the transit vehicle is at passenger capacity (seated and standing).

Peak direction: The direction of service in which the heaviest passenger loads are experienced. This direction is usually associated with a time of day, e.g., on Pierce County-Seattle routes, the peak direction is northbound in the morning and southbound in the afternoon.

Glossary of Terms

Peak period: The time during which the heaviest passenger loads are experienced; it is generally defined as 6:00 a.m. – 9:00 a.m. and 3:00 p.m. – 6:00 p.m. on weekdays, but can vary by transit agency.

Platform hour: The total time a transit vehicle is operating, which includes in-service hours, deadhead hours and layover hours. Typically, this is the total amount of time the transit vehicle is away from the operating base.

Purchased transportation cost: The total cost paid to the contracted operator of a service (e.g., King County Metro, Pierce Transit, BNSF).

Revenue hour: An hour in which a transit vehicle is in revenue service, i.e., picking up, dropping off, and/or carrying passengers. Vehicles are *not* in revenue service between base and their first stop, between their last stop and base, or when maneuvering between the last stop on one trip and the first stop on the next trip.

Revenue service: The time when a vehicle is available to the general public and there is an expectation of carrying passengers.

Revenue vehicle: Vehicle used to provide revenue service to passengers.

Service change: Thrice-yearly process of updating the transit system, which corresponds with transit operator shift changes. Service change can refer to the actual date(s) that changes go into effect or the entire period during which service operates in between two service change dates. Also referred to as a “shakeup.”

SIP – Service Implementation Plan

ST2 – Sound Transit 2; the voter-approved program of transit improvements passed in 2008

Street team: Customer outreach method in which staff communicates with customers through face-to-face interactions

Subsidy per boarding: Total operating cost less collected fare revenue divided by the total number of boardings. Indicates the average financial effectiveness of a route or mode on a per passenger basis.

Time point: A geographic location where a transit vehicle is scheduled at a particular time.

TIP – Transit Improvement Plan

Title VI: Title VI of the Civil Rights Act of 1964, which prevents transit agencies receiving federal assistance from discriminating in the provision of services on the grounds of race, color or national origin

Transit partner: See Operating Partner

Chapter One: Introduction

Agency Overview

Our Mission

Sound Transit plans, builds and operates regional transit systems and services to improve mobility for Central Puget Sound.

History

In 1996, voters in Central Puget Sound approved the Sound Move plan. Our mandate: build a mass transit system that connects major urban centers in Snohomish, King, and Pierce counties. The Sound Transit district made up of these three counties and covers nearly 1,100 square miles, linking business districts to various residential regions.

About the Service Implementation Plan

Each year, Sound Transit documents the development of its express bus, commuter rail, and light rail services through its Service Implementation Plan (SIP). The SIP describes service changes planned for the year and financial projection for the following five years. A detailed report on the status of each bus and rail route is also included, along with performance objectives for the coming year.

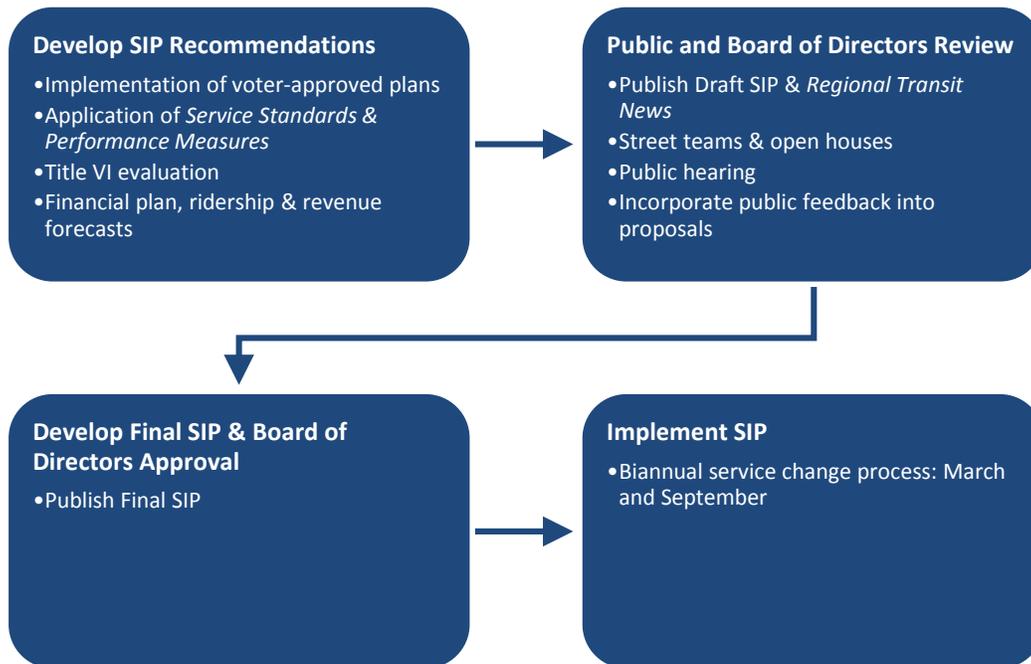
Figure 1 - Sound Move and ST2 Projects



SIP Process

The SIP process includes four key activities outlined in the diagram below and explained in detail in the following section.

Figure 2 - SIP Process Chart

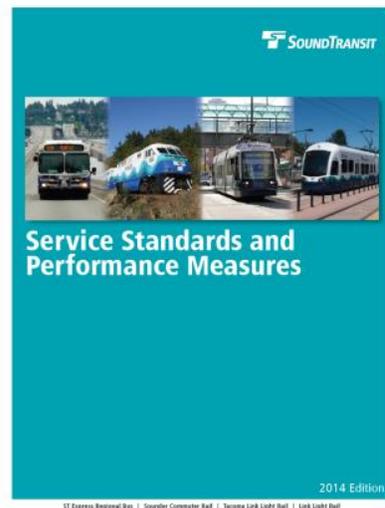


Service Changes

There are two primary guides for service changes included in the SIP, voter-approved plans (i.e. *Sound Move*, *ST2*) and service changes based on evaluation of route performance, ridership patterns, trends and customer input. Each Sound Transit route and line is evaluated against four key performance indicators as described in Sound Transit’s *Service Standards and Performance Measures*, developed in 1998 and updated in 2006, 2010, and 2014. ST Express bus routes are compared to the system average by day type (weekday, Saturday, and Sunday), while the rail modes are generally compared to the system average by time of day. Additional details on the evaluation process are available in the *Service Standards and Performance Measures*.

Staff develops major service additions and changes in the SIP following a comprehensive review of the service performance and coordination with other Sound Transit departments and partner transit agencies.

Figure 3 - *Service Standards and Performance Measures 2014*



Public Outreach

Upon the public release of the Draft SIP, Sound Transit begins the public outreach process. A key element of the SIP outreach is the *Regional Transit News* (RTN), a newsletter that describes the proposed service changes and the anticipated impacts to various communities and rider groups. Sound Transit distributes the RTN to customers at key locations where the changes are likely to have the greatest impact. The agency also stocks the RTN at public locations including transit centers. In addition, the RTN is posted on Sound Transit's website and a link to the on-line content is emailed to passengers who subscribe to Sound Transit service planning news, a general agency mailing list and regional Commute Trip Reduction groups. Besides explanations and maps of service changes, the RTN also announces open house-style public meetings in the areas most directly affected by the service changes. Members of the public are invited to comment through email or letter, via telephone, or at an open house. A special email address used only for SIP Comments (fastride@soundtransit.org) is actively monitored during the public input phase of the SIP process so comments can be tracked and support/opposition measured.

Board of Directors Process

Sound Transit's Board of Directors is involved throughout the SIP process. During the proposal development phase, Sound Transit staff briefs Board members of changes proposed in their respective jurisdictions. Staff also keeps the Board apprised of comments received throughout the public outreach phase. Staff formally presents the Draft SIP to the Operations and Administration Committee of the Board of Directors and a public hearing is held the month prior to the Board's vote on the final SIP. The Board voted on a "decision package" of specific changes to be implemented in the following year.

Administrative Changes

Changes that are not defined as "major service changes" according to the Service Standards and Performance Measures can be made administratively, that is, without Board approval. For example, when schedules are adjusted to address overcrowding at the highest demand time, these changes are not part of a Board decision package and may not be included in the SIP. This allows Sound Transit staff to be responsive in addressing service issues as they arise.

Implementing the SIP

The SIP is implemented through the twice-yearly service change process. These times correspond to the service change dates when transit operators change work assignments. Staff prepares detailed instructions for the operating partners as well as internal staff responsible for carrying out rider communications (e.g., rider alert messages, schedule publication) and small capital tasks (e.g., changes to signage) associated with the service changes. One to two weeks prior to a major service change, staff generally "street-team" on-location to notify customers face-to-face about upcoming changes. Immediately after service changes are implemented, staff works closely with the operating partners to resolve any unanticipated operational issues. In addition, street teams continue into the first week of the service change to assist customers in locating their service.

Chapter Two: Service Analysis

Introduction

Chapter 2 provides an assessment of service performance both at the system level and in detail for each rail and bus route. Results from the analysis specified in the *Service Standards and Performance Measures* are also included. The analysis discusses trends in performance, results of service restructures, and highlights specific areas of focus for planning staff in the upcoming year. Chapter 2 is organized by mode, starting with commuter rail, followed by light rail and bus.

Service Description

Sound Transit currently operates two light rail lines, two commuter rail lines, and 27 express bus routes. A system-wide map can be found on the following page, labeled Figure 4. Table 1 displays Sound Transit's current service network and provides basic operating information about each Sound Transit line and route, including days of operation, span of service (start and end time), frequency, service start date, and the date of the most recent major service change.

System Performance

The number of customers boarding Sound Transit trains and buses increased steadily during 2014 and the first half of 2015. Over 32 million boardings took place in 2014, an increase of 8 percent over 2013. During the first half of 2015, total Sound Transit ridership was up almost 6.6 percent compared with the same period in 2014.

Table 2 shows various 2014 performance metrics for each Sound Transit bus route and rail line, including boardings, platform hours and miles, operating costs, and the four key performance metrics that the agency uses to evaluate its services: boardings per platform hour, boardings per trip, subsidy per boarding, and passenger miles per platform vehicle mile. These metrics are explained in greater detail in Sound Transit's *Service Standards and Performance Measures*, and each term is also defined in the glossary at the beginning of the document.

Following the system-level operating and performance information, each route and line of Sound Transit service is described in greater detail.

Table 1 - Existing System Service Levels

Route/Line	Start Date	Days Operated	Weekday Span	Weekday Frequency (minutes)	Saturday Span	Saturday Frequency (minutes)	Sunday Span	Sunday Frequency (minutes)	Last Major Change Date
Link									
Tacoma	2003	M-F, Sa, Su	5:00 am - 10:12 pm	12-24	7:48 am - 10:12 pm	12	9:48 am - 6:00 pm	24	Sep-11
Central	2009	M-F, Sa, Su	4:22 am - 1:20 am	6-15	4:22 am - 1:20 am	10-15	5:33 am - 12:15 am	10-15	Dec-09
Souder Commuter Rail									
Souder North Line	2003	M-F	5:45 am - 6:34 pm ¹	30	-	-	-	-	Sep-08
Souder South Line	2000	M-F	4:41 am - 7:33 pm ¹	20-38	-	-	-	-	Sep-13
ST Express									
510 Everett-Seattle	1999	M-F	4:11 am - 7:51 pm ¹	10-20	-	-	-	-	Sep-13
511 Lynnwood-Seattle	1999	M-F	4:21 am - 7:47 pm ¹	15-20	-	-	-	-	Sep-13
512 Everett-Seattle	2011	M-F, Sa, Su	5:23 am - 1:13 am	10-30	5:30 am - 1:05 am	15-30	5:30 am - 1:05 am	30	Sep-13
513 Evergreen-Seattle	1999	M-F	5:03 am - 7:19 pm ¹	15-40	-	-	-	-	Sep-13
522 Woodinville-Seattle	2002	M-F, Sa, Su	4:45 am - 12:31 am	10-60	5:39 am - 12:26 am	30-60	5:39 am - 12:26 am	30-60	Oct-11
532 Everett-Bellevue	1999	M-F	4:30 am - 7:42 pm ¹	10-30	-	-	-	-	Mar-11
535 Lynnwood-Bellevue	1999	M-F, Sa	4:48 am - 11:02 pm	30-60	7:18 am - 11:01 pm	60	-	-	Jun-11
540 Kirkland-U. District	2000	M-F	6:04 am - 7:18 pm ¹	22-30	-	-	-	-	Sep-13
542 Redmond-U. District	2010	M-F	5:25 am - 7:43 pm ¹	15-20	-	-	-	-	-
545 Redmond-Seattle	2000	M-F, Sa, Su	4:27 am - 12:36 am	5-60	6:19 am - 11:58 pm	30-60	6:19 am - 12:01 am	30-60	Feb-08
550 Bellevue-Seattle	1999	M-F, Sa, Su	4:52 am - 12:50 am	5-30	6:01 am - 12:50 am	15-30	6:09 am - 12:50 am	30	Sep-13
554 Issaquah-Seattle	2001	M-F, Sa, Su	4:26 am - 12:46 am	20-60	6:24 am - 12:07 am	30-60	6:25 am - 12:07 am	30-60	Jun-11
555 Northgate-Issaquah	2001	M-F	5:34 am - 7:13 pm ¹	23-50	-	-	-	-	Jun-09
556 Issaquah-Northgate	2005	M-F	5:13 am - 7:15 pm ¹	23-30	-	-	-	-	Jun-09
560 W Seattle-Bellevue	2003 ²	M-F, Sa, Su	4:37 am - 12:13 am	30-60	5:19 am - 11:17 pm	60	5:19 am - 11:17 pm	60	Jun-13
566 Auburn-Overlake	2010 ²	M-F	4:45 am - 9:11 pm	12-60	-	-	-	-	Jun-13
567 Kent-Overlake	2013	M-F	5:30 am - 6:32 pm ¹	20-35	-	-	-	-	Sep-13
574 Lakewood-SeaTac	1999	M-F, Sa, Su	2:13 am - 12:38 am	15-60	2:13 am - 12:37 am	30-60	2:13 am - 12:37 am	30-60	Feb-10
577 Federal Way-Seattle	2006	M-F, Sa, Su	5:00 am - 6:38 pm ¹	7-28	6:15 am - 10:20 pm	60	6:15 am - 8:20 pm	60	Feb-10
578 Puyallup-Seattle	2009	M-F, Sa, Su	4:56 am - 12:16 am	30-120	6:01 am - 11:29 pm	60	6:01 am - 11:29 pm	60	Jun-12
580 Lakewood-Puyallup	2015	M-F	4:31 am - 7:37 pm ¹	20-38	-	-	-	-	-
586 Tacoma-U. District	2002	M-F	5:46 am - 7:14 pm ¹	15-30	-	-	-	-	Sep-12
590 Tacoma-Seattle	1999	M-F	4:08 am - 7:37 pm ¹	5-30	-	-	-	-	Sep-12
592 DuPont-Seattle	1999	M-F	4:05 am - 8:00 pm ¹	15-20	-	-	-	-	Sep-13
594 Lakewood-Seattle	1999	M-F, Sa, Su	5:30 am - 1:06 am	15-30	5:00 am - 1:08 am	30-60	5:00 am - 1:08 am	30-60	Sep-08
595 Gig Harbor-Seattle	1999	M-F	4:50 am - 7:01 pm ¹	22-35	-	-	-	-	-
596 Bonney Lake-Sumner	2012	M-F	4:54 am - 7:15 pm ¹	20-37	-	-	-	-	Sep-13

¹ Service operates during a.m. and p.m. peak periods only (no midday service).

² Predecessor route(s) may have started earlier; year of start is given for route in current or near current configuration.

Table 2 - Key System Performance Metrics (2014)

Route/Line	Total Boardings	Annual Platform Hours	Annual Coach/ Train Platform Miles	O&M Cost (\$)	Boardings per Revenue Hour	Boardings per Trip	Subsidy per Boarding
Link							
Central Link	10,937,883	75,774 ¹	1,407,268	\$ 54,978,098	151.83	120.86	\$ 3.38
Tacoma Link	973,605	9,918 ¹	75,889	\$ 3,950,655	99.51	19.90	\$ 3.57
Sounder Commuter Rail							
North Line	330,288	2,641 ¹	66,241	\$ 6,174,442	133.61	173.02	\$ 15.40
South Line	3,030,287	6,691 ¹	208,859	\$ 32,710,221	485.39	589.66	\$ 7.70
Total Sounder	3,360,575	9,332¹	275,100	\$38,884,663	385.61	476.81	\$ 8.46
ST Express							
510 Everett-Seattle	506,654	16,754	458,814	\$ 2,326,917	48.92	48.35	\$ 1.86
511 Lynnwood-Seattle	519,793	17,425	422,211	\$ 2,420,111	66.94	55.13	\$ 1.90
512 Everett-Seattle	1,452,612	60,725	1,492,678	\$ 8,433,928	35.71	39.06	\$ 3.65
513 Evergreen-Seattle	176,318	11,189	300,570	\$ 1,554,010	30.79	32.96	\$ 5.92
522 Woodinville-Seattle	1,439,579	53,129	907,396	\$ 9,293,709	31.34	44.73	\$ 4.85
532 Everett-Bellevue	504,783	17,580	449,822	\$ 2,441,637	47.36	48.32	\$ 2.33
535 Lynnwood-Bellevue	507,181	23,356	501,493	\$ 3,198,017	31.47	27.93	\$ 4.18
540 Kirkland-U. District	131,239	8,112	129,366	\$ 1,419,011	19.44	14.30	\$ 8.71
542 Redmond-U. District	393,133	18,077	300,298	\$ 3,162,160	28.81	28.19	\$ 6.15
545 Redmond-Seattle	2,559,750	71,742	1,195,327	\$ 12,549,630	40.74	50.62	\$ 3.22
550 Bellevue-Seattle	2,864,487	56,065	833,208	\$ 14,821,578	58.46	50.99	\$ 3.58
554 Issaquah-Seattle	1,076,223	34,129	640,798	\$ 5,970,091	33.58	39.21	\$ 3.93
555 Northgate-Issaquah	156,117	5,773	119,569	\$ 1,009,855	32.86	47.09	\$ 4.54
556 Issaquah-Northgate	217,563	7,834	162,415	\$ 1,370,380	36.14	50.23	\$ 4.28
560 Westwood Village -Bellevue	570,608	38,762	954,279	\$ 4,675,754	17.77	27.12	\$ 6.73
566 Auburn-Overlake	420,752	29,680	776,540	\$ 3,580,217	20.41	28.96	\$ 6.75
567 Kent-Overlake	137,507	10,317	353,116	\$ 1,255,963	31.58	33.70	\$ 7.32
574 Lakewood-SeaTac	793,040	43,357	1,015,884	\$ 5,278,162	20.86	30.04	\$ 4.59
577 Federal Way-Seattle	468,828	17,531	529,635	\$ 2,109,456	44.12	38.05	\$ 2.61
578 Puyallup-Seattle	582,150	31,015	782,571	\$ 3,775,681	20.59	35.19	\$ 4.80
586 Tacoma-U. District	154,813	11,733	385,627	\$ 1,428,343	27.01	34.02	\$ 6.79
590 Tacoma-Seattle	792,724	52,042	1,363,532	\$ 6,335,450	22.68	32.17	\$ 5.53
592 DuPont-Seattle	256,454	24,185	744,344	\$ 2,944,215	14.88	29.18	\$ 9.05
594 Lakewood-Seattle	740,311	46,874	1,107,173	\$ 5,440,437	17.70	32.57	\$ 5.20
595 Gig Harbor-Seattle	100,150	7,701	213,725	\$ 937,498	20.68	39.29	\$ 6.73
596 Bonney Lake-Sumner	108,037	3,268	79,332	\$ 396,631	61.03	26.48	\$ 2.08
Total ST Express	17,661,976	719,825	16,234,529	\$ 108,128,842	31.93	39.12	\$ 4.21
Paratransit	56,197	33,000	522,381	\$ 1,484,440	1.70	1	\$ 26.41
Sound Transit Total	32,990,236	847,849	18,515,167	\$ 207,426,698	38.91	50.43	\$ 4.44

¹ Train Platform Hours.



Sounder Commuter Rail- North Line

Sounder North connects Everett to Seattle via the BNSF mainline along the Puget Sound. The train also stops at Edmonds and Mukilteo.

- December 2003: Service begins
- February 2005: RailPlus program begins
- June 2005: Second round trip added
- September 2007: Third round trip added
- May 2008: Mukilteo Station opens
- September 2008: Fourth round trip added

Figure 5 - Sounder North Line Average Daily Ridership

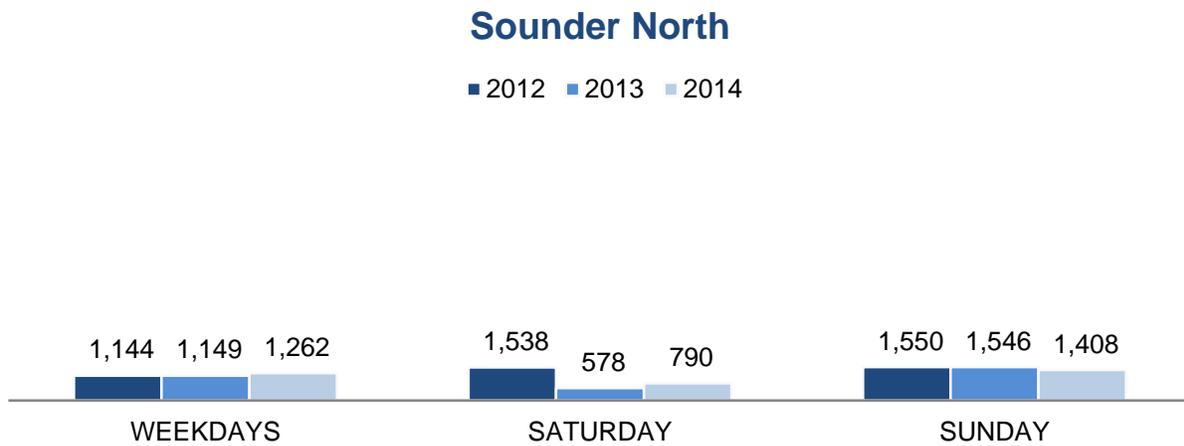
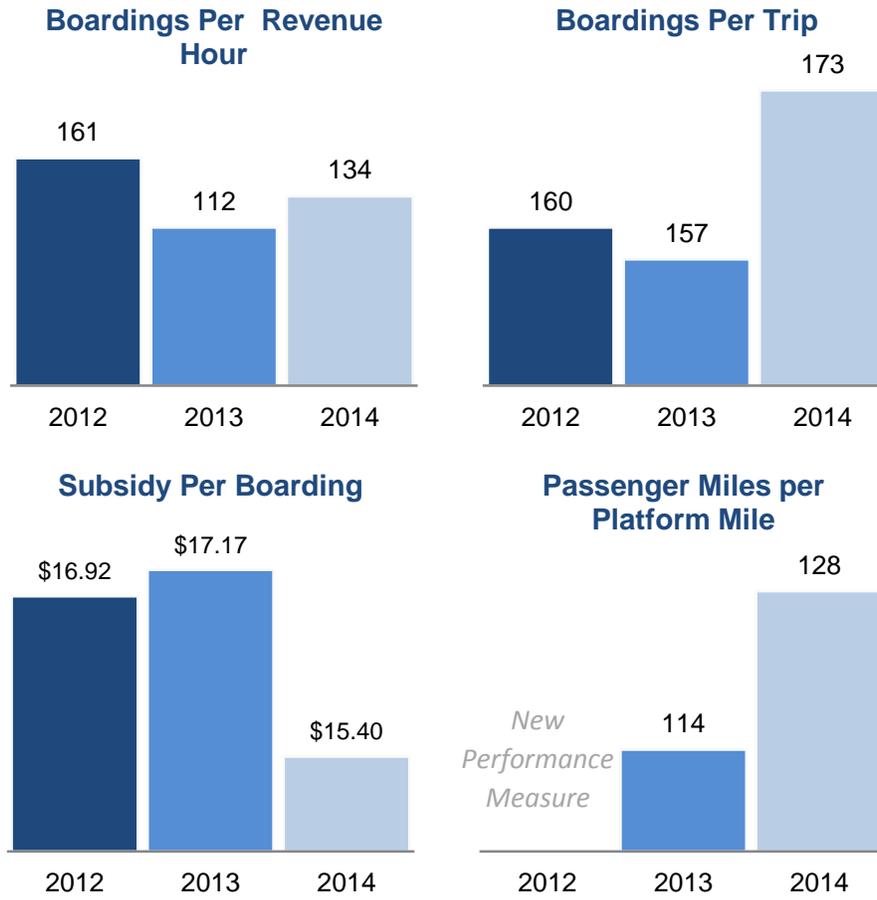


Figure 6 - Sounder North Line Performance Measures



 **Sounder Commuter Rail- South Line**

The Sounder South line connects Lakewood to Seattle via the BNSF mainline and the cities of Tacoma, Puyallup, Sumner, Auburn, Kent, and Tukwila.

- September 2000: Line opens with two round trips serving a temporary Tacoma platform at the Amtrak Station, Sumner Station, Auburn Station and King Street Station
- Throughout 2001: Puyallup, Kent and Tukwila stations open
- February 2003: Third round trip added
- September 2005: Fourth round trip added
- September 2007: Fifth and sixth round trip added
- September 2008: Seventh and eighth round trip added
- June 2009: Ninth round trip added
- October 2012: Line extended to Lakewood Station
- September 2013: Tenth round trip added
- September 2015: Schedule adjusted to prepare for future implementation of Positive Train Control (PTC)

2016 Service Change

In September 2016, a new off-peak round-trip will be added. A new northbound trip leaves Lakewood for Seattle in the late morning. A new southbound trip leaves Seattle for Lakewood in the early afternoon.

Figure 7 - Sounder South Line Average Daily Boardings

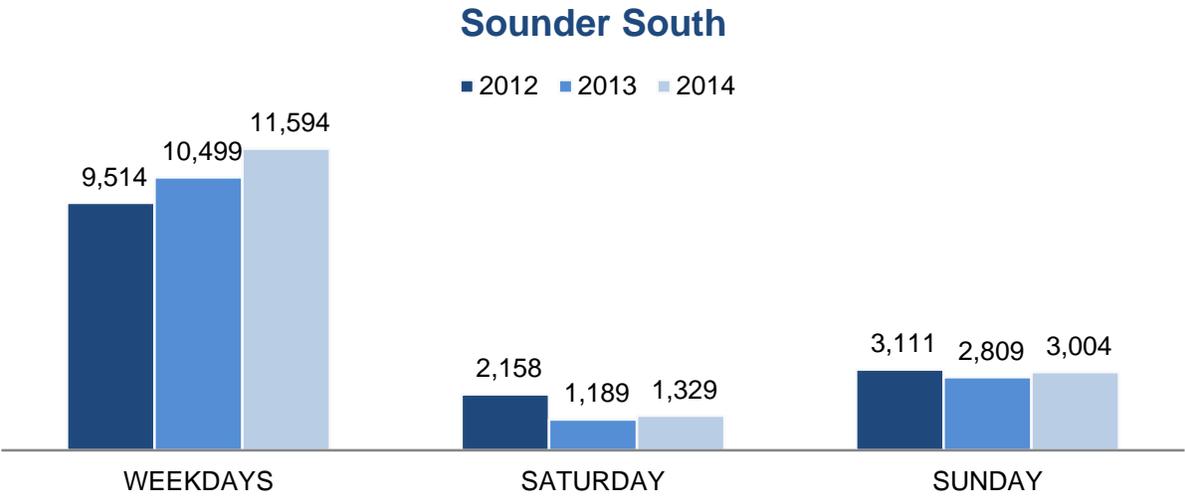
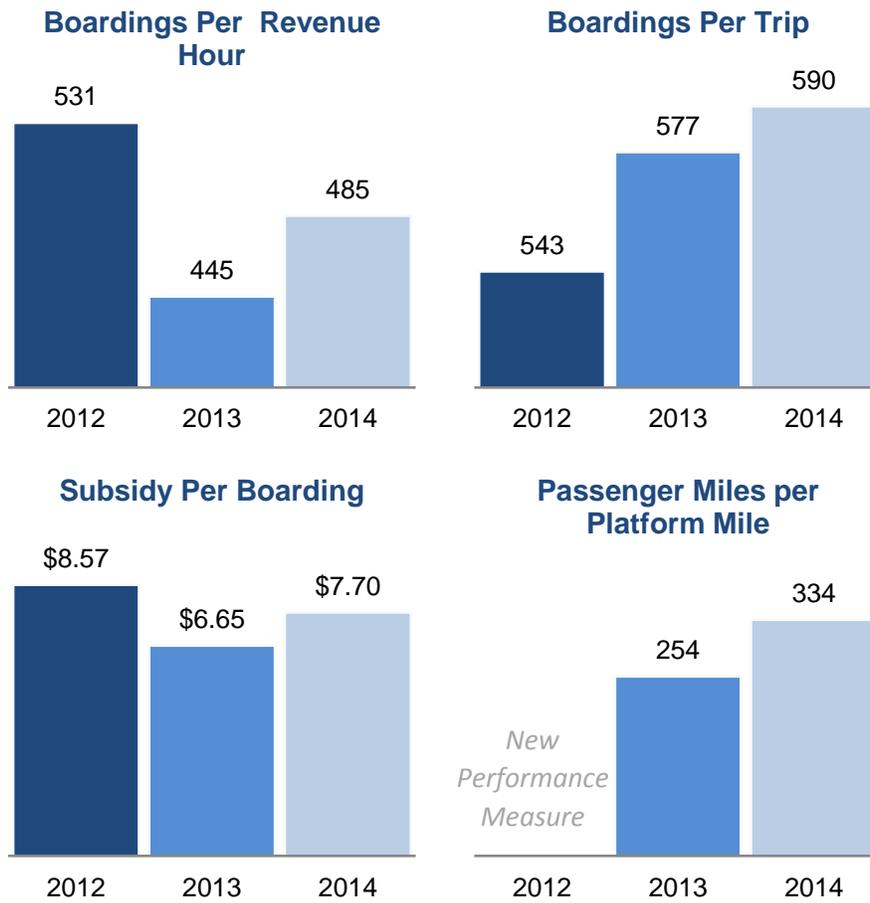


Figure 8 - Sounder South Line Performance Measures



Sounder Peer Analysis for North and South lines

Table 3 - Sounder Peer Review (2014 National Transit Database Data)

Performance Indicator	Sounder System (WA)	Sounder North Line (WA)	Sounder South Line (WA)	Tri-Rail (FL)	Coaster (CA)
Passenger Miles per Platform Mile	284	128	334	N/A	160
Passengers per Revenue Hour	386	134	485	119	239
Boardings per Trip	477	173	590	275	248
Subsidy per boarding (NTD Methodology)	\$8.46	\$15.40	\$7.70	N/A	\$6.92



Tacoma Link

Tacoma Link, opened in 2003, is a 1.6-mile light rail line connecting the Tacoma Dome and the Theater District in downtown Tacoma. There are four intermediate stations at S. 25th Street, Union Station, Convention Center and Commerce Street. A maximum of two light rail cars are usually scheduled, with a third car available as a spare. The Tacoma Link alignment is approximately half double-track and half single-track. The scheduled end-to-end running time is approximately 10 minutes each way and is synchronized with the City of Tacoma’s traffic signal timing system.

- September 2011: Commerce Street Station opens and frequency of service adjusted from 10 minutes during peak/20 minutes during off-peak to 12 minutes during peak/24 minutes during off-peak.

Figure 9 - Tacoma Link Average Daily Boardings

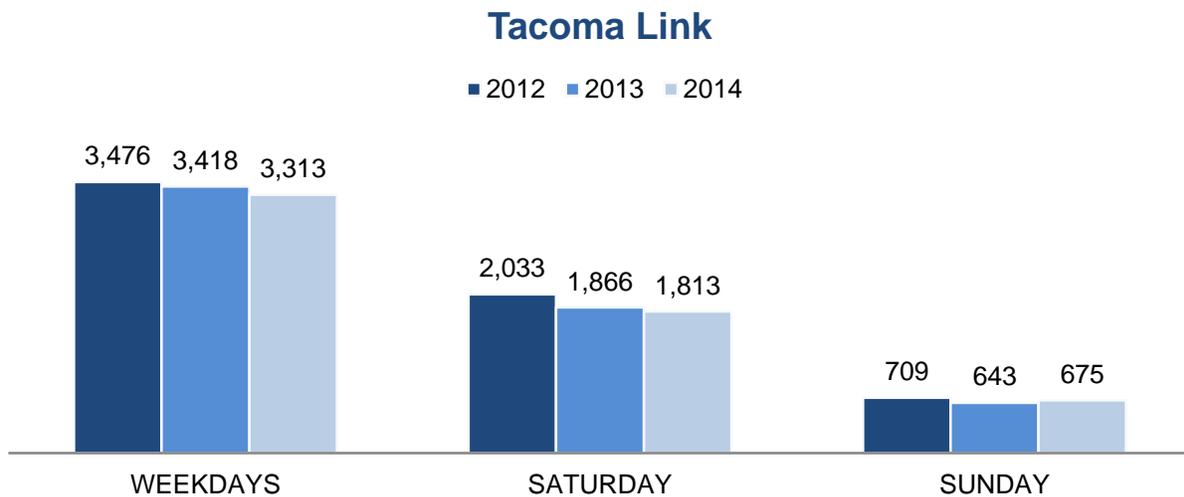


Figure 10 - Tacoma Link Performance Measures

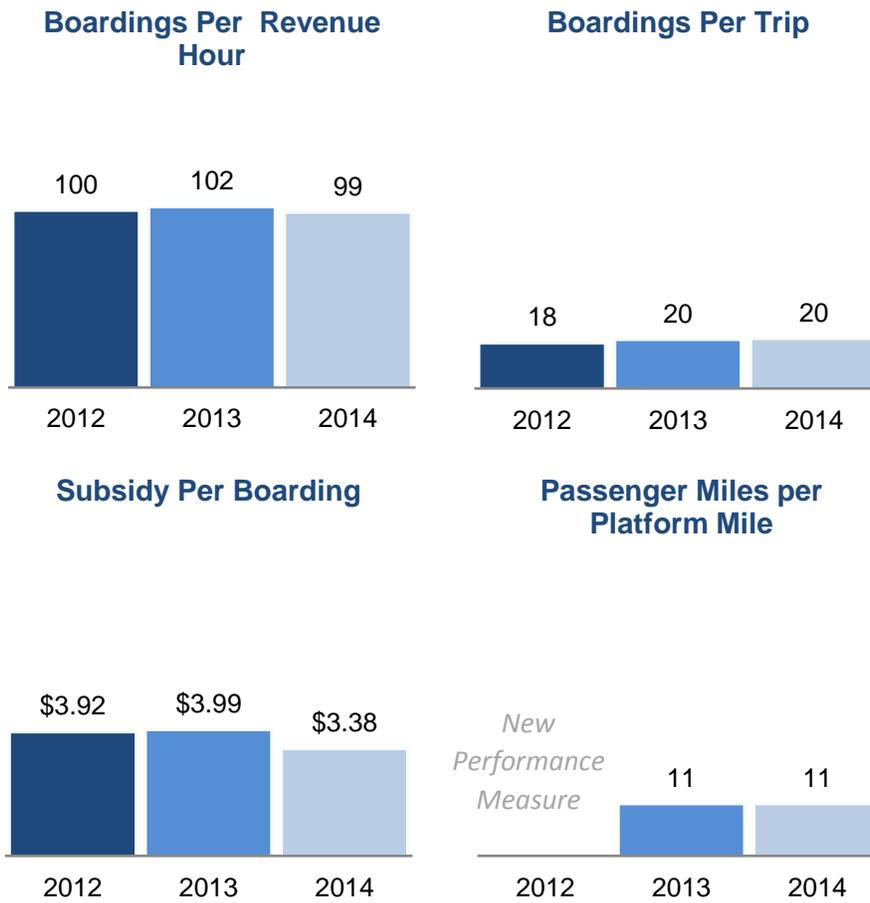


Table 4 - Tacoma Link Service Standards (2014)

Time Period	Boardings Per Revenue Hour	Boardings Per Trip	Passenger Miles Per Platform Mile	Subsidy per Boarding	Score ¹	Rating ¹
Weekday Peak	131.78	26	14.79	\$3.24	2	At+
Weekday Midday	112.50	23	11.78	\$3.60	2	At+
Weekday Early/Late	61.22	12	7.18	\$8.90	2.5	At-
Saturday/Sunday	72.30	14	8.51	\$4.76	2.25	At+
Holiday	64.41	13	7.68	\$3.65	1.75	At+
System Total	99.51	19.9	11.33	\$3.38		

¹ Calculated by methodology provided by the 2014 Service Standards and Performance Measures



Link

Link is a 15.6 mile light rail line connecting Downtown Seattle with SeaTac Airport via Beacon Hill, the Rainier Valley, and Tukwila.

- July 2009: Line opens between Tukwila International Blvd Station and Westlake Station
- December 2009: Line extended to SeaTac/Airport Station
- September 2015: Peak hour frequencies improve to six minutes

2016 Service Change

In early 2016 a 3.1-mile extension with new stations at Capitol Hill and University of Washington opens. Later in 2016 a new 1.6 mile extension to Angle Lake Station will open.

Figure 11 - Link Average Daily Boardings

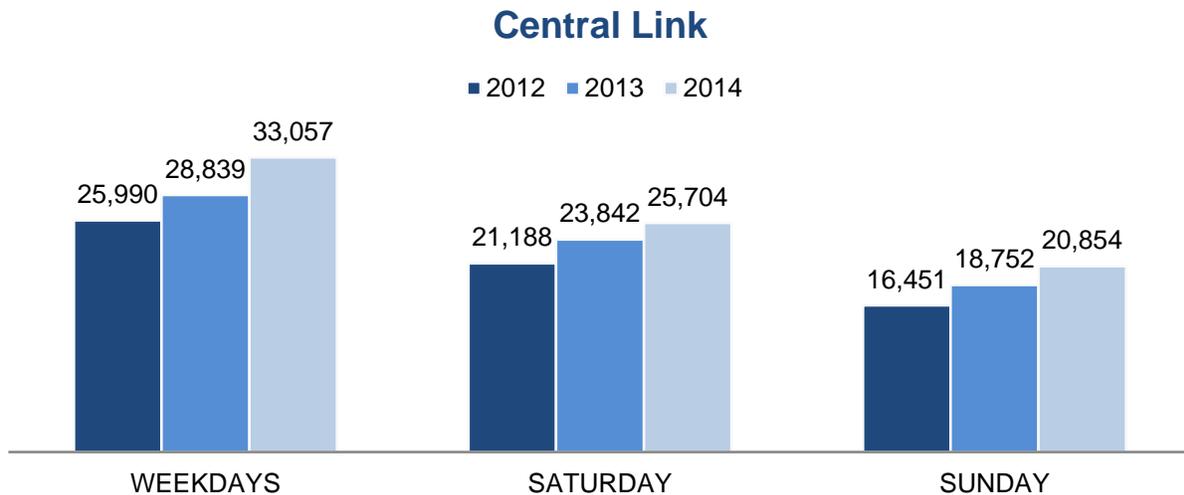


Figure 12 - Link Performance Measures

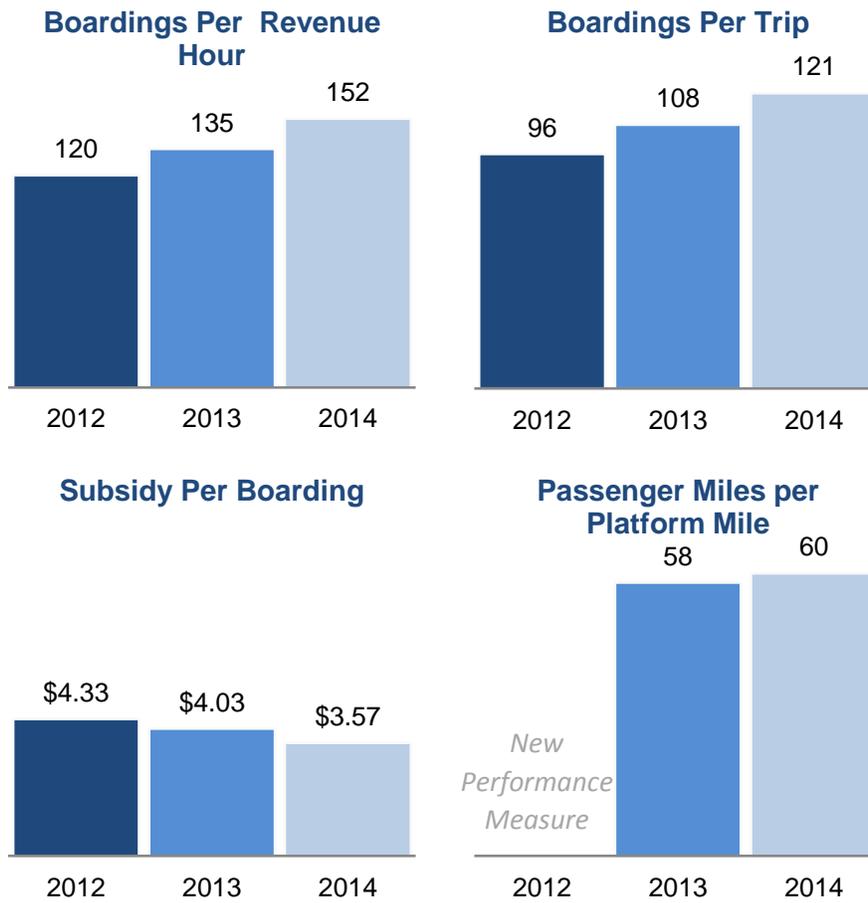


Table 5 - Link Peer Review (NTD 2014)

Performance Indicator	Seattle	St. Louis	Portland	San Jose
Passenger Miles per Platform Mile	60	48.9	51.8	30
Boardings Per Revenue Train Hour	152	129.5	141.1	78.8
Boardings per Trip	121	N/A	N/A	79.3
Subsidy per Boarding (NTD Methodology)	\$3.57	\$2.71	N/A	N/A

Table 6 - Link Service Standards (2014)

Link 2014 Annual Performance Indicators	2014	Budget Targets
Total Annual Boardings	10,950,276	10,000,000
Average Weekday Boardings	32,924	-
Percentage of Scheduled Trips Operated	99.5%	≥98.5%
On-time Performance and Headway Performance	94.2%	≥90.0%
Customer Complaints per 100k Boardings	1.2	<15
Preventable Accidents per 100k Platform Miles	0.00	≤0.30

ST Express Overview

Description

Sound Transit's regional bus system, ST Express, served over 17.6 million passengers in 2014. ST Express regional bus service operates from 2:15 a.m. to 1 a.m. every day. Service levels on ST Express route range from peak-only to all-day, all-week service. At 2014's year end, ST Express has had more than 162 million boardings since service began in September, 1999.

As of the end of 2014, 26 ST Express regional bus routes were in operation. These routes are:

- 510: Everett – Seattle Express
- 511: Ash Way – Seattle Express
- 512: Everett/Lynnwood – Seattle Express
- 513: Evergreen Way/Eastmont – Seattle Express
- 522: Woodinville – Seattle Express
- 532: Everett – Bellevue Express
- 535: Lynnwood – Bellevue Express
- 540: Kirkland – U. District Express
- 542: Redmond – U. District Express
- 545: Redmond – Seattle Express
- 550: Bellevue – Seattle Express
- 554: Issaquah – Seattle Express
- 555: Issaquah – Northgate Express
- 556: Issaquah – U. District – Northgate Express
- 560: Bellevue – Sea-Tac – West Seattle Express
- 566: Auburn – Overlake Express
- 567: Kent – Overlake Express
- 574: Lakewood – Sea-Tac Airport Express
- 577: Federal Way – Seattle Express
- 578: Puyallup – Seattle Express
- 586: Tacoma – U. District Express
- 590: Tacoma – Seattle Express
- 592: Olympia/DuPont/Lakewood – Seattle Express
- 594: Tacoma/Lakewood – Seattle Express
- 595: Gig Harbor – Seattle Express
- 596: Bonney Lake – Sumner Express

Performance Assessment

Until the expanded light rail network begins to replace segments of ST Express routes, Sound Transit faces challenges in meeting the existing demand for bus service. ST Express service continues to exhibit sustained ridership growth and significant capacity utilization, particularly during peak periods. Over the past five years, average trip-level ridership increased by over 40 percent. Across several corridors, during peak periods, average trip loads consistently exceed seated capacity. On the average weekday ST Express operates 1,500 trips, nearly one-quarter generate more than 60 boardings per trip and 200 trips experience max loads above 60 passengers.

The following four charts, Figure 13 through Figure 16, show four key performance indicators for each route: boardings per trip, boarding per revenue hour, subsidy per boarding, and passenger miles per platform mile. The routes are then placed into four quartiles dependent on their performance.

The definitions of the four quartiles are as following:

First Quartile – These routes land in the top 25%, are typically high performers and the most crowded. They may also be candidates for service enhancements, if resources are available.

Second Quartile – Routes stay within normal operational parameters.

Third Quartile – Routes within normal operational parameters.

Fourth Quartile – These routes land in the bottom 25%, and are candidates for actions that improve their productivity and cost effectiveness.

Figure 13 - ST Express Boardings per Trip

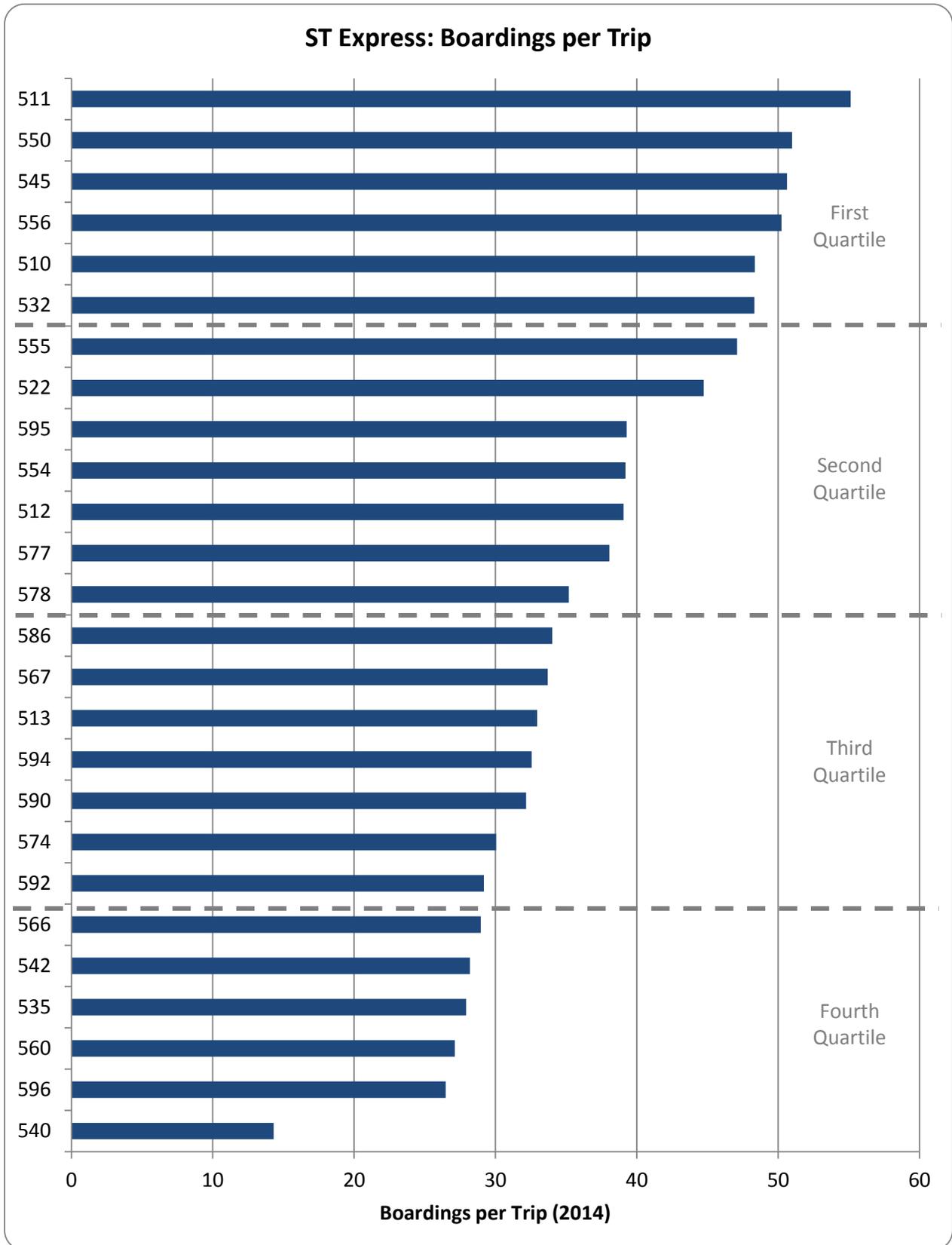


Figure 14 - ST Express Boarding per Revenue Hour

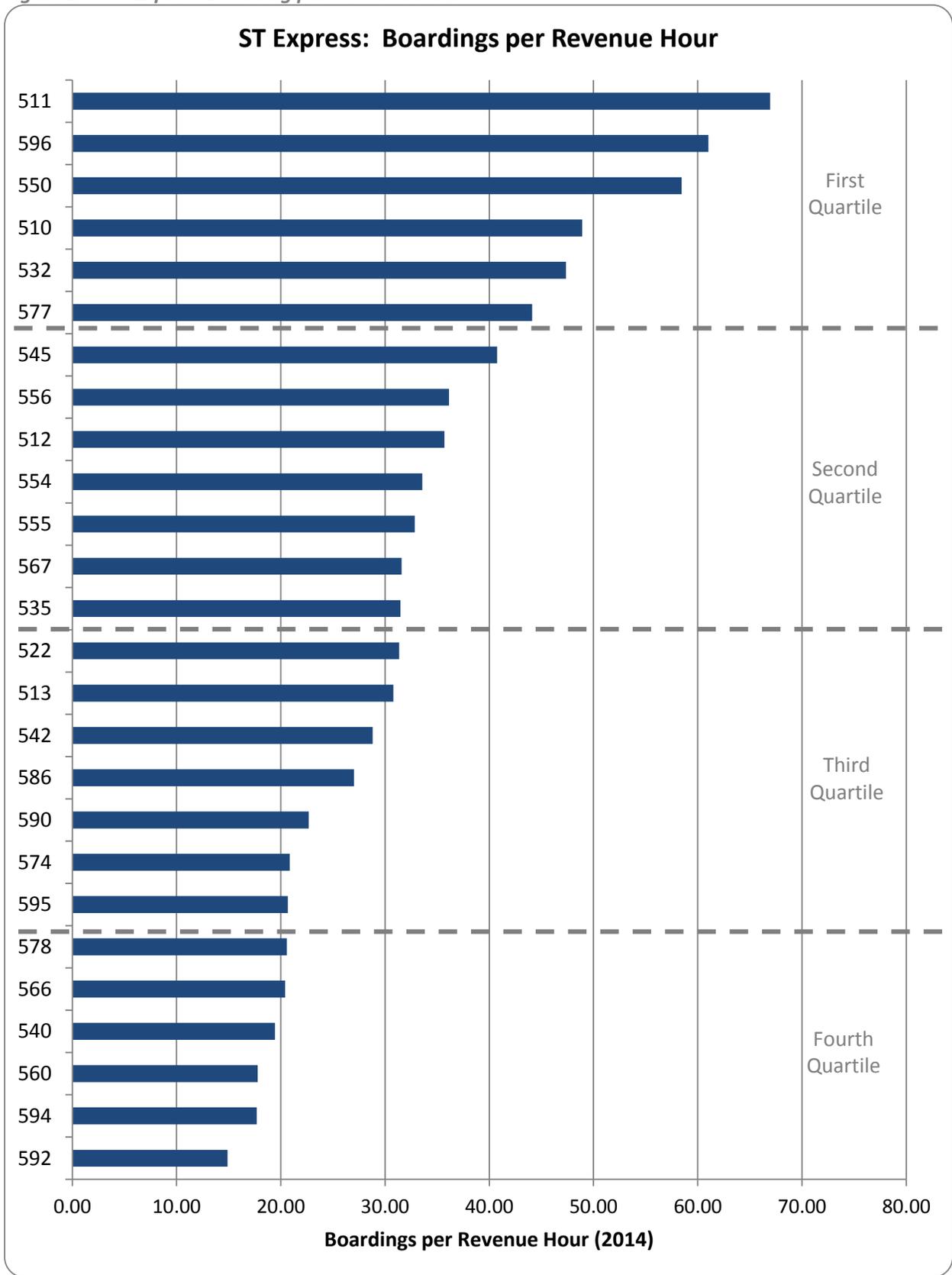


Figure 15-ST Express Subsidy per Boarding

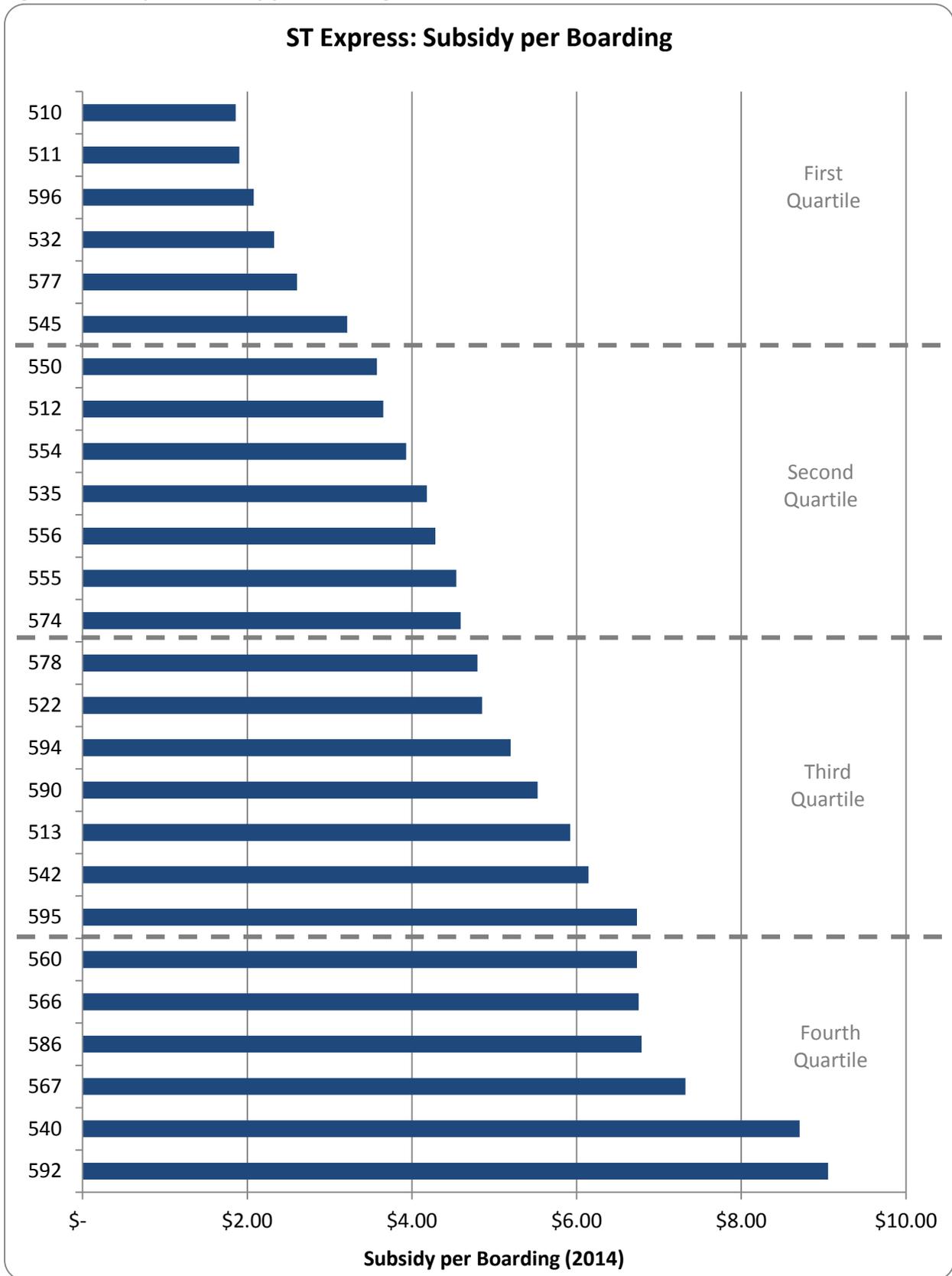
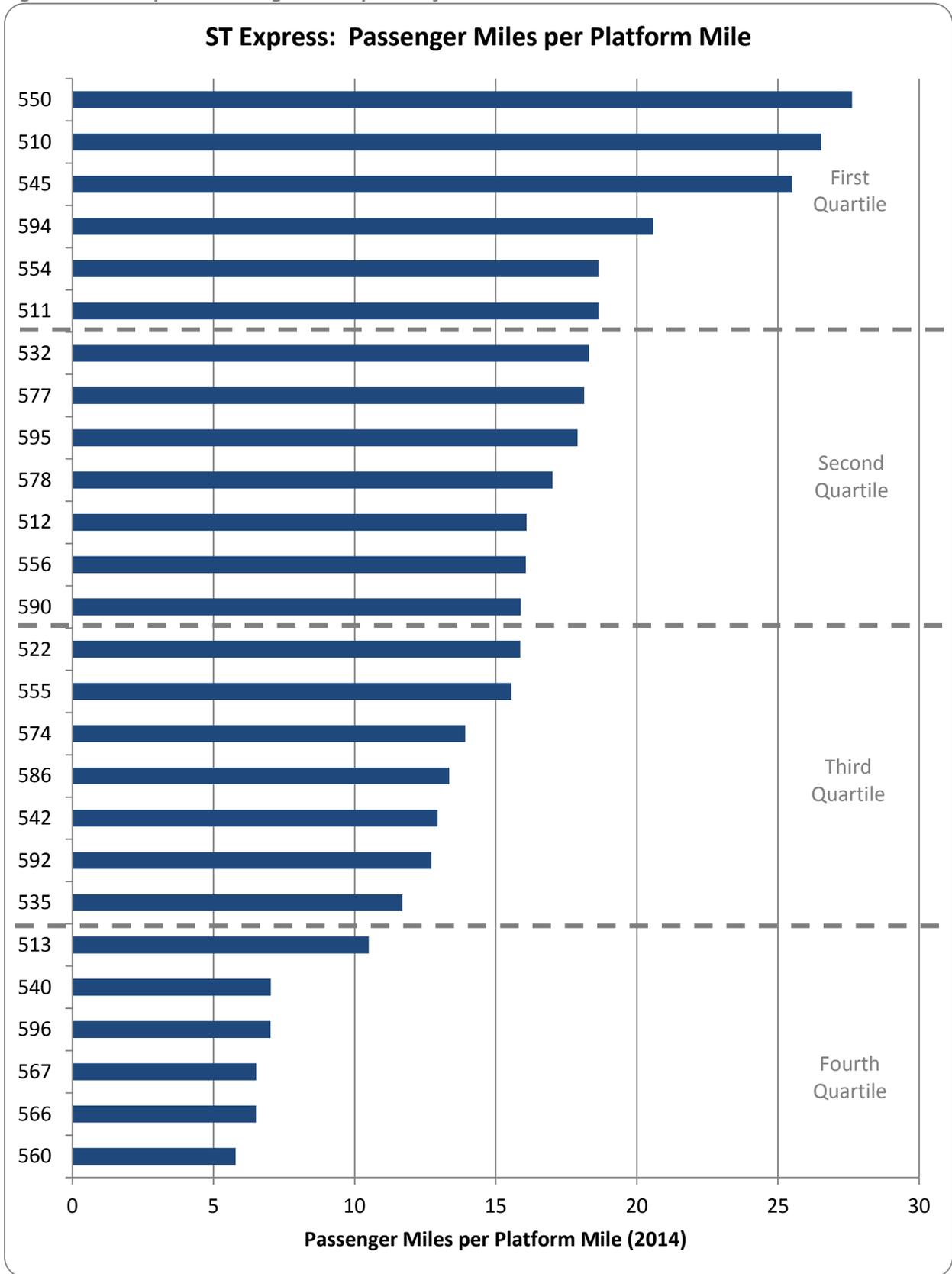


Figure 16 - ST Express Passenger Miles per Platform Mile



Chapter Two: Service Analysis

Table 7 - ST Express Performance Summary

	Route	Description	Passengers per Trip	Passengers per Revenue Hour	Subsidy per Boarding	Passenger Miles per Platform Mile
1st Quartile	511	Lynnwood-Seattle	55.13	66.94	\$1.90	18.64
	510	Everett-Seattle	48.35	48.92	\$1.86	26.53
	550	Bellevue-Seattle	50.99	58.46	\$3.58	27.62
	545	Redmond-Seattle	50.62	40.74	\$3.22	25.51
	532	Everett-Bellevue	48.32	47.36	\$2.33	18.30
	577	Federal Way-Seattle	38.05	44.12	\$2.61	18.13
2nd Quartile	556	Issaquah-Northgate	50.23	36.14	\$4.28	16.07
	554	Issaquah-Seattle	39.21	33.58	\$3.93	18.64
	555	Northgate-Issaquah	47.09	32.86	\$4.54	15.55
	522	Woodinville-Seattle	44.73	31.34	\$4.85	15.87
	596	Bonney Lake-Sumner	26.48	61.03	\$2.08	7.03
	512	Everett-Seattle	39.06	35.71	\$3.65	16.09
3rd Quartile	595	Gig Harbor-Seattle	39.29	20.68	\$6.73	17.90
	578	Puyallup-Seattle	35.19	20.59	\$4.80	17.01
	594	Lakewood-Seattle	32.57	17.70	\$5.20	20.59
	535	Lynnwood-Bellevue	27.93	31.47	\$4.18	11.69
	590	Tacoma-Seattle	32.17	22.68	\$5.53	15.89
	574	Lakewood-SeaTac	30.04	20.86	\$4.59	13.93
	586	Tacoma-U. District	34.02	27.01	\$6.79	13.36
4th Quartile	513	Eastmont-Seattle	32.96	30.79	\$5.92	10.50
	567	Kent-Overlake	33.70	31.58	\$7.32	6.52
	542	Redmond-U. District	28.19	28.81	\$6.15	12.94
	566	Auburn-Overlake	28.96	20.41	\$6.75	6.51
	592	Olympia-Lakewood-Seattle	29.18	14.88	\$9.05	12.72
	560	Westwood Village-Bellevue	27.12	17.77	\$6.73	5.78
	540	Kirkland-U. District	14.30	19.44	\$8.71	7.03

ST Express Route Level Performance Assessment

The following section provides an assessment of ST Express service performance by route during 2014 using the following key metrics:

- Average Daily Boardings
- Boardings per Revenue Hour
- Boardings per Trip
- Subsidy per Boarding
- Passenger Miles per Platform Mile

Route 510: Everett – Seattle

The route operates in the peak-period, peak-direction southbound on weekdays from Everett to Seattle before 9:00 a.m. and northbound from Seattle to Everett between 2:30 p.m. and 7:00 p.m. Buses run every 10 to 20 minutes.

- September 1999: Route begins with two-way peak period service
- September 2003: Route begins full time, seven day a week service
- September 2006: Midday and Saturday service improved to operate every 30 minutes
- September 2008: Route restructured to serve South Everett Freeway Station
- September 2009: Sunday service improved to operate every 30 minutes
- June 2011: Sunday service combined with Route 511 into Route 512
- September 2013: Service on I-5 restructured to current operation

Figure 17 - Route 510 Map

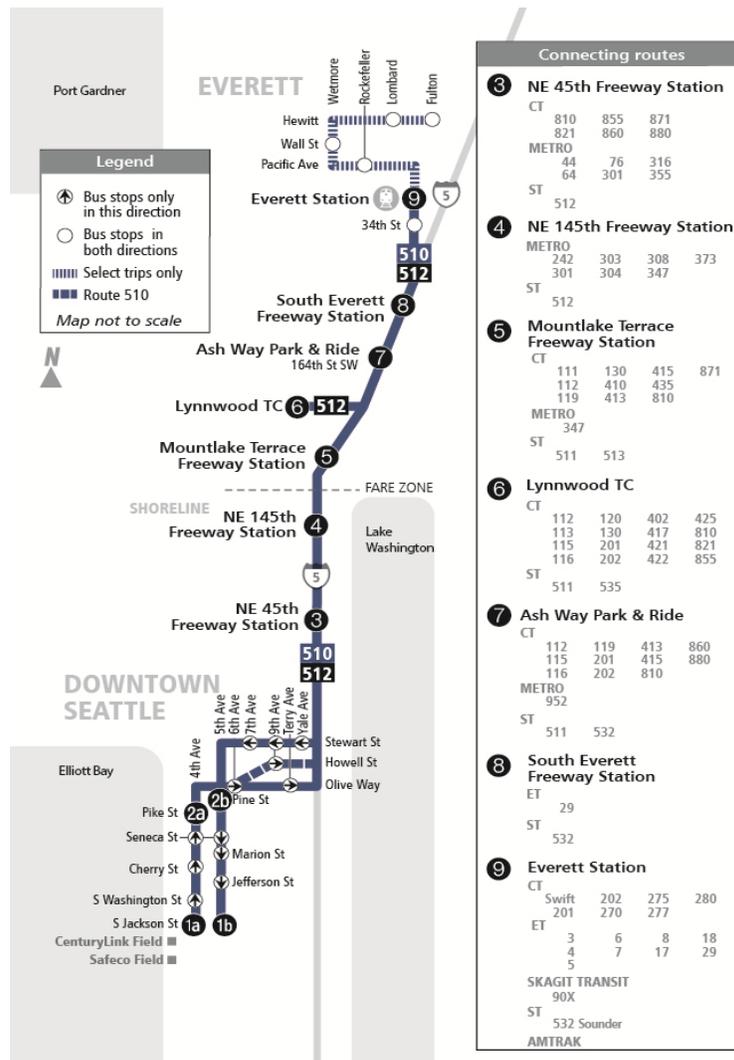


Figure 18 - Route 510 Average Daily Boardings

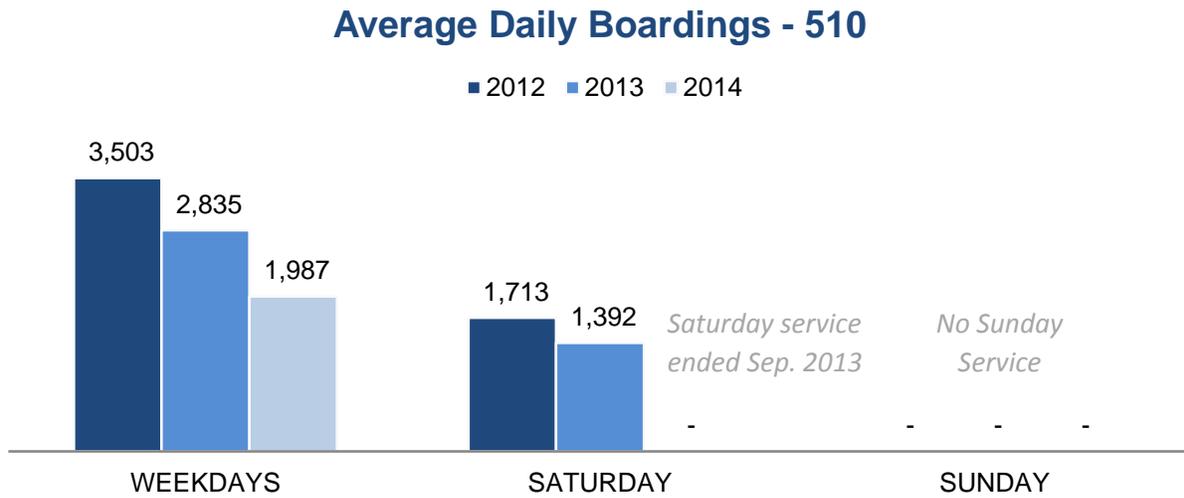
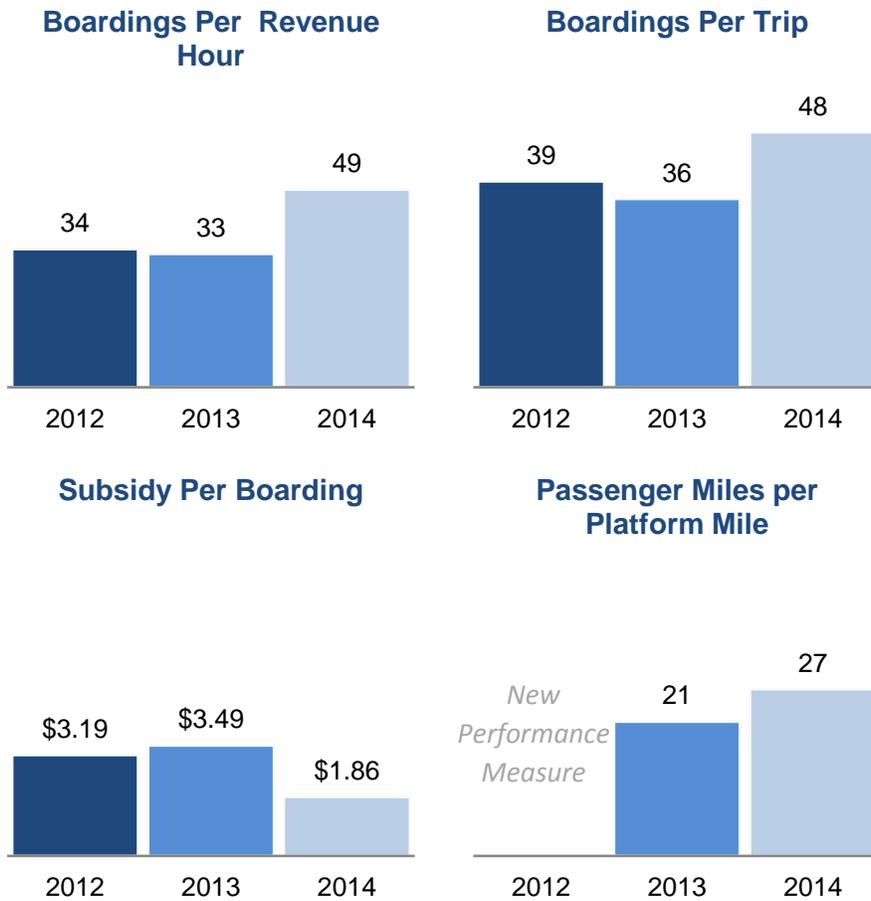


Figure 19 - Route 510 Performance Measures





Route 511: Ash Way – Seattle

The route operates in the peak-period, peak-direction southbound on weekdays from Ash Way to Seattle before 9:00 a.m. and northbound from Seattle to Lynnwood and Ash Way between 2:30 p.m. and 7:00 p.m. Buses run every 15 to 20 minutes. This route also serves Lynnwood Transit Center and Mountlake Terrace Freeway Station.

- September 1999: Route begins with two-way peak period service
- September 2003: Route begins full time, seven day a week service
- September 2009: Weekday midday service improved to every 15 minutes
- March 2011: Mountlake Terrace Freeway Station opens and peak-period service improved to every 15 minutes
- June 2011: Sunday service combined with Route 510 into Route 512
- September 2013: Service on I-5 restructured to current operation

Figure 20 - Route 511 Map

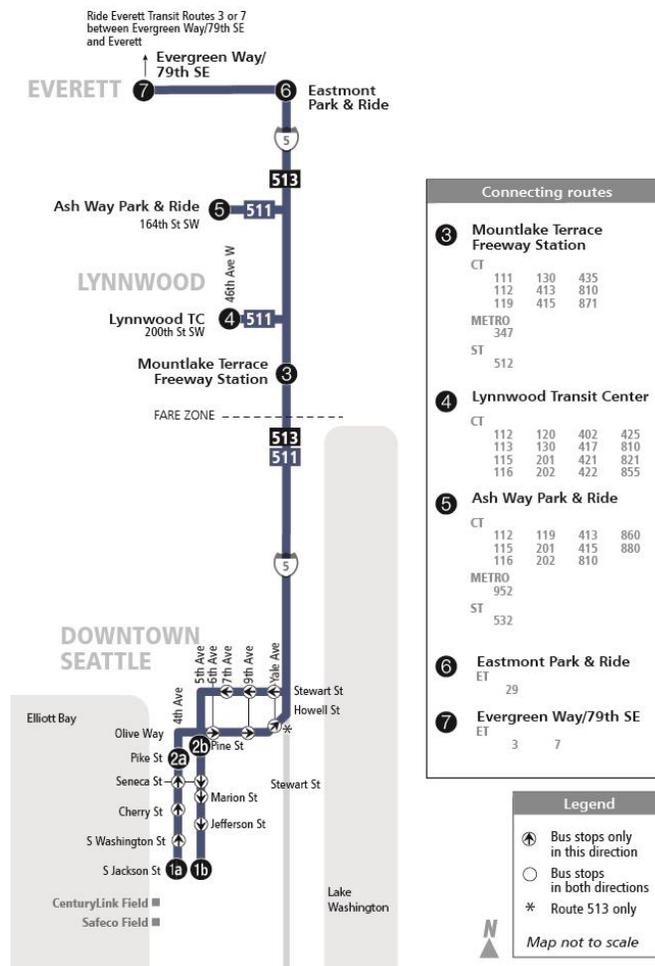


Figure 21 - Route 511 Average Daily Boardings

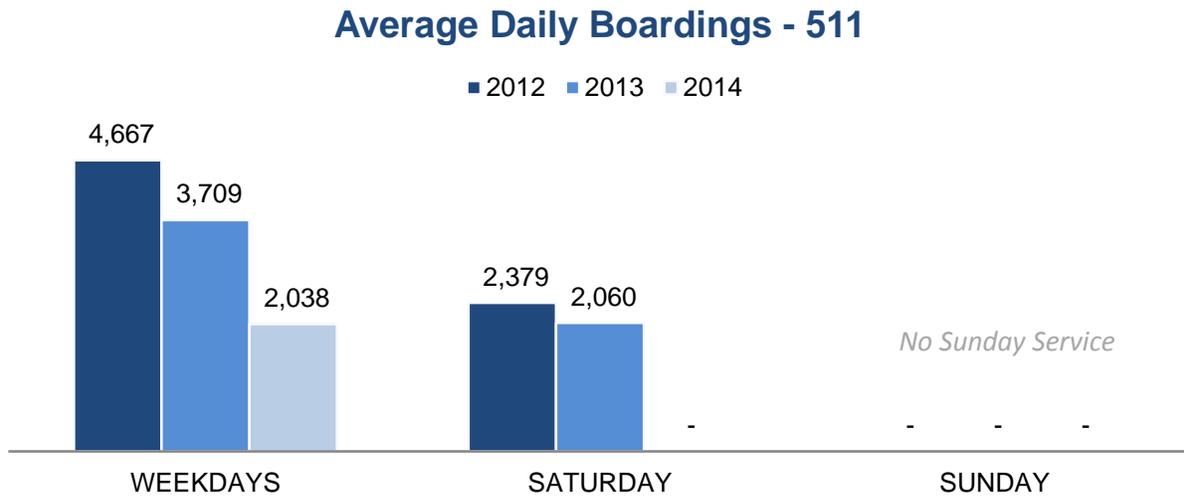
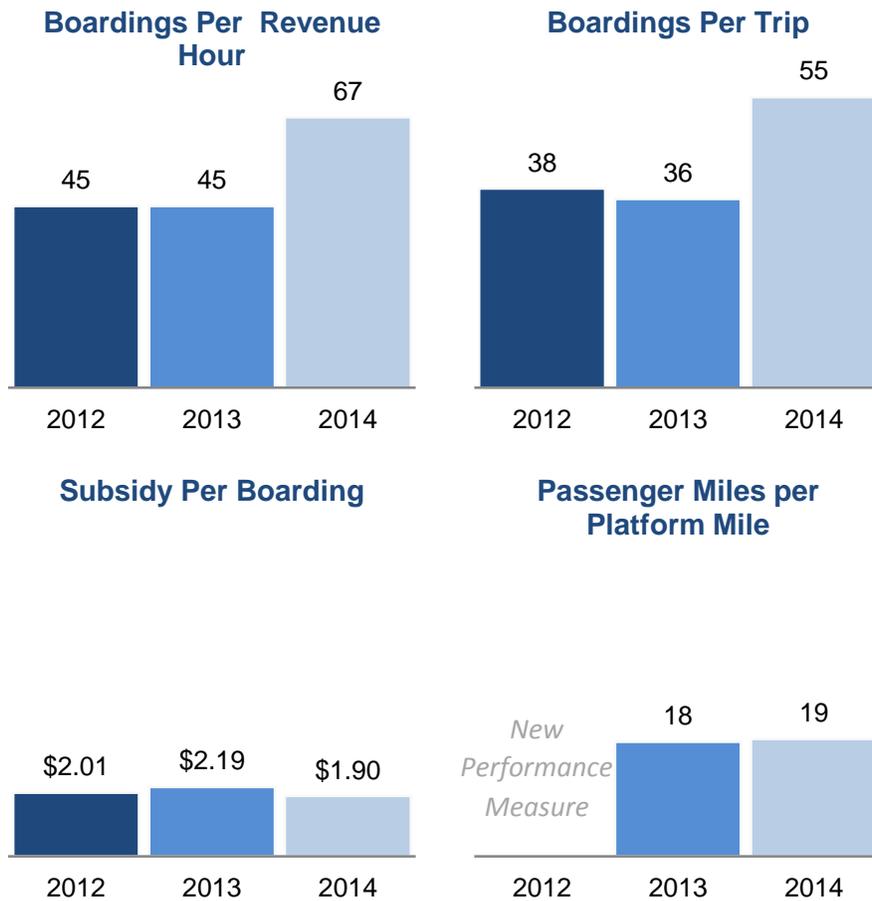


Figure 22 - Route 511 Performance Measures



Route 512: Everett – Seattle

The route operates seven days a week between Everett and Seattle except when routes 510 and 511 are operating. Buses run every 10 to 30 minutes. This route also serves South Everett Freeway Station, Ash Way Park-and-Ride, Lynnwood Transit Center, Mountlake Terrace Freeway Station, Jackson Park Freeway Station and NE 45th Street Freeway Station.

- September 1999: Route begins with midday and Saturday service replacing portions of Community Transit Route 418
- May 2000: Sunday service begins and intermediate connections made during peak periods with routes 505 and 506 that operated between Everett and Northgate
- September 2003: Route discontinued (along with routes 505 and 506) and replaced with full time service on routes 510 and 511
- June 2011: Sunday service combines routes 510 and 511 into Route 512
- September 2013: Service on I-5 restructured to current operation

Figure 23 - Route 512 Map

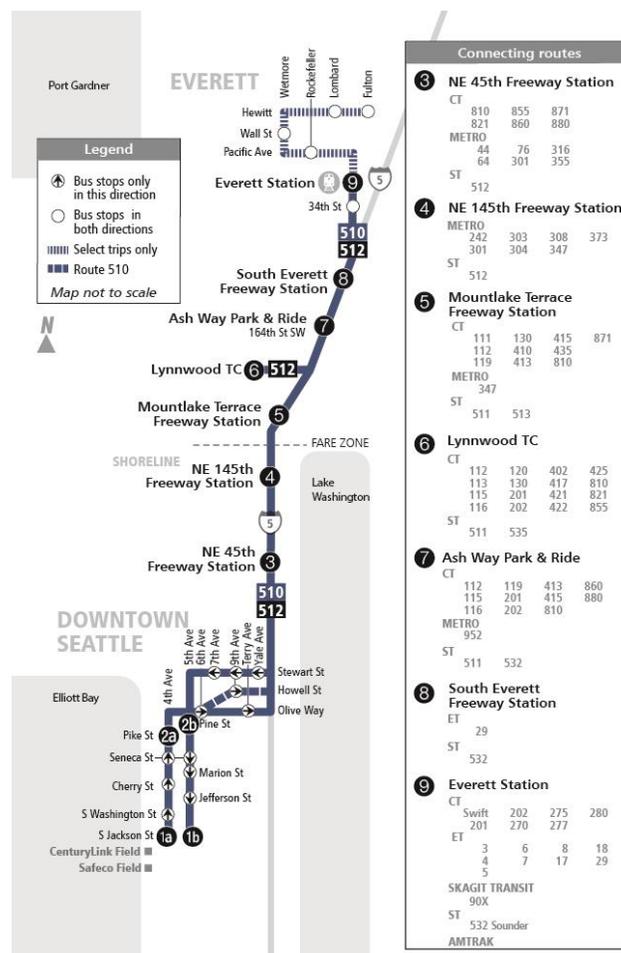


Figure 24 - Route 512 Average Daily Boardings

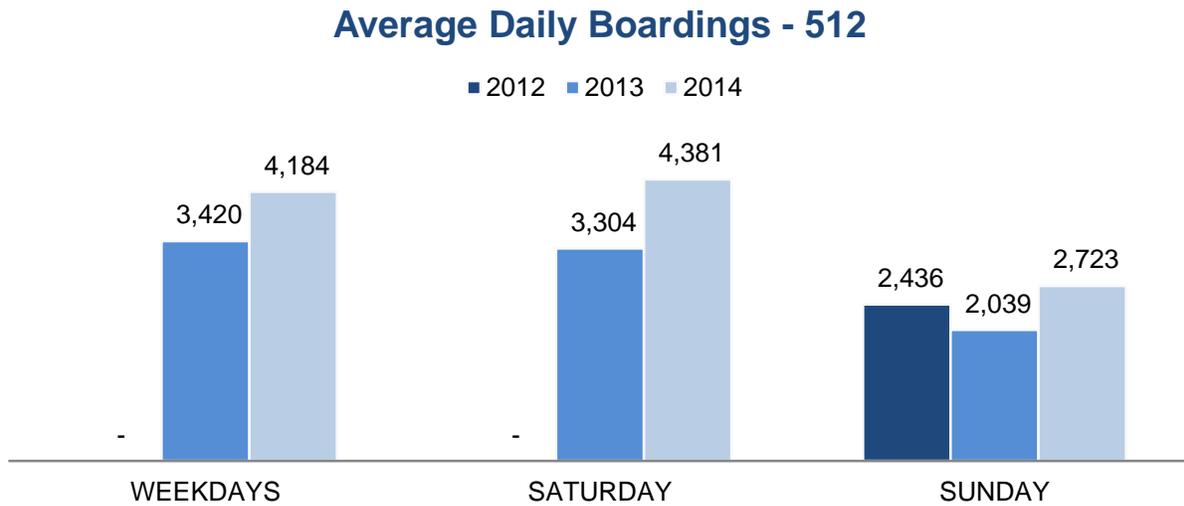
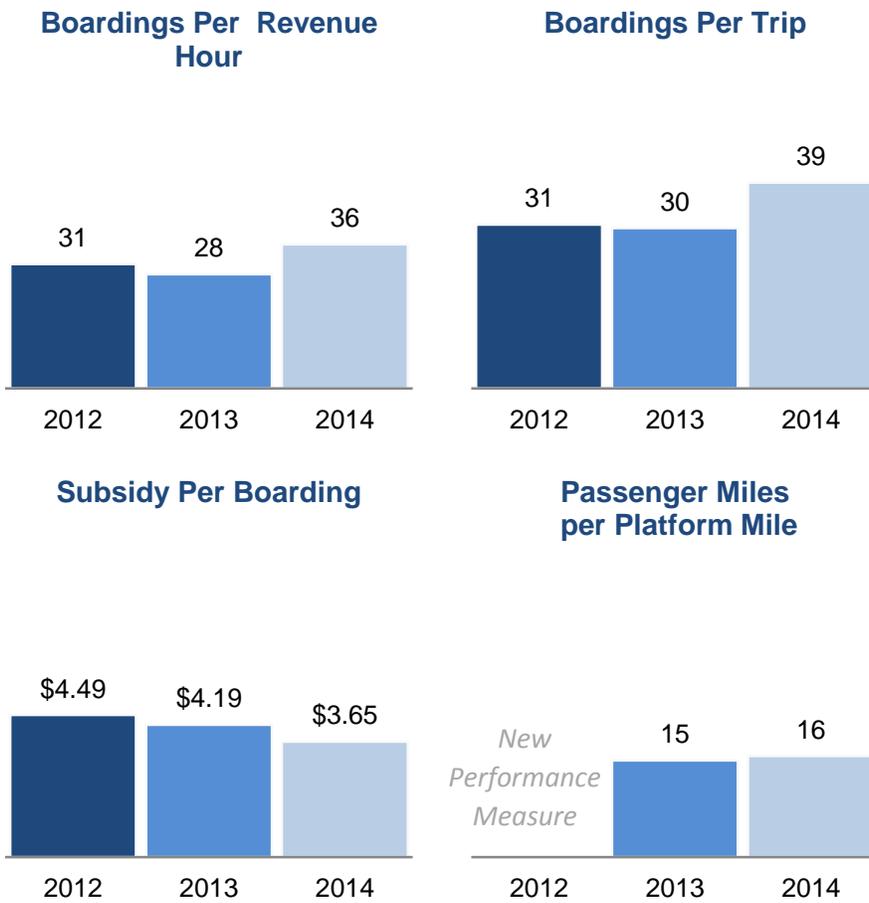


Figure 25 - Route 512 Performance Measures



Route 513: Everett – Seattle

The route operates in the peak-period, peak-direction southbound on weekdays from south Everett to Seattle before 9:00 a.m. and northbound from Seattle to south Everett between 3:00 p.m. and 7:00 p.m. Buses run every 14 to 38 minutes with 11 trips operating southbound on weekday mornings and 10 trips operating northbound on weekday afternoons.

- September 1999: Route replaces Community Transit Route 420
- September 2008: Route 510 restructured to serve South Everett Freeway Station instead of Eastmount Park and Ride
- March 2011: Mountlake Terrace Freeway Station stop opens
- June 2011: Service from downtown Everett along Evergreen Way discontinued
- September 2013: Service on I-5 restructured to current operation

Figure 26 - Route 513 Map

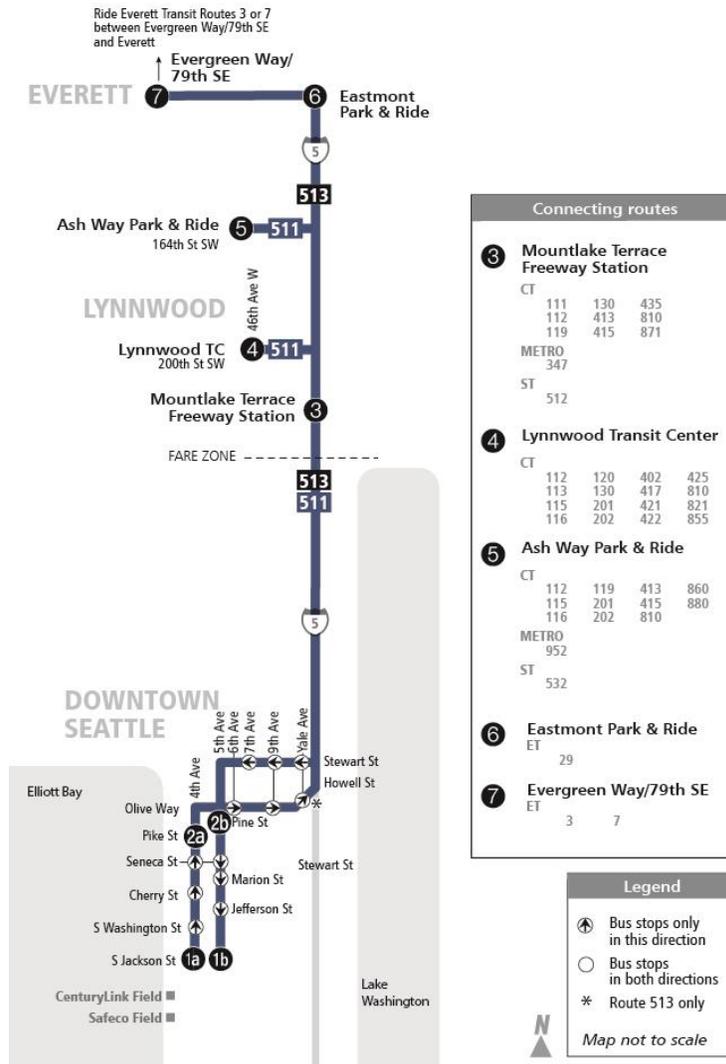


Figure 27 - Route 513 Average Daily Boardings

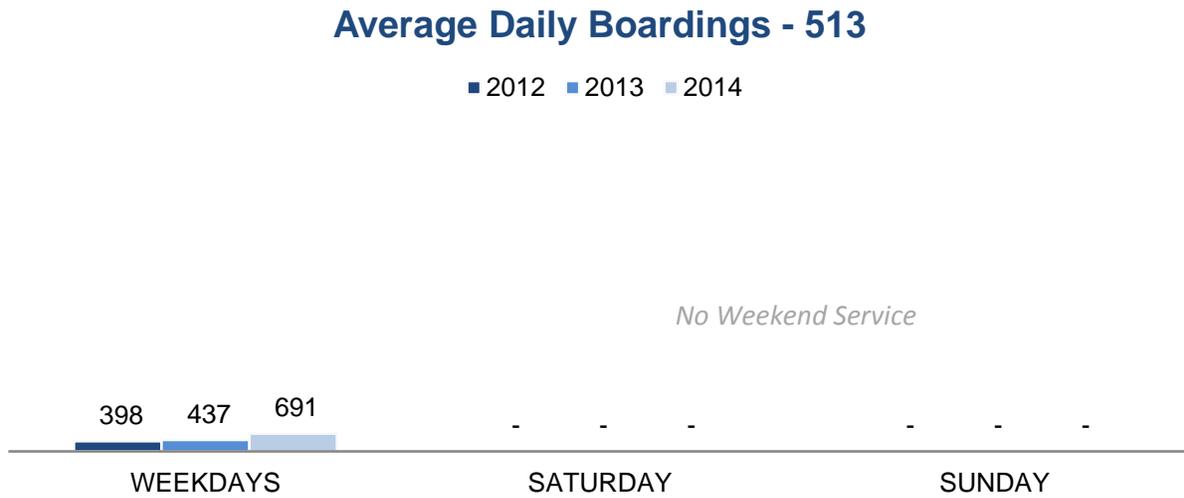
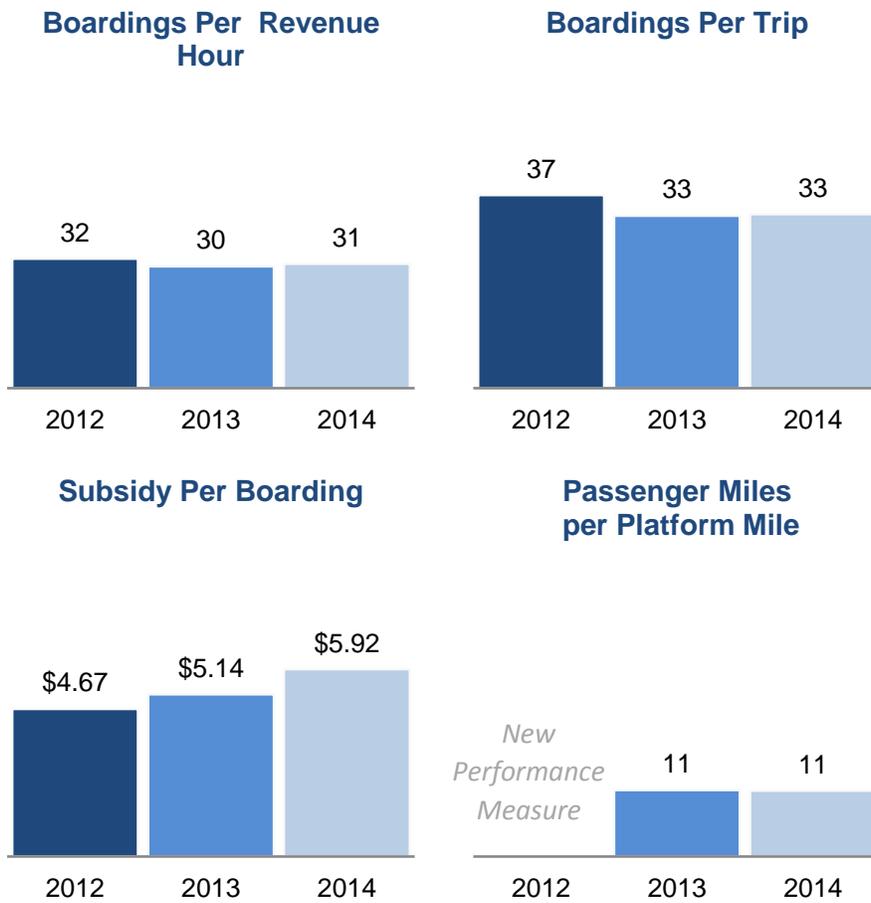


Figure 28 - Performance Measures Performance Measures



Route 522: Woodinville – Seattle

The route operates seven days a week between Woodinville and Seattle. Buses run every 9 to 60 minutes. This route also serves Bothell, Kenmore, Lake Forest Park, Shoreline and Lake City.

- September 2002: Route begins service replacing portions of King County Metro Route 307
- September 2012: Service shifted from 3rd Avenue to 4th Avenue in downtown Seattle

Figure 29 - Route 522 Map

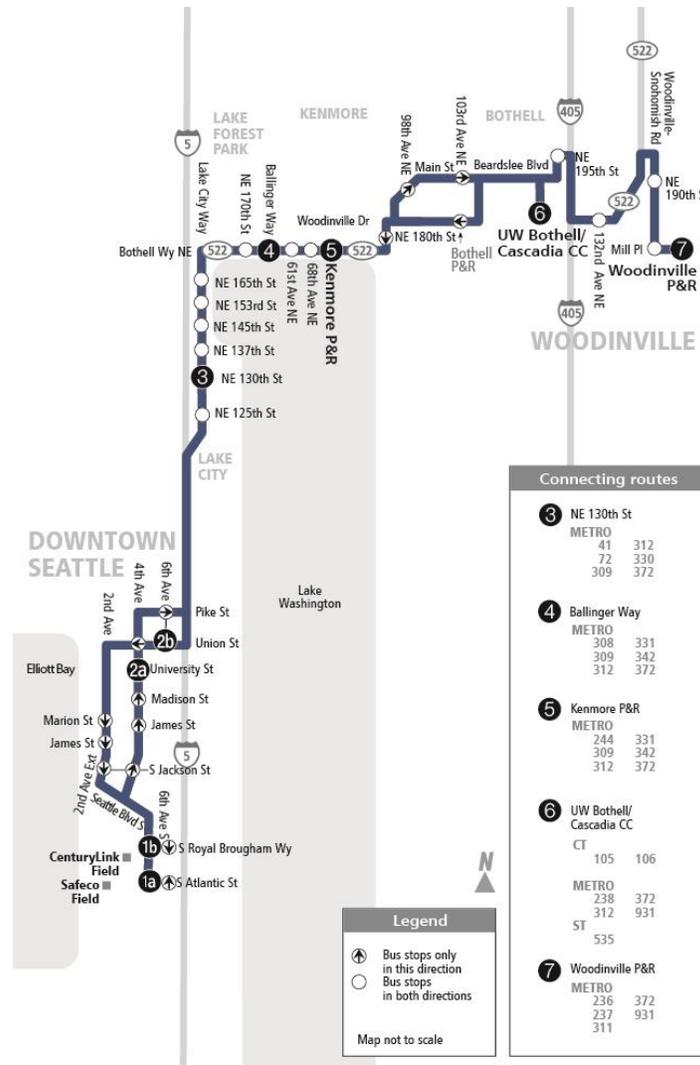


Figure 30 - Route 522 Average Daily Boardings

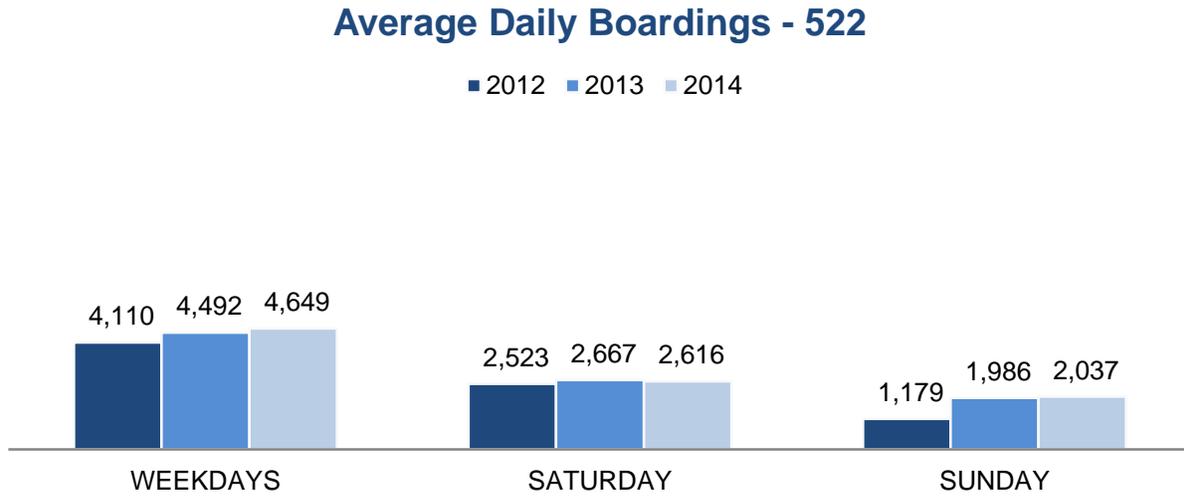
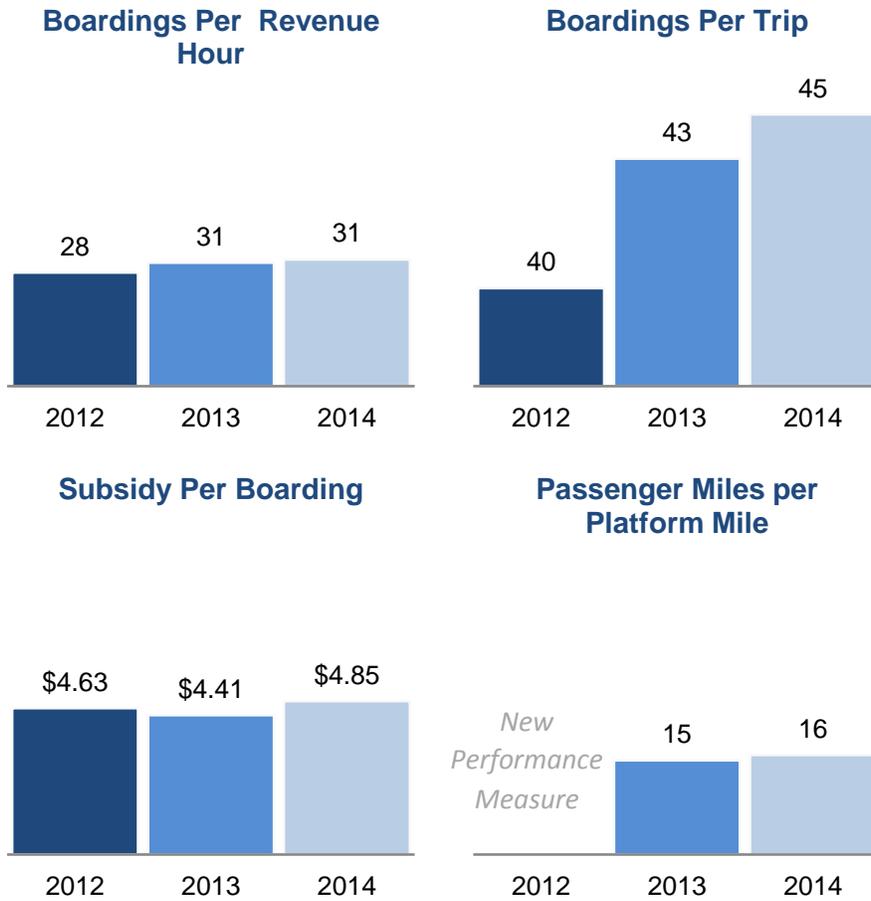


Figure 31 - Route 522 Performance Measures



Route 532: Everett – Bellevue

The route operates peak-hour, two-way service between Everett and Bellevue. Buses run every 10 to 30 minutes. This route also serves South Everett Freeway Station, Ash Way Park-and-Ride, Canyon Park Freeway Station and the Totem Lake Freeway Station. Brickyard Park Freeway Station and NE 195th Street are served northbound in the morning peak periods and southbound in the afternoon peak periods.

- September 1999: Route begins operation between Everett Mall and Bellevue with off-peak services provided by routes 530 (midday and reverse peak-direction on weekdays) and 531 (nights and weekends)
- September 2001: Route 531 discontinued on nights and weekends and replaced with trips on Route 535
- September 2002: Route extended to Everett station
- September 2006: Route 530 discontinued and replaced with 30-minute service on Route 535
- June 2007: Canyon Park Freeway Station opens
- November 2007: Totem Lake Freeway Station opens
- September 2008: Route restructured to serve South Everett Freeway Station

Figure 32 - Route 532 Map

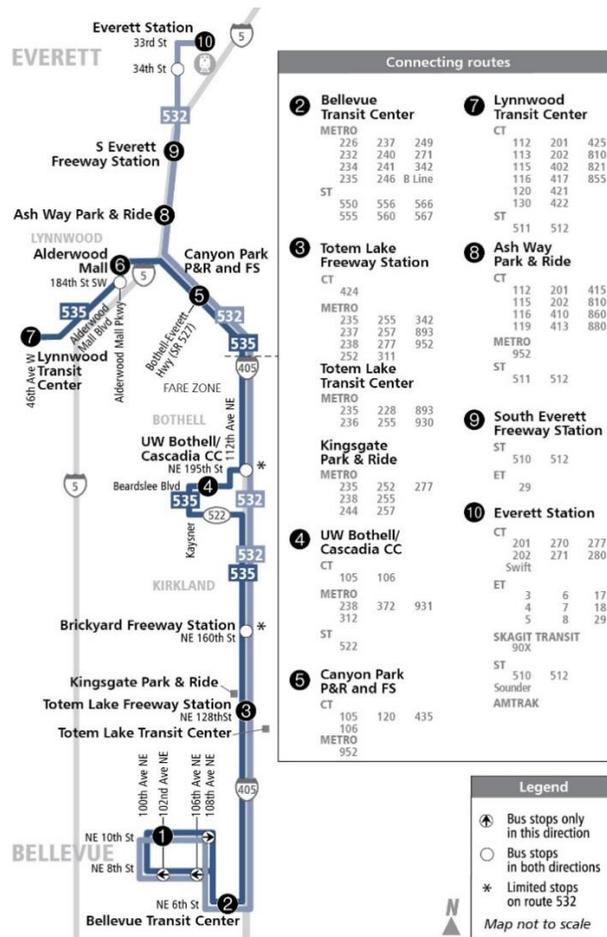


Figure 33 - Route 532 Average Daily Boardings

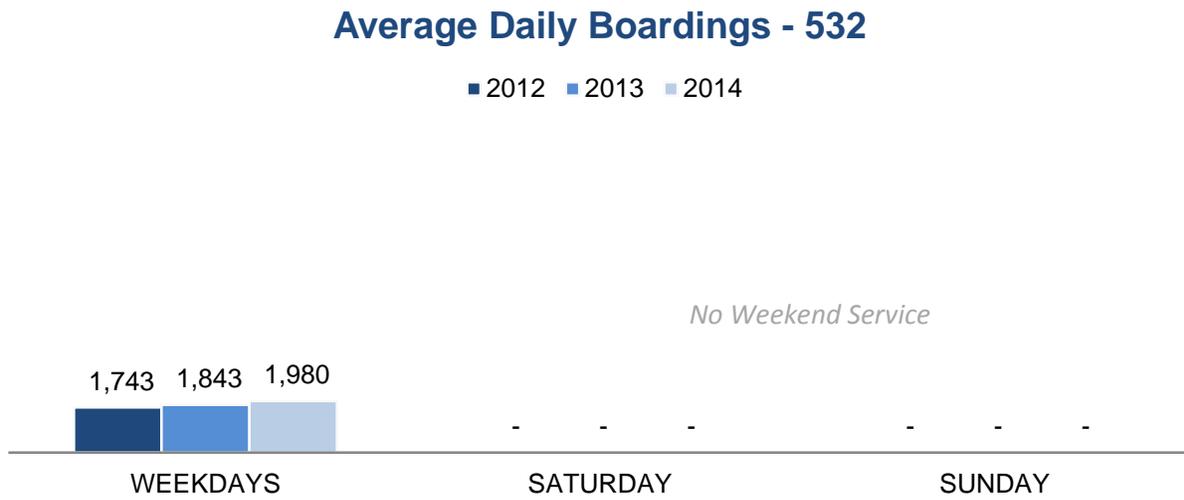
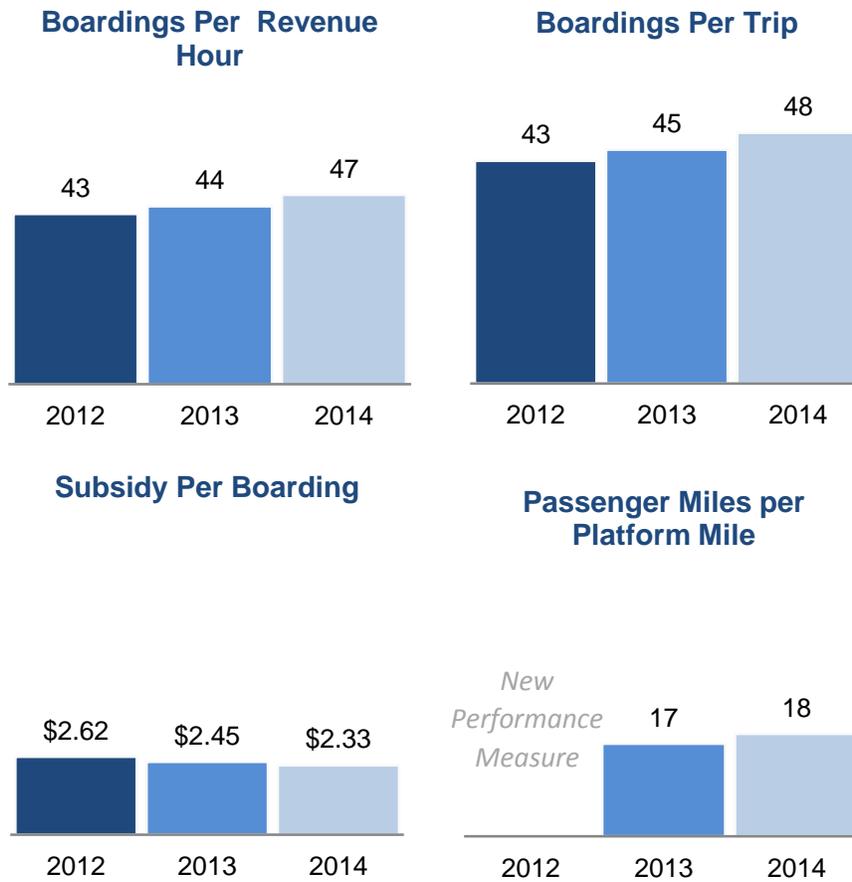


Figure 34 - Route 532 Performance Measures



Route 535: Lynnwood – Bellevue

The route operates Monday through Saturday between Lynnwood and Bellevue. Buses run every 30 to 60 minutes. This route also serves Alderwood Mall, Canyon Park Freeway Station, UW-Bothell/Cascadia College, Bothell Park-and-Ride, Brickyard Freeway Station and Totem Lake Freeway Station.

- September 1999: Route begins operation between Lynnwood and Bellevue with night and weekend services provided by Route 531
- September 2001: Route 531 discontinued on nights and weekends and replaced with trips on Route 535
- September 2006: Route 530 discontinued and replaced with 30-minute service on Route 535
- June 2007: Canyon Park Freeway Station opens
- November 2007: Totem Lake Freeway Station opens
- June 2011: Sunday service discontinued as part of the 2011 SIP efficiency initiative

Figure 35 - Route 535 Map

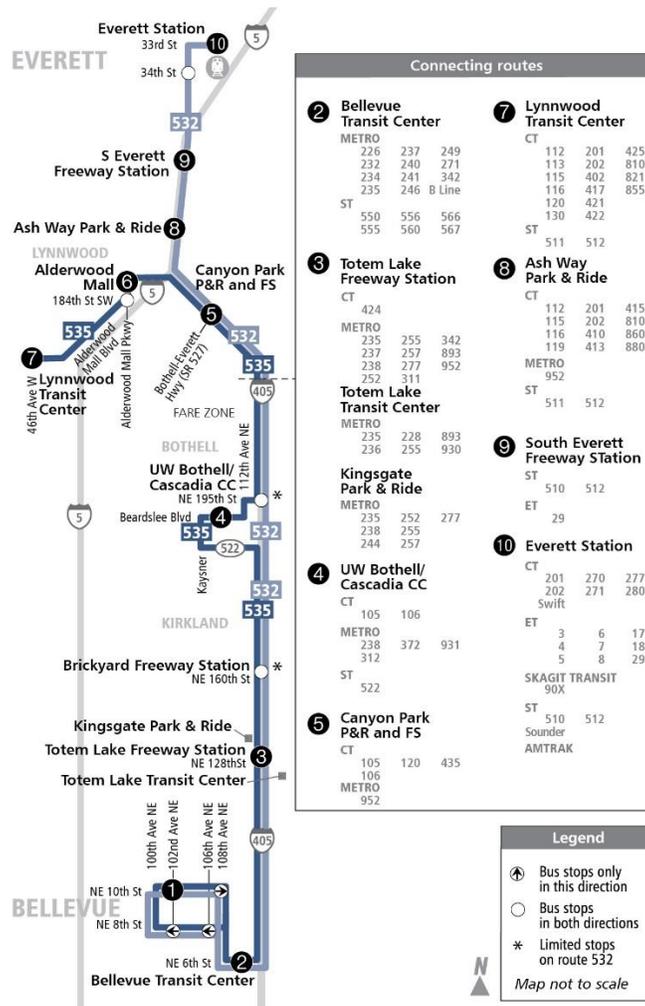


Figure 36 - Route 535 Average Daily Boardings

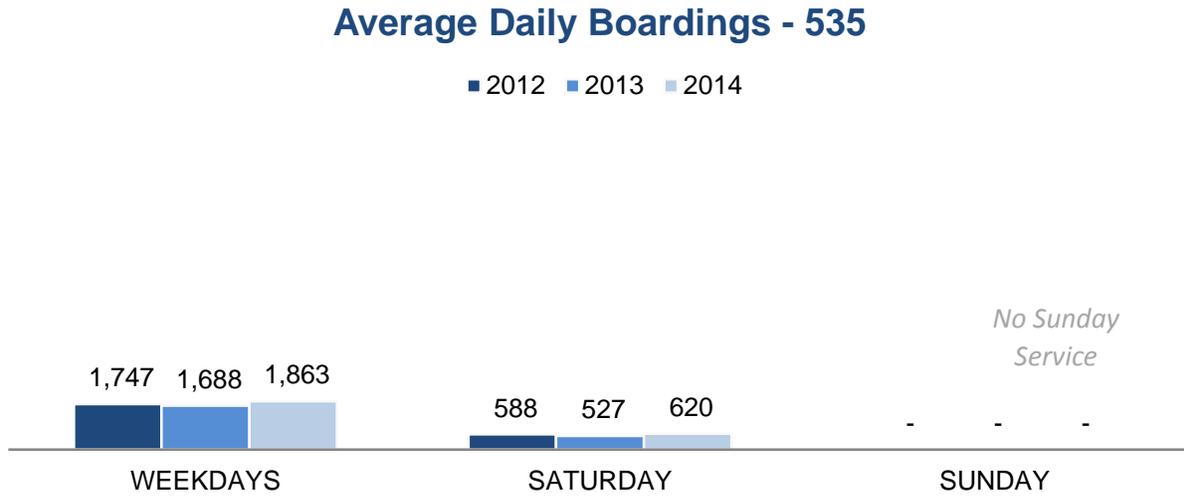
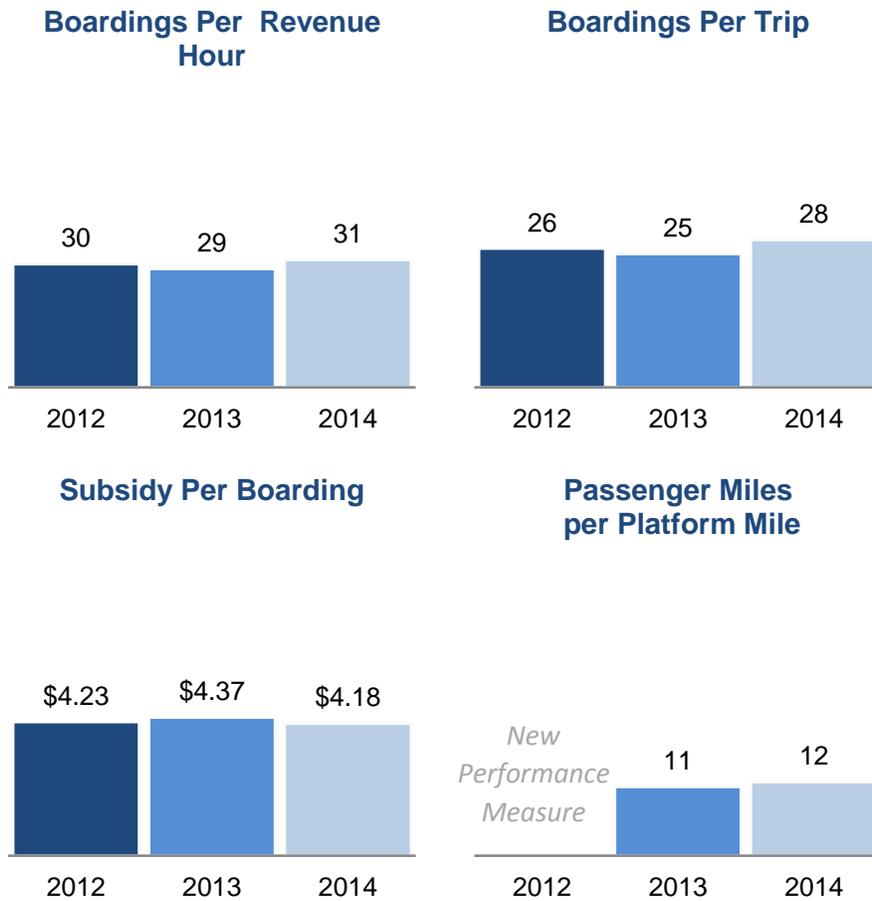


Figure 37 - Route 535 Performance Measures



Route 540: Kirkland – University District

The route operates two-way peak-hour service between Kirkland and the University District. Buses run every 22 to 30 minutes. This route also serves South Kirkland Park-and-Ride, Clyde Hill/Yarrow Point Freeway Station and the Evergreen Point Freeway Station.

- September 2000: Route begins operation seven days a week between Redmond and the University District
- February 2008: Portion of route between Kirkland and Redmond replaced by King County Metro Route 248 and weekend service discontinued
- June 2011: Midday service discontinued

Figure 38 - Route 540 Map



Figure 39 - Route 540 Average Daily Boardings

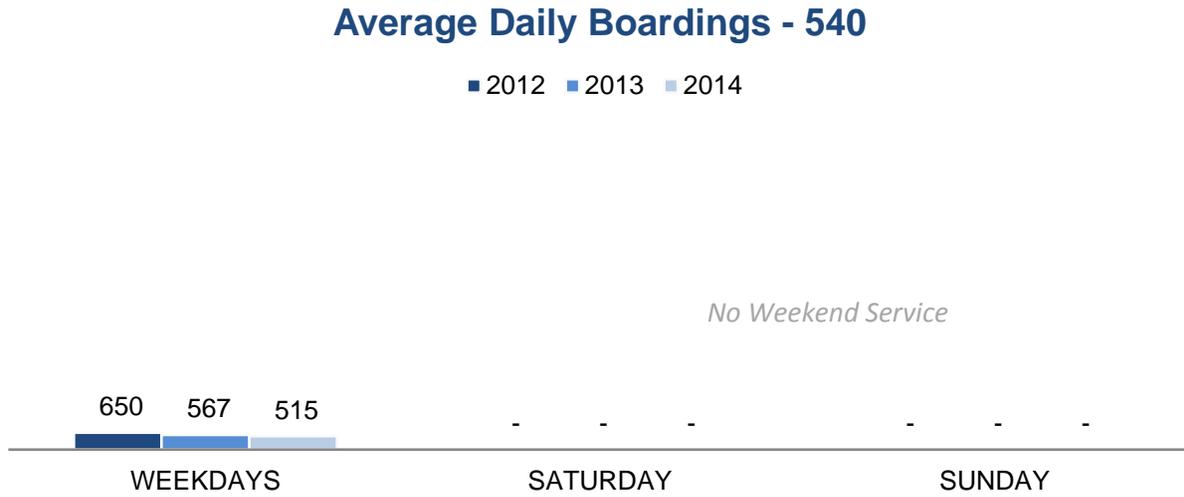
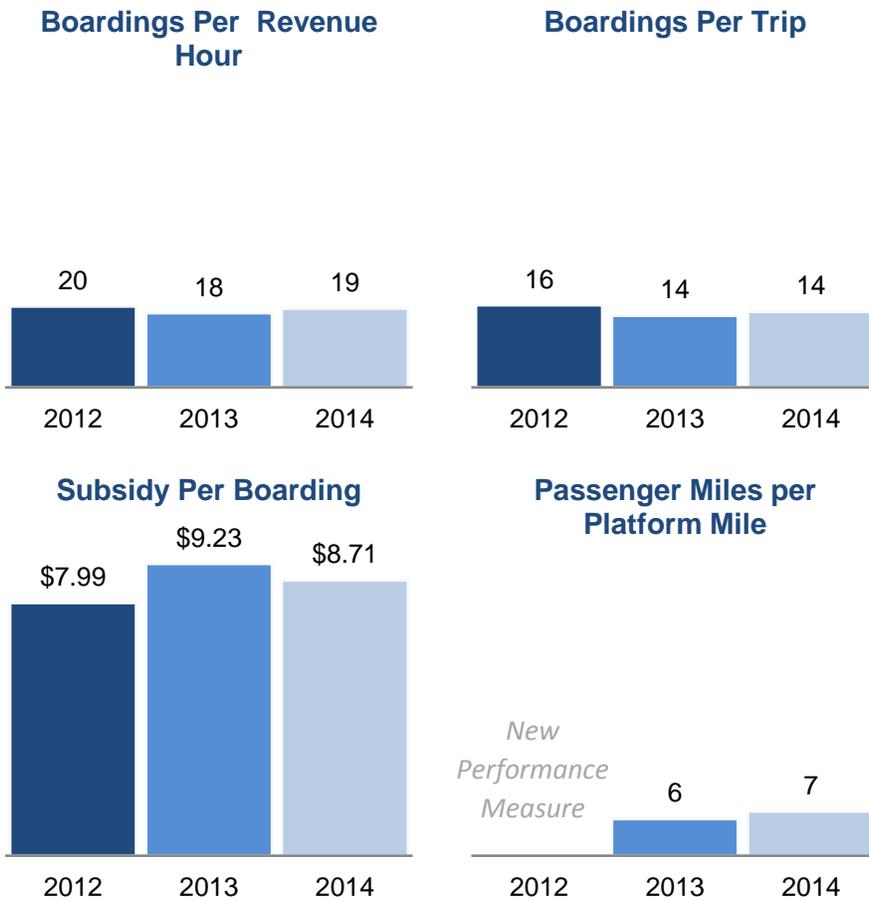


Figure 40 - Route 540 Performance Measures



Route 542: Redmond – Green Lake via University District

The route operates two-way peak-hour service between Redmond and the I-5/NE 65th Street Park-and-Ride. Buses run every 15 to 20 minutes. This route also serves Bear Creek Park-and-Ride, the NE 51st Street Freeway Station, Overlake Transit Center/NE 40th Street, Clyde Hill/Yarrow Point Freeway Station, Evergreen Point Freeway Station and the University District.

- October 2010: Route begins operation

2016 Service Change

Add 30-minute midday frequency to Redmond, the Evergreen Point Freeway Station, and the University District on SR 520.

Figure 41 - Route 542 Map

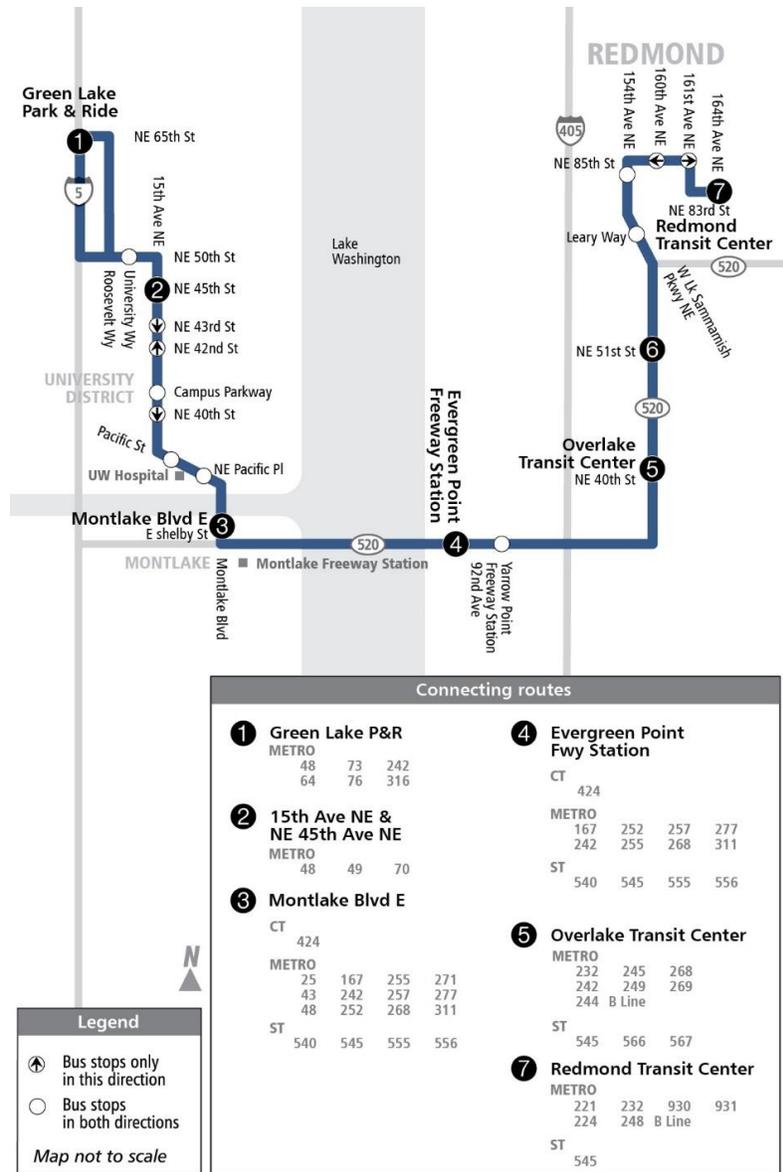
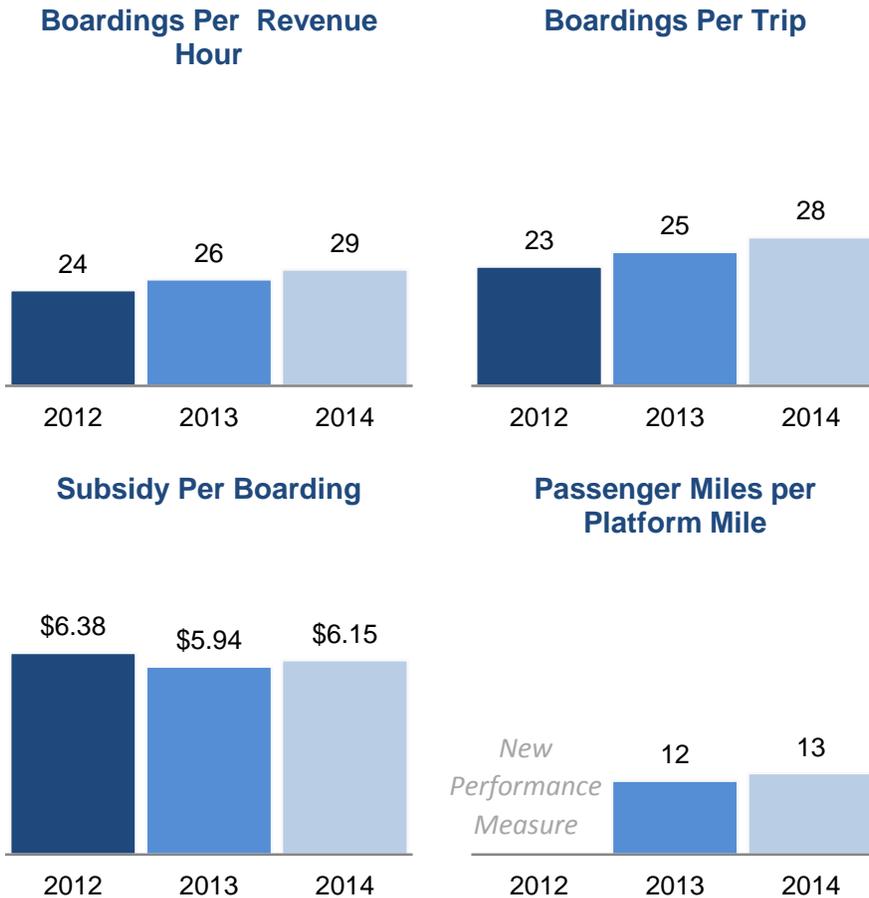


Figure 42 - Route 542 Average Daily Boardings



Figure 43 - Route 542 Performance Measures





Route 545: Redmond – Seattle

The route operates seven days a week between Redmond and Seattle. Buses run every 5 to 60 minutes. This route also serves Bear Creek Park-and-Ride, the NE 51st Street Freeway Station, Overlake Transit Center/NE 40th Street, Clyde Hill/Yarrow Point Freeway Station, Evergreen Point Freeway Station and the Montlake Freeway Station.

- September 2000: Route begins operation Monday through Friday between Redmond and downtown Seattle as routes 545 and 546
- February 2002: Overlake Transit Center opens and Route 546 discontinued
- September 2003: Saturday service begins
- September 2004: Sunday service begins
- September 2005: Weekday peak period service improved to every 10 minutes and stop added on Bellevue Avenue E
- February 2008: Weekday midday service improved to every 15 minutes

2016 Service Change

In order to address crowding and ridership growth, an additional 15 weekday trips will be in September 2016.

Figure 44 - Route 545 Map

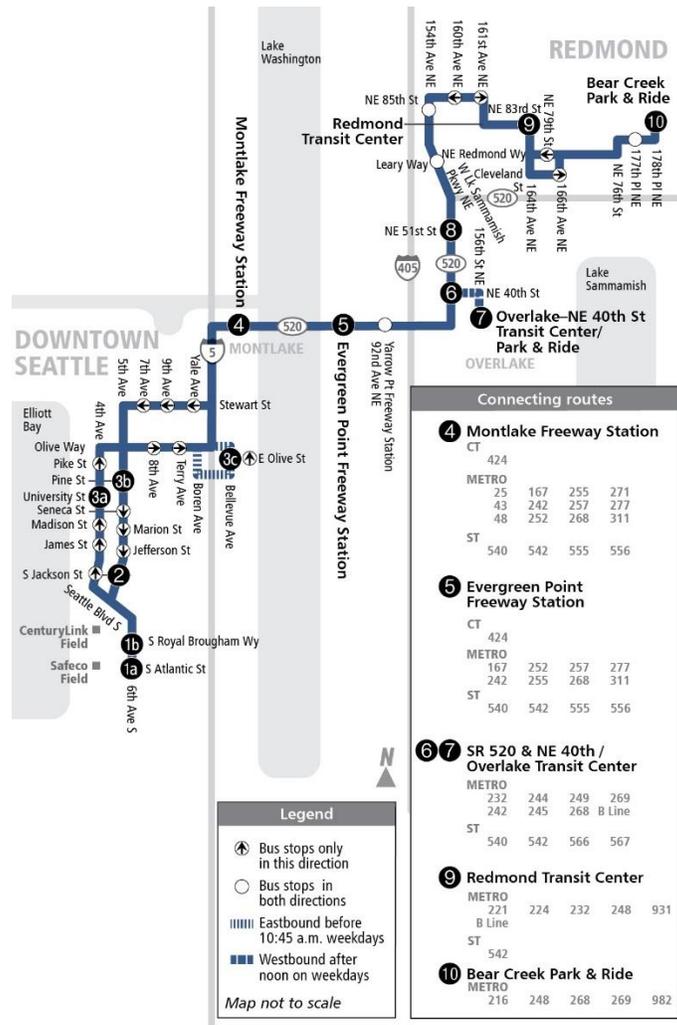


Figure 45 - Route 545 Average Daily Boardings

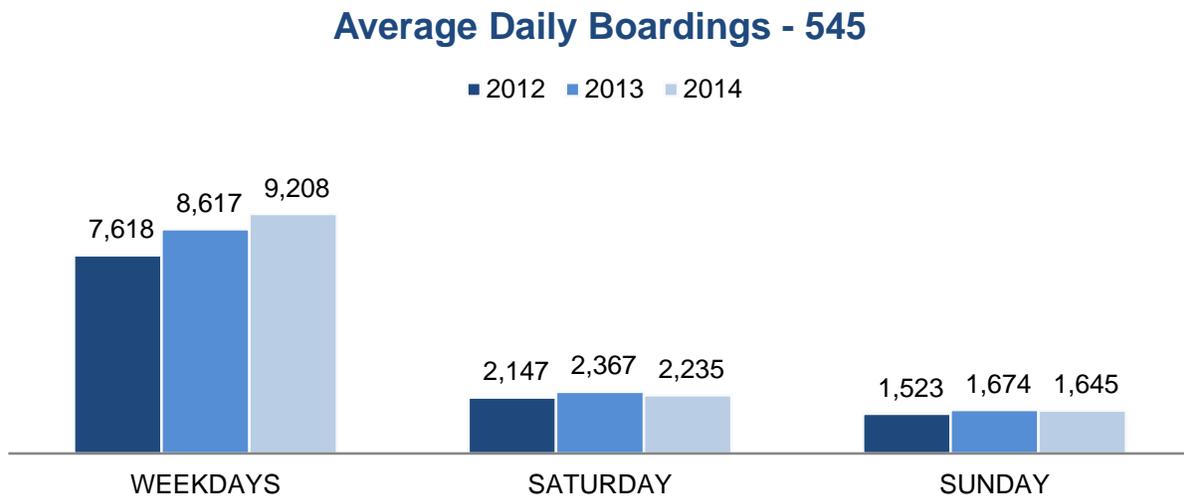
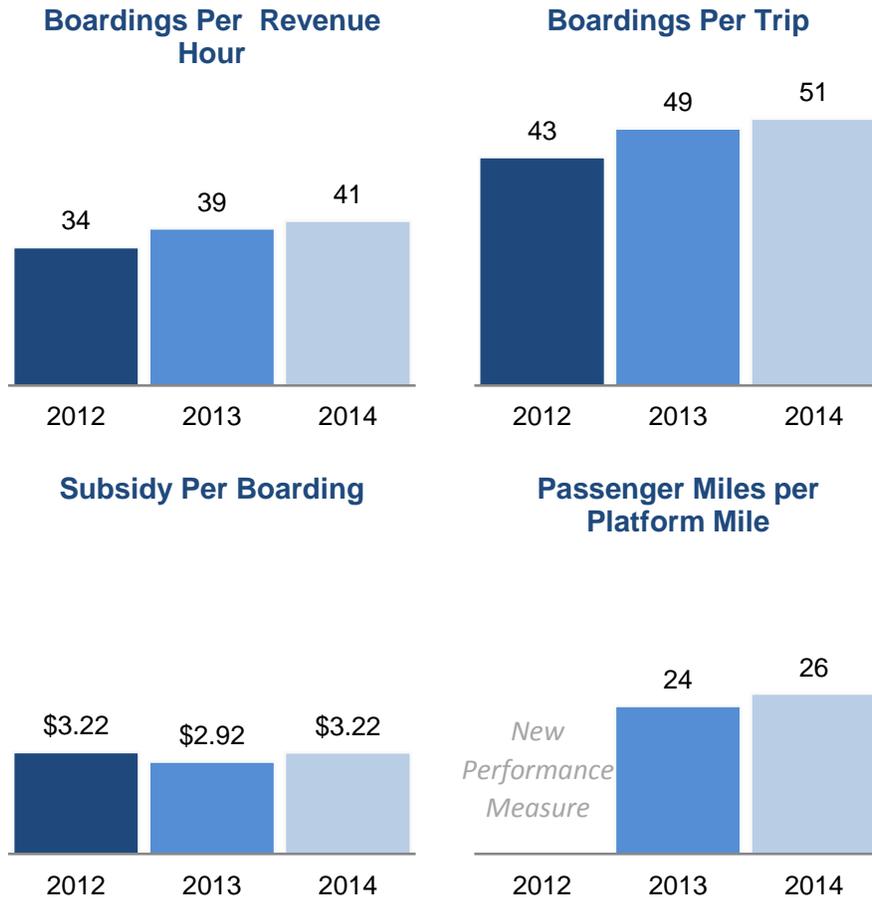


Figure 46 - Route 545 Performance Measures



Route 550: Bellevue – Seattle

The route operates seven days a week between Bellevue and Seattle. Buses run every 5 to 42 minutes. This route also serves South Bellevue Park-and-Ride, Mercer Island and the Rainier Avenue Freeway Station.

- September 1999: Route begins seven day a week operation replacing King County Metro Route 226
- September 2009: Saturday service improved to every 15 minutes
- September 2013: Weekday peak period service improved to every five minutes

Figure 47 - Route 550 Map

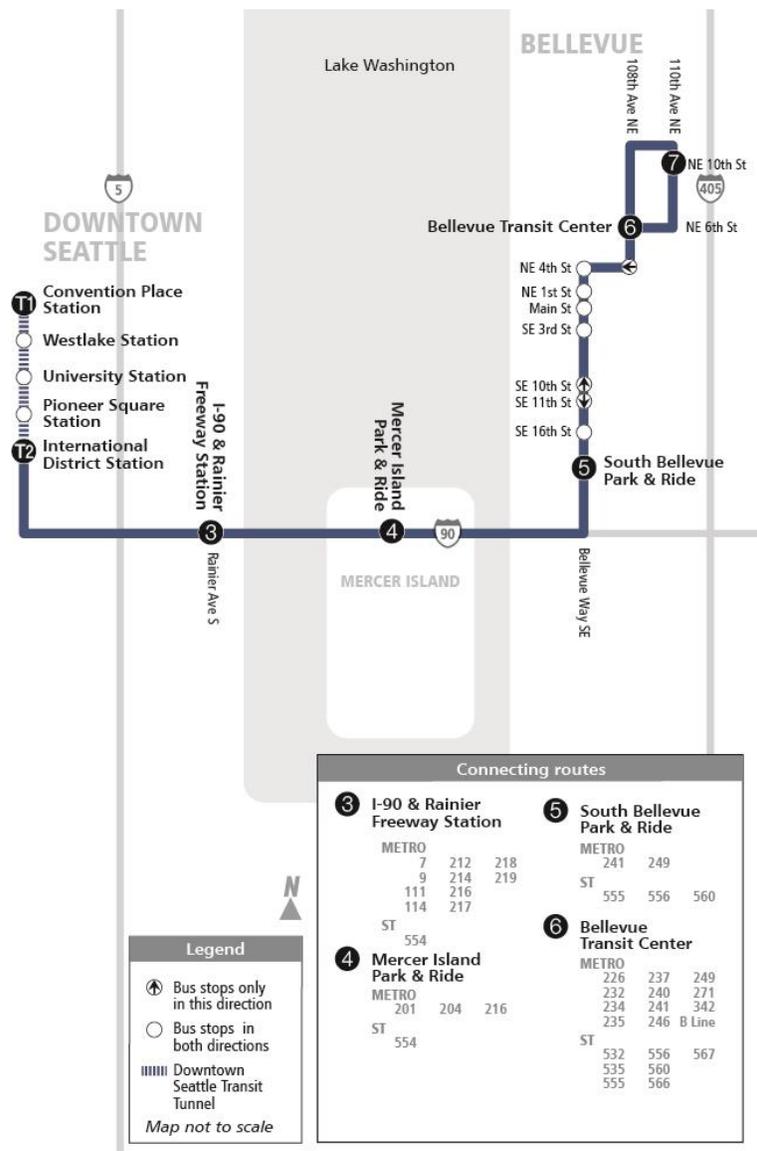


Figure 48 - Route 550 Average Daily Boardings

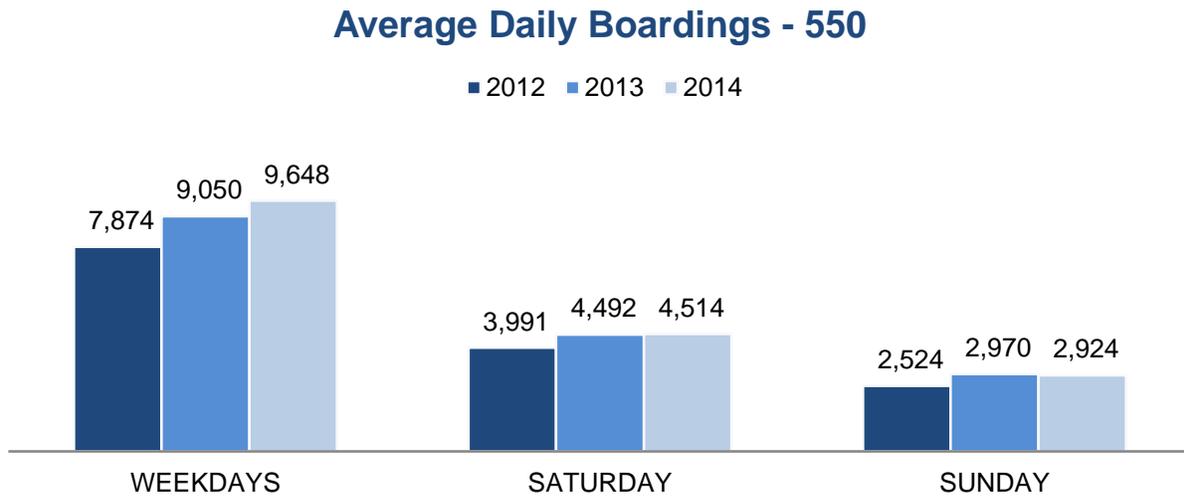
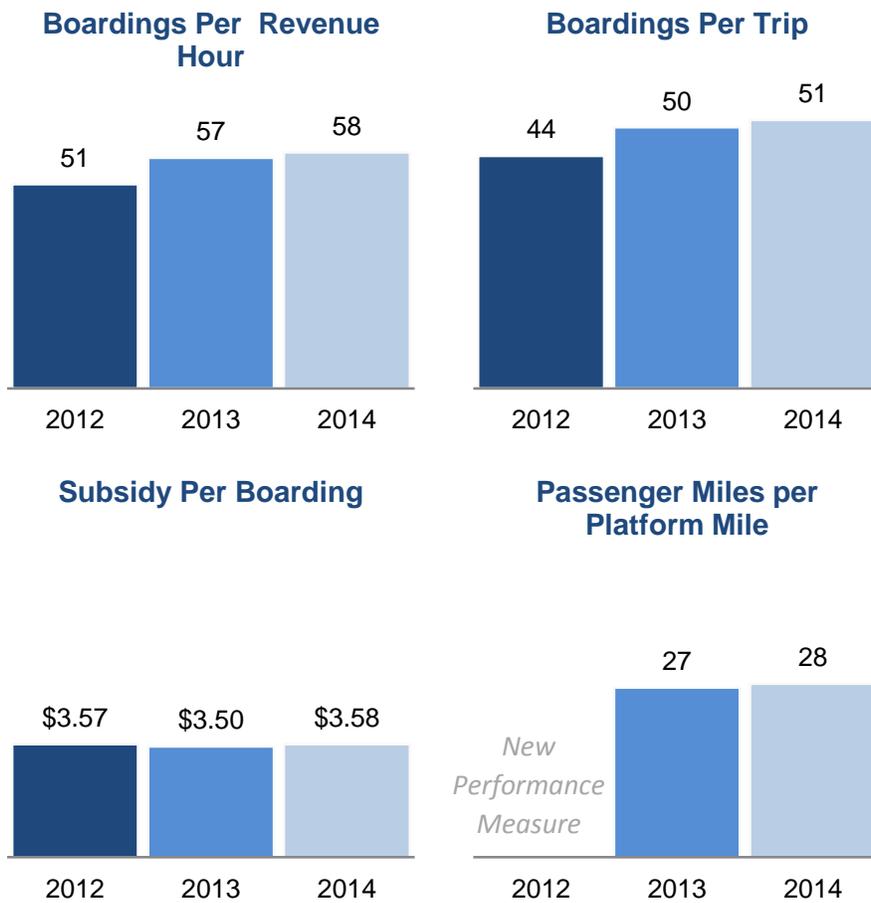


Figure 49 - Route 550 Performance Measures





Route 554: Issaquah – Seattle

The route operates seven days a week between Issaquah and Seattle. Buses run every 20 to 60 minutes. This route also serves Issaquah Highlands, Eastgate Freeway Station, Mercer Island and the Rainier Avenue Freeway Station.

- September 2001: Route begins seven day a week operation replacing King County Metro Route 211
- September 2003: Weekday service extended to Issaquah Highlands (serving interim park-and-ride)
- September 2006: Route revised to serve downtown Issaquah and select weekday trips extended to Sammamish
- June 2008: Expanded Issaquah Transit Center opens
- June 2009: Eastgate Freeway Station opens and fifteen minute midday service extended to Issaquah Transit Center.
- June 2011: Midday service on weekdays revised to every 20 minutes between Issaquah Highlands and Seattle and span of 30-minute service on weekends reduced to 10:00 a.m. to 7:00 p.m.

2016 Service Change

Add 15-minute peak service between Issaquah and Seattle to meet growing demand.

Figure 50 - Route 554 Map

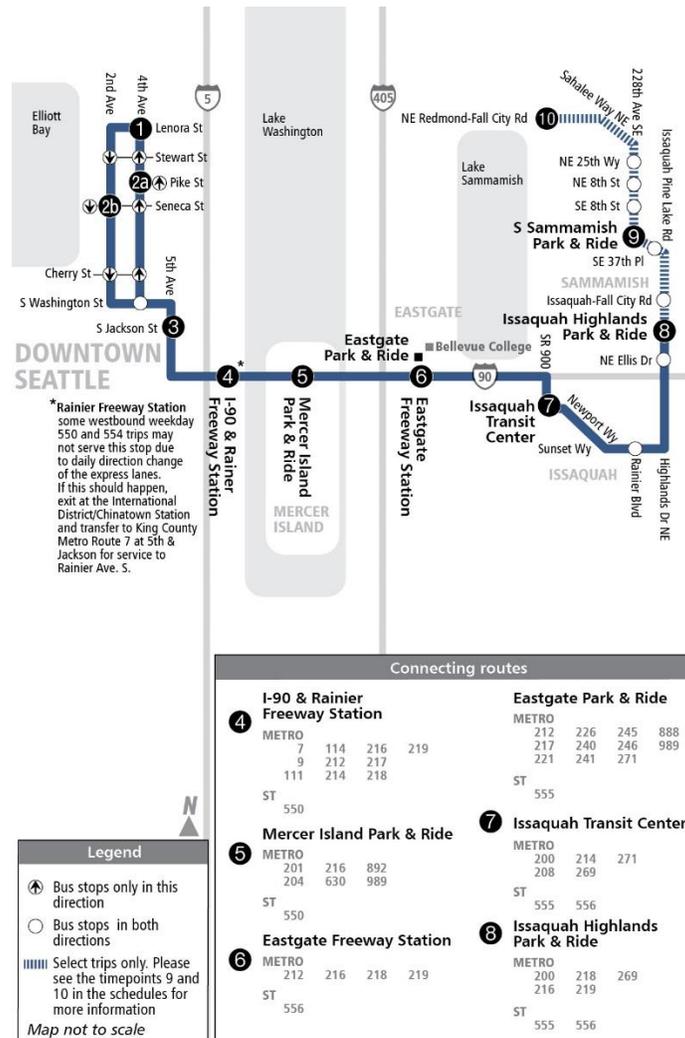


Figure 51 - Route 554 Average Daily Boardings

Average Daily Boardings - 554

■ 2012 ■ 2013 ■ 2014

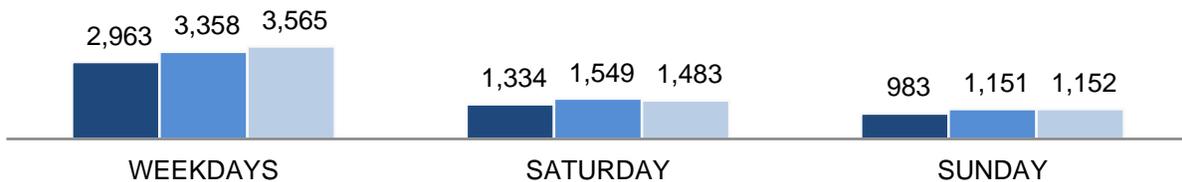
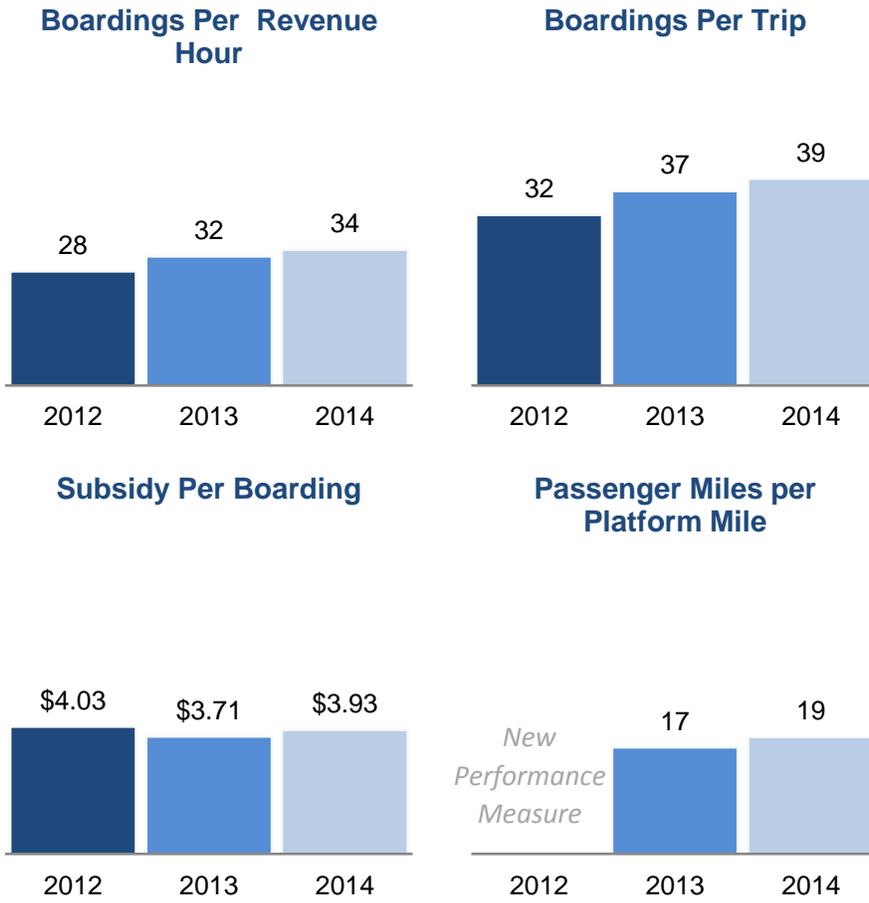


Figure 52 - Route 554 Performance Measures





Route 555/556: Northgate – Bellevue – Issaquah

These two routes operate peak periods on weekdays between Issaquah and Northgate. Buses run every 23 to 50 minutes. These routes also serve Issaquah Highlands, Eastgate, Bellevue, Clyde Hill/Yarrow Point Freeway Station, Evergreen Point Freeway Station, University District (Route 556), and Montlake Freeway Station (Route 555).

- September 2001: Route begins as Route 555
- September 2005: Trips operating westbound in the morning and eastbound in the afternoon restructured to operate through the University District as Route 556
- June 2006: Issaquah Highlands Park-and-Ride opens and weekend service extended to Issaquah Highlands
- September 2006: Service extended to Issaquah Highlands
- June 2008: Expanded Issaquah Transit Center opens
- June 2009: Eastgate Freeway Station opens and service operates via Bellevue Way and 112th Avenue



Long-term Construction Re-route

A long-term construction closure of 112th Avenue SE in Bellevue requires route revisions: Revise to use Bellevue Way SE and NE 4th Street instead of 112th Avenue SE and NE 6th Street between South Bellevue Park-and-Ride and Bellevue Transit Center. Bus stops on 112th Avenue SE would no longer be served by Routes 555/556, replaced by new stops on Bellevue Way SE and on NE 4th Street.

Figure 53 - Route 555/556 Map

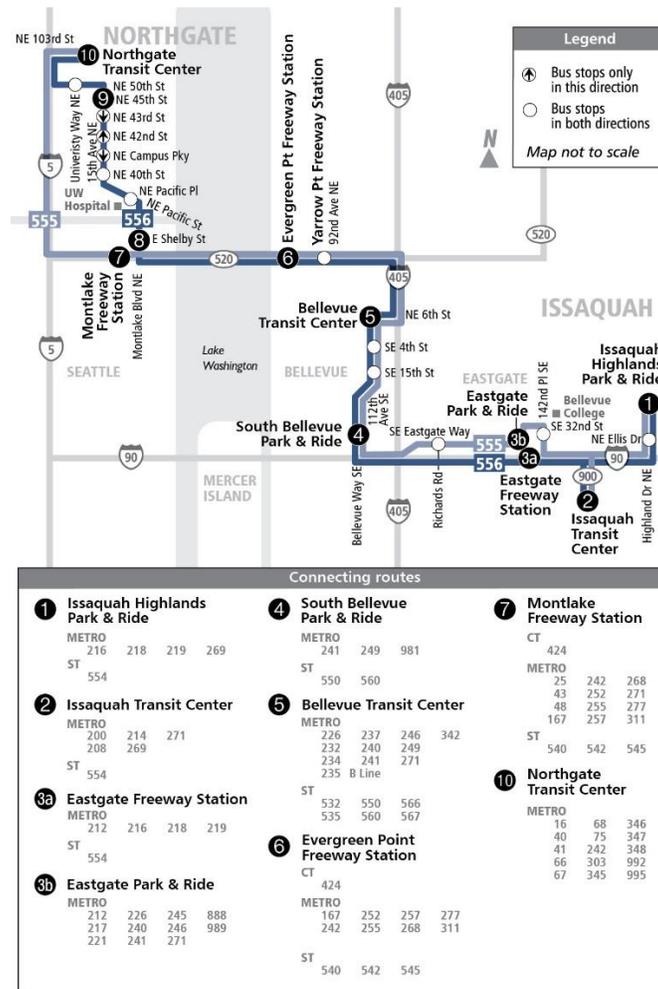


Figure 54 - Route 555 Average Daily Boardings

Average Daily Boardings - 555

■ 2012 ■ 2013 ■ 2014

No Weekend Service



Figure 55 - Route 555 Performance Measures

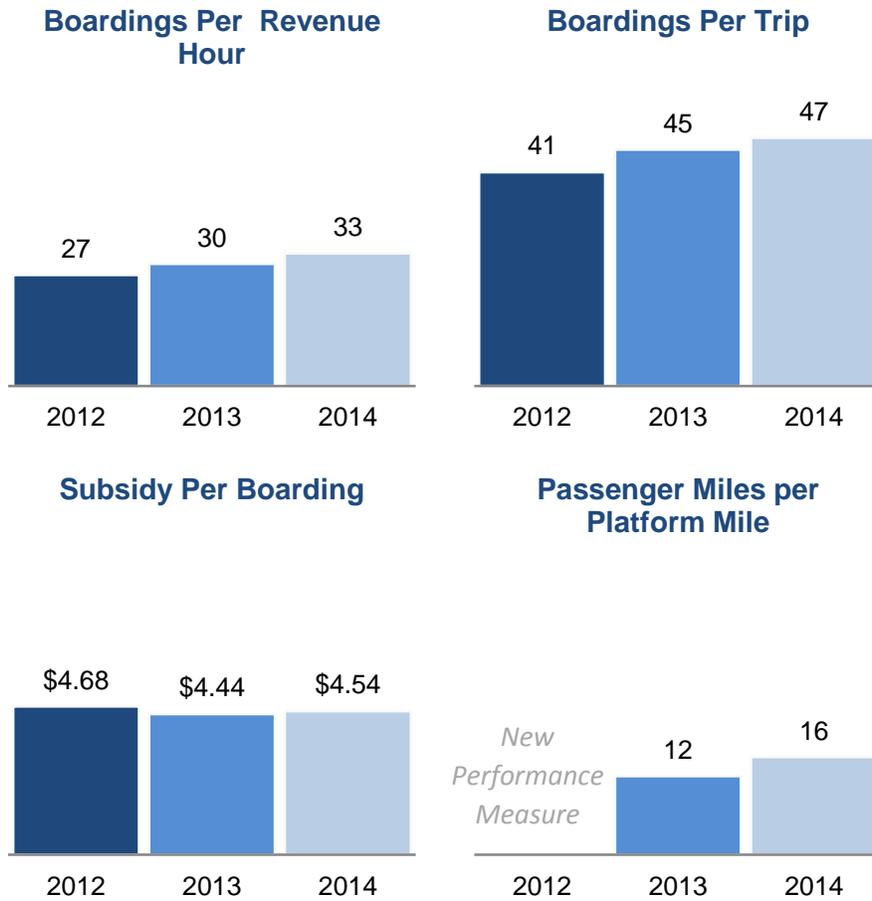
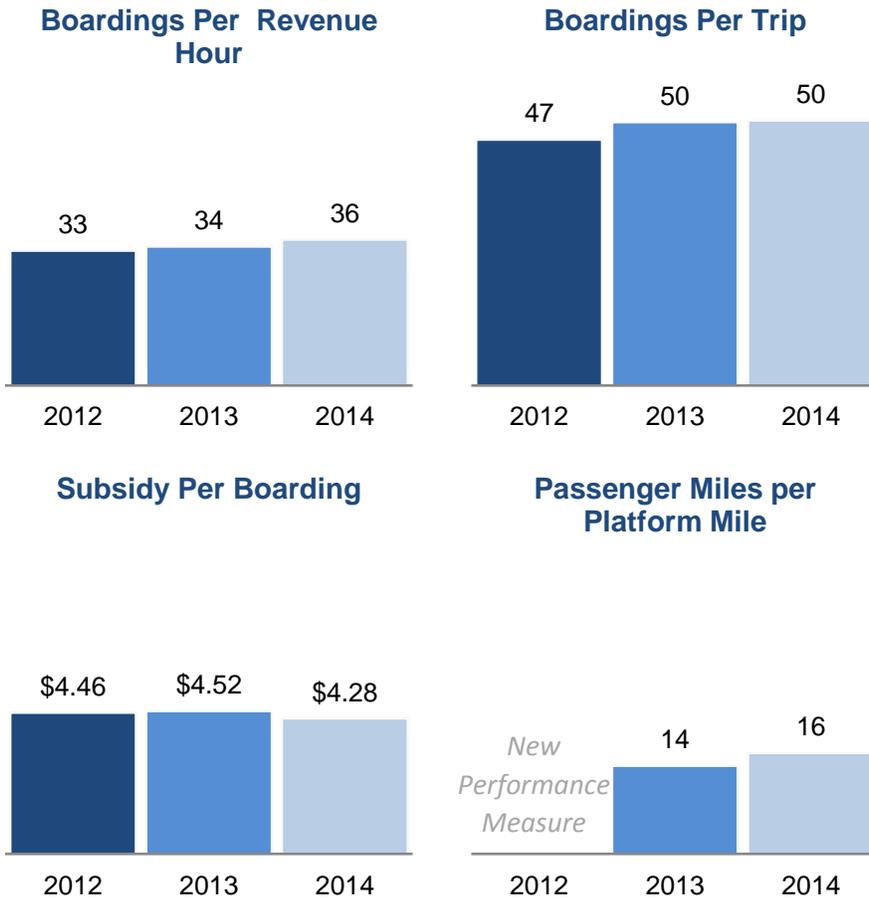


Figure 56 - Route 556 Average Daily Boardings



Figure 57 - Route 556 Performance Measures





Route 560: Bellevue – Seatac – West Seattle

The route operates seven days a week between Westwood Village and Bellevue. Buses run every 30 to 60 minutes. This route also serves Burien, Sea-Tac Airport, SeaTac/Airport Station, Renton, Kenndale, Newport Hills Park-and-Ride and South Bellevue.

- September 1999: Weekday peak period service between the airport and West Seattle begins as Route 570
- September 2000: Route 560 begins seven days a week between the airport and Bellevue and midday service added to Route 570
- September 2003: Routes 560 and 570 merged as new route between West Seattle and Bellevue
- February 2010: Midday service on weekdays between Burien and West Seattle reduced to hourly frequency
- June 2011: Service between West Seattle and Burien reduced to weekday peak periods
- June 2013: Route restructured to current operation

Long-term Construction Re-route

A long-term construction closure of 112th Avenue SE in Bellevue requires route revisions: Revise Bellevue routing to use I-405 and NE 6th Street instead of I-90, Bellevue Way SE and 112th Avenue SE between Newport Hills Park-and-Ride and the Bellevue Transit Center. Bus stops at the South Bellevue Park-and-Ride and along 112th Avenue SE would no longer be served by Route 560.

Figure 58 - Route 560 Map

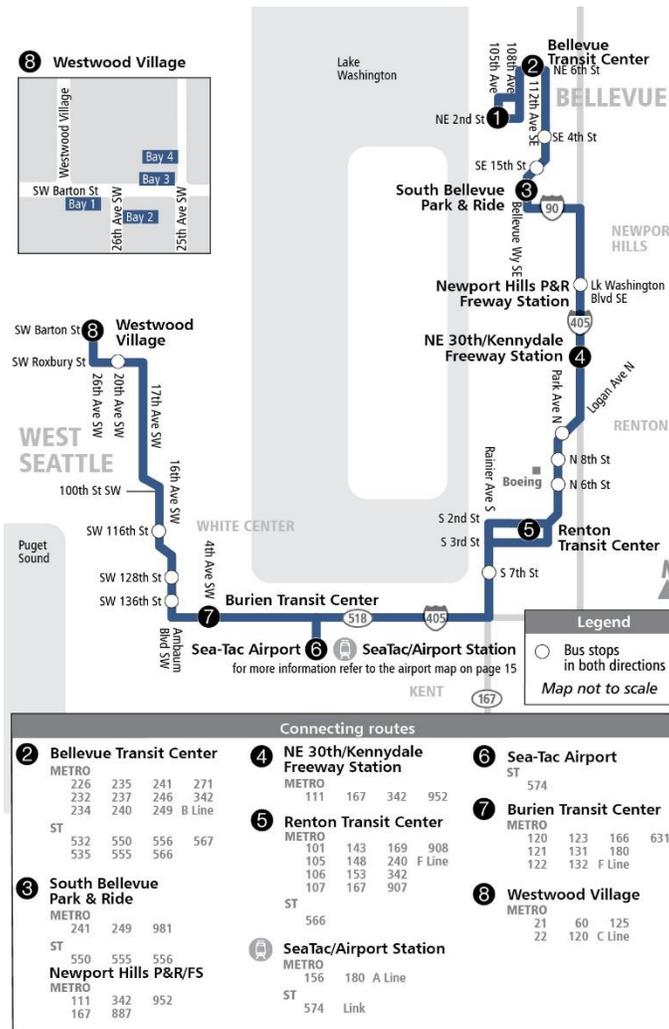


Figure 59 - Route 560 Average Daily Boardings

Average Daily Boardings - 560

■ 2012 ■ 2013 ■ 2014

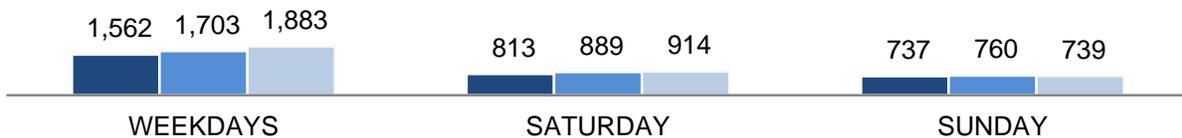
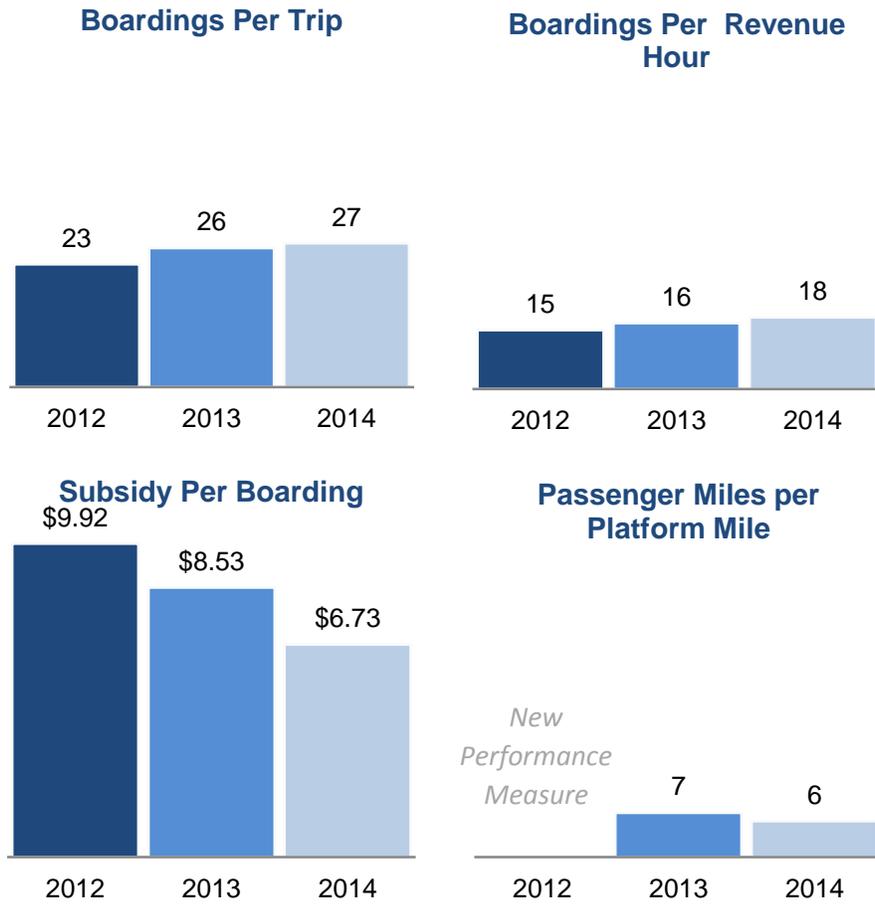


Figure 60 - Route 560 Performance Measures





Route 566: Auburn – Overlake

The route operates five days a week between Auburn and Overlake. Buses run every 12 to 60 minutes. This route also serves Auburn Park-and-Ride, Kent, Renton and Bellevue.

- September 1999: Route begins weekday operation as Route 565 between Federal Way and Bellevue
- September 2003: Turn back trips between Auburn and Bellevue begin (Route 564)
- September 2005: Route is extended to Overlake Transit Center
- June 2006: Route 564 extended to South Hill Mall replacing portions of ST Express Route 585 (Lakewood-Auburn)
- February 2010: Routes 564 and 565 are consolidated into current routing (ST Express Route 578 replaces intercounty service between Auburn and Sumner)
- June 2013: Select trips converted to Route 567 and midday trips operate between Auburn and Renton
- June 2015: Travel time analysis completed and evening trips discontinued

Figure 61 - Route 566 Map

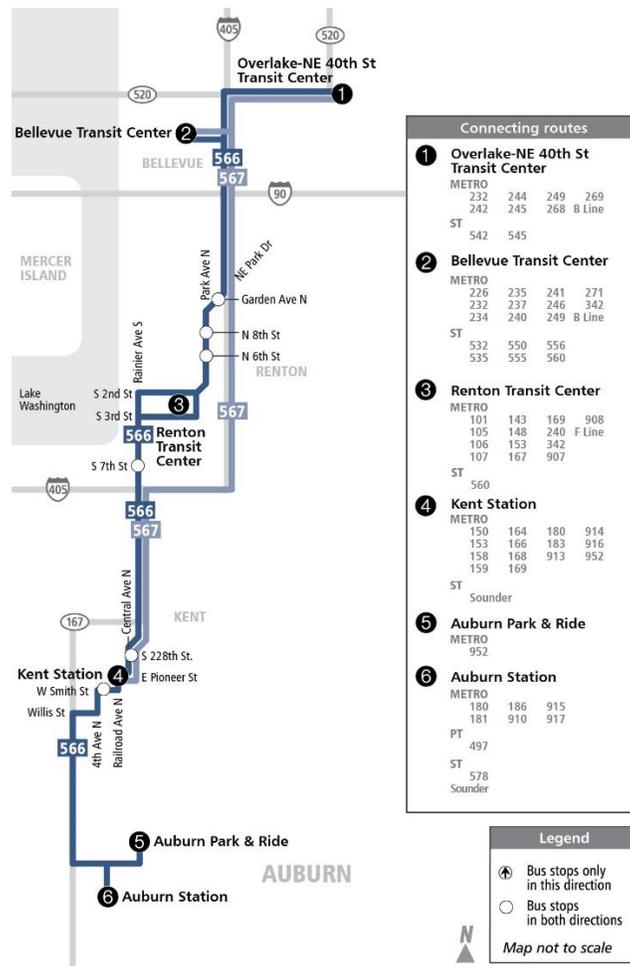


Figure 62 - Route 566 Average Daily Boardings

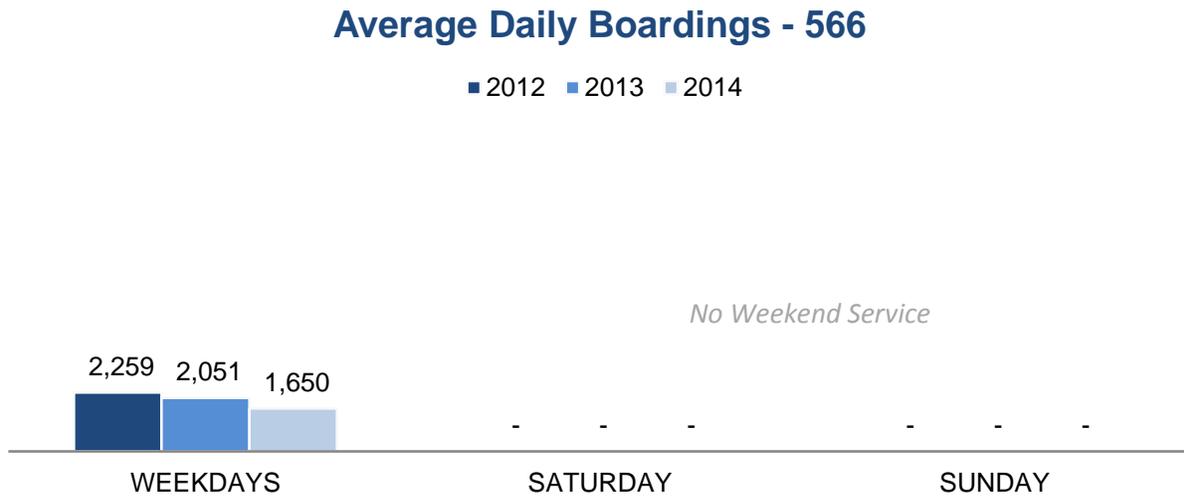
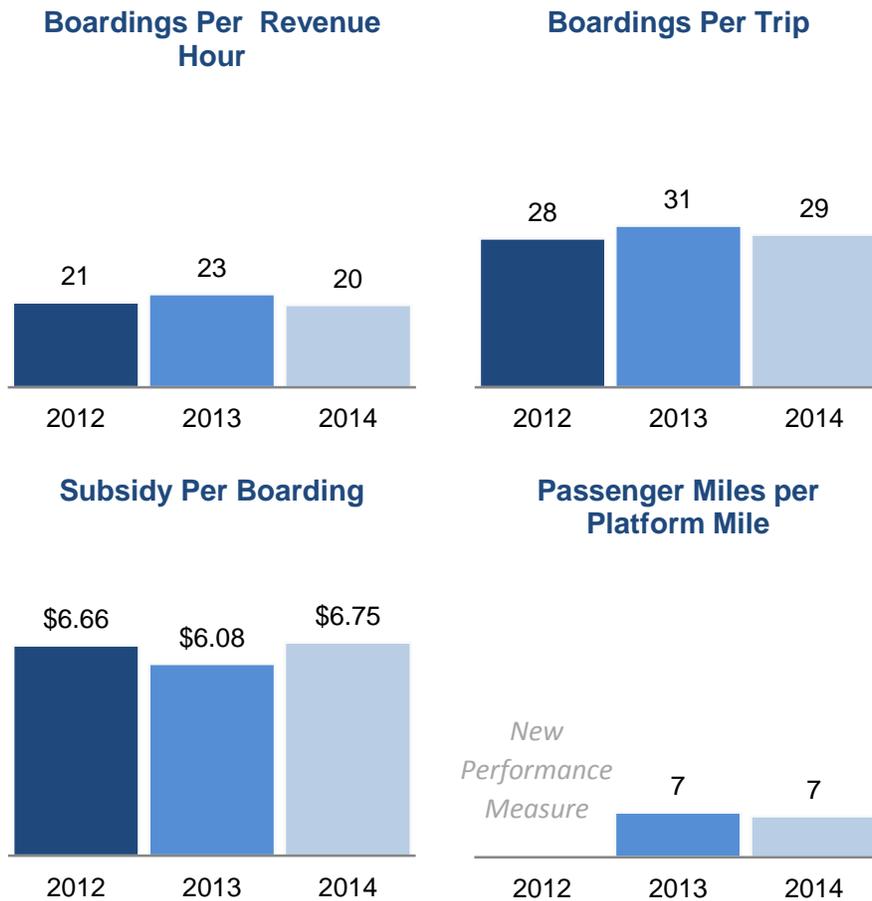


Figure 63 - Route 566 Performance Measures



Route 567: Kent – Overlake

The route operates during peak hours in the peak direction between Kent and Overlake. Buses run every 20 to 35 minutes. This route also serves Bellevue.

- June 2013: Route begins operation connecting peak-direction Sounder trips to Bellevue and Overlake Transit Center

2016 Service Change

An additional two new trips are approved to meet new Sounder trips that are starting in September 2016.

Figure 64 - Route 567 Map

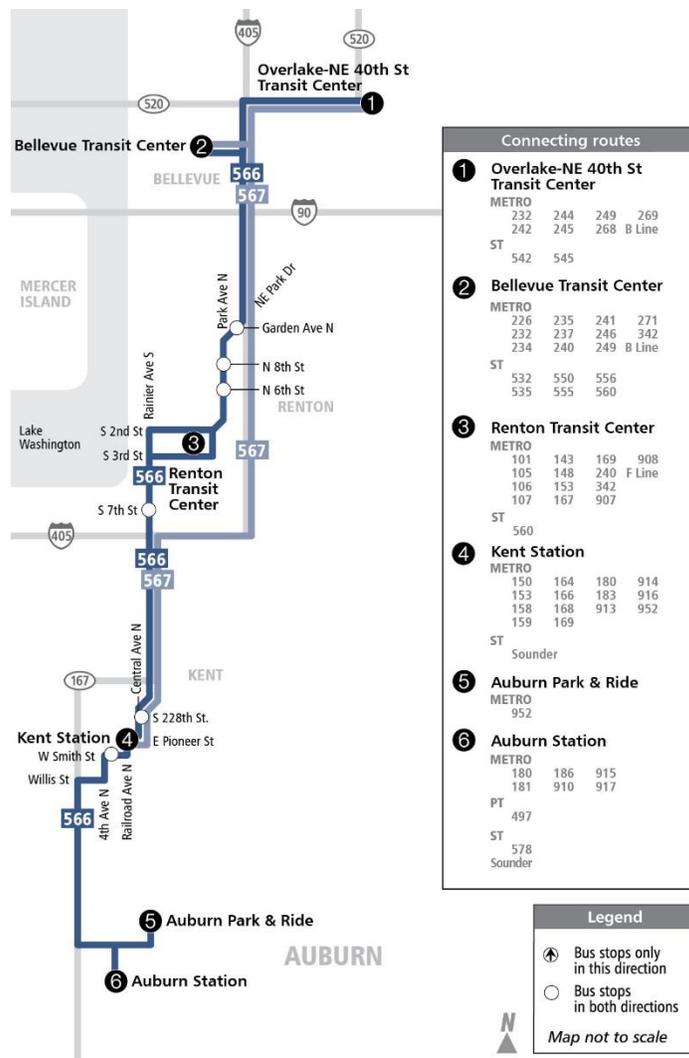


Figure 65 - Route 567 Average Daily Boardings

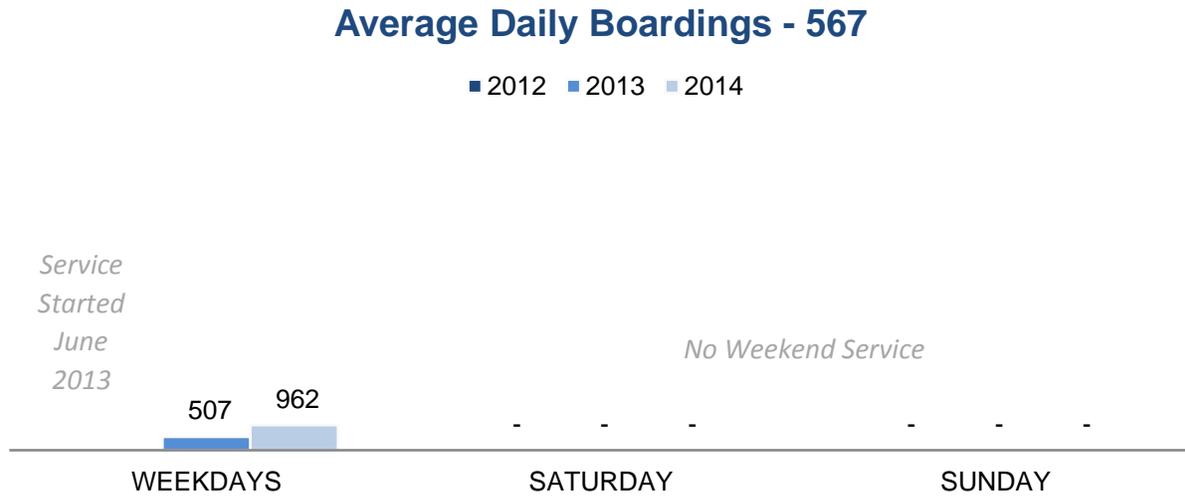
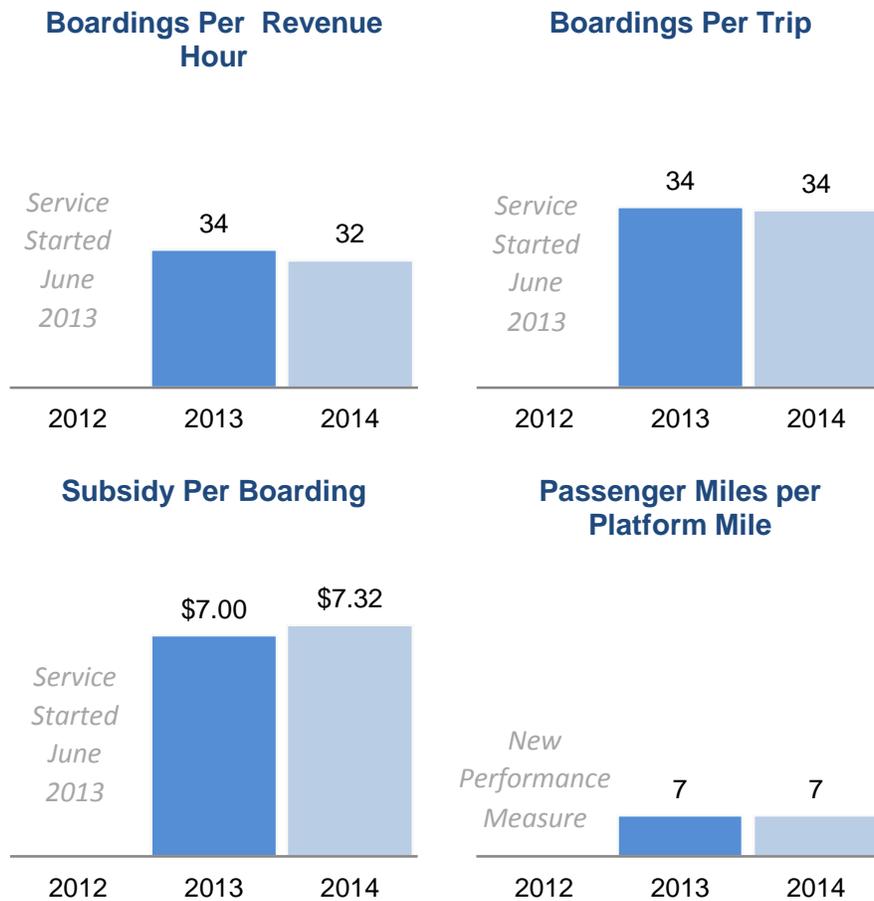


Figure 66 - Route 567 Performance Measures



Route 574: Lakewood – Seatac Airport

The route operates seven days a week between Lakewood and Sea-Tac Airport. Buses run every 15 to 60 minutes. This route also serves SR-512 Park-and-Ride, Tacoma Dome Station, Federal Way, Star Lake Park-and-Ride and Kent-Des Moines Park-and-Ride.

- September 1999: Weekday service begins
- May 2000: Weekend service begins
- June 2005: Late morning frequency on weekdays changed from every 30 minutes to every 60 minutes
- February 2010: Routing modified to serve SeaTac/Airport Station and 30 minute frequency restored on weekdays

Figure 67 - Route 574 Map

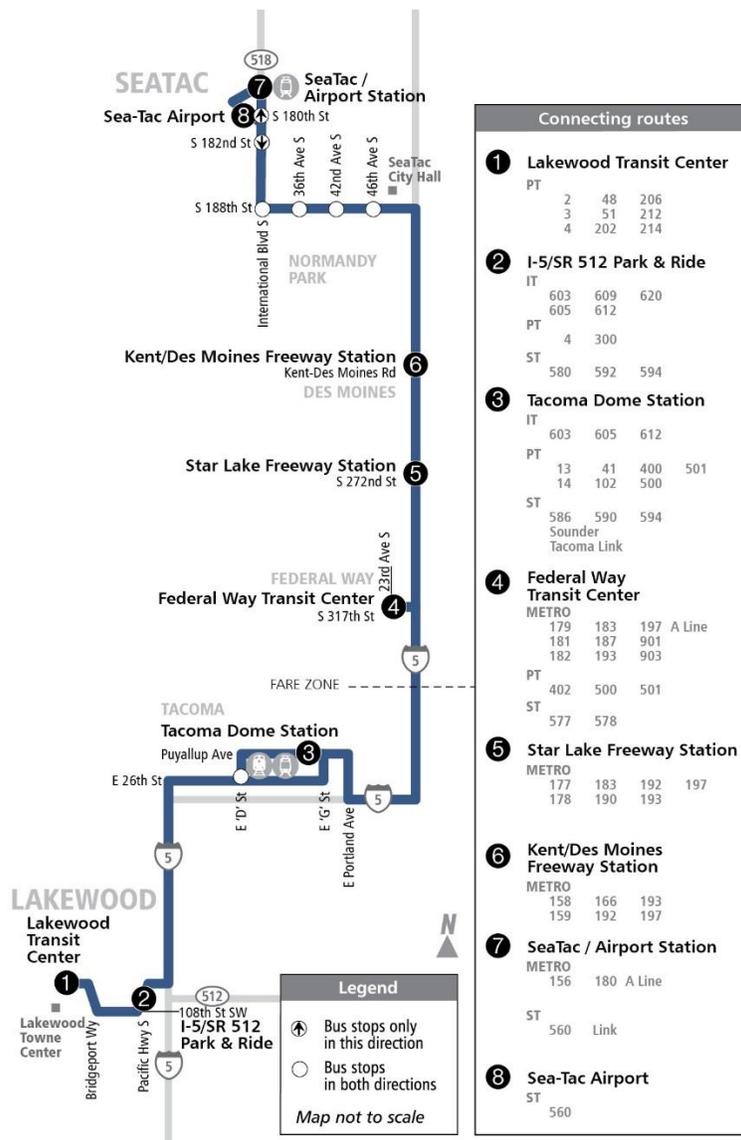


Figure 68 - Route 574 Average Daily Boardings

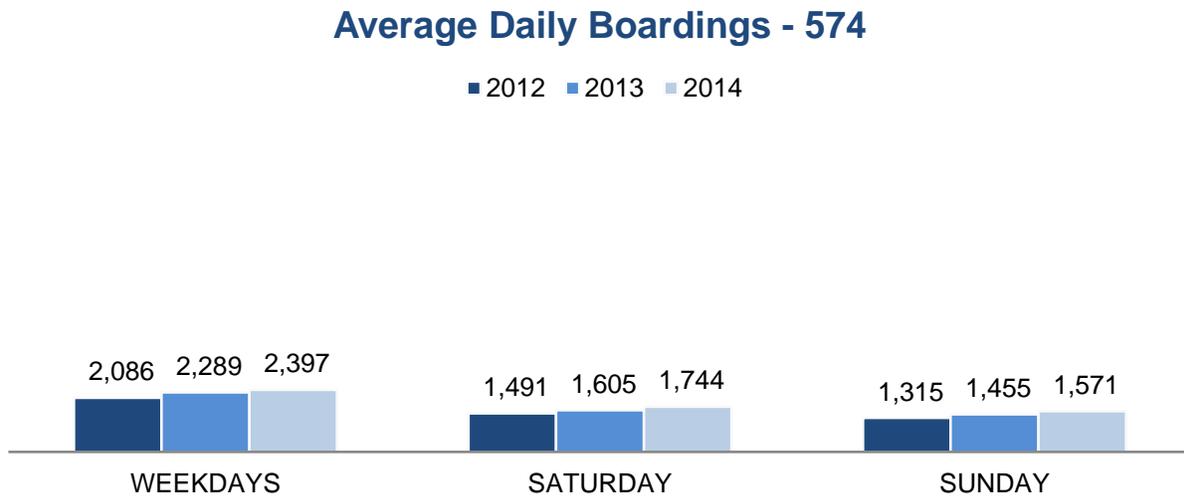
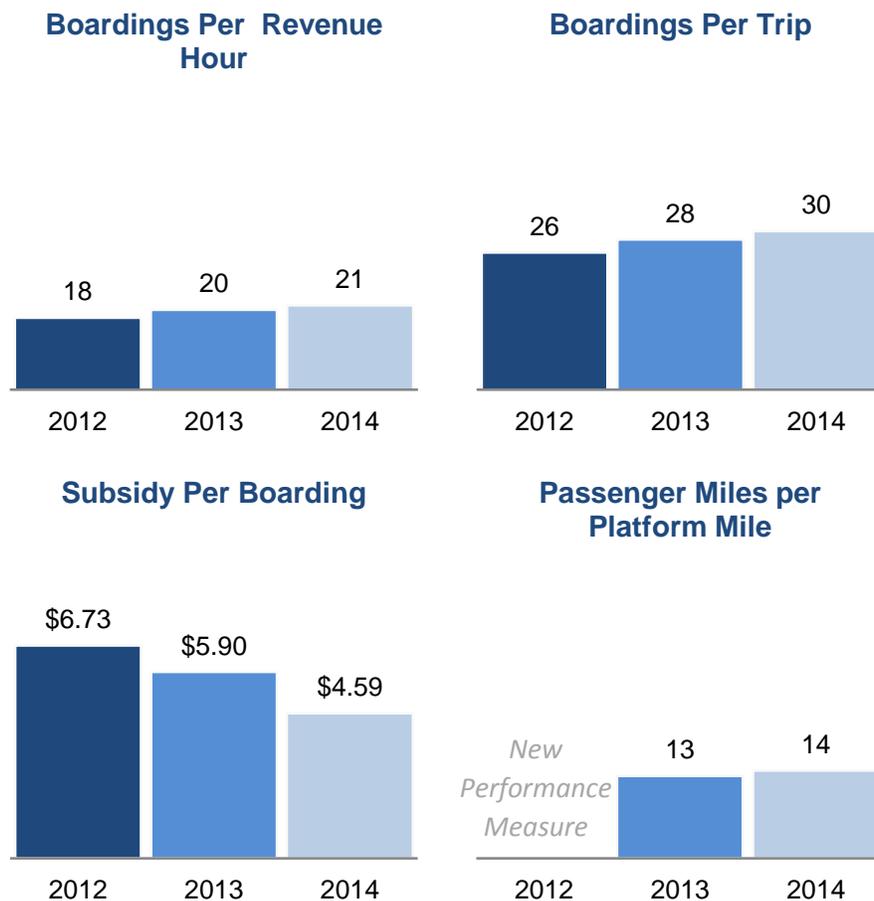


Figure 69 - Route 574 Performance Measures



Route 577: Federal Way – Seattle

The route operates seven days a week between Federal Way and downtown Seattle. Buses run every 8 to 60 minutes.

- February 2006: Federal Way Transit Center opens and peak-hour, peak-direction service begins
- February 2010: Hourly service added on weekends

2016 Service Change

Consistent ridership growth affirmed the approval of additional trips connecting Federal Way and Seattle.

Figure 70 - Route 577 Map

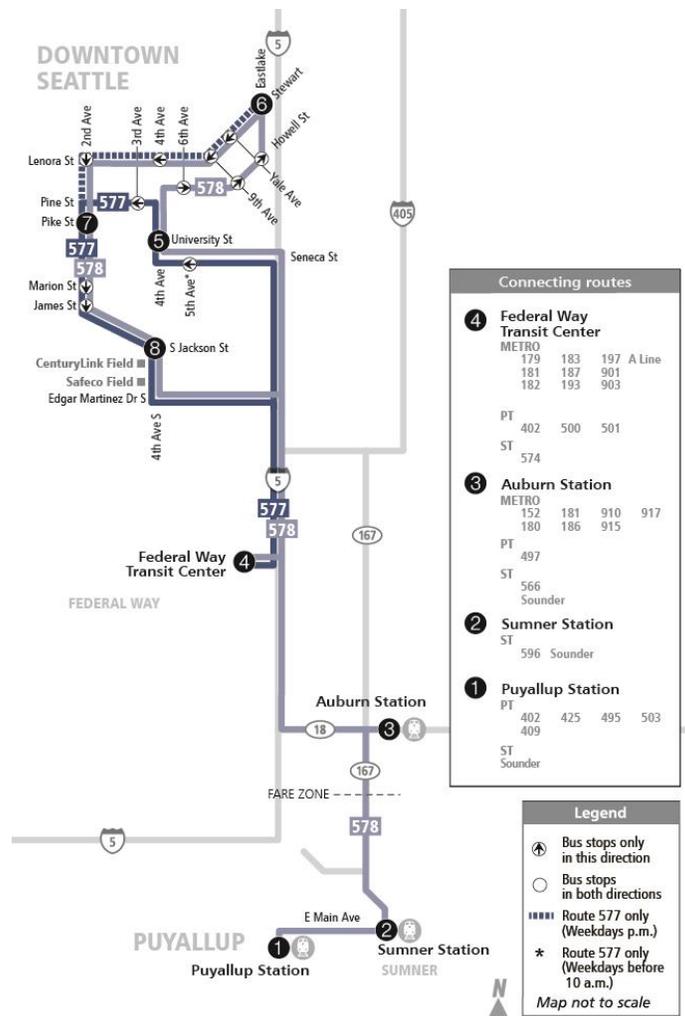


Figure 71 - Route 577 Average Daily Boardings

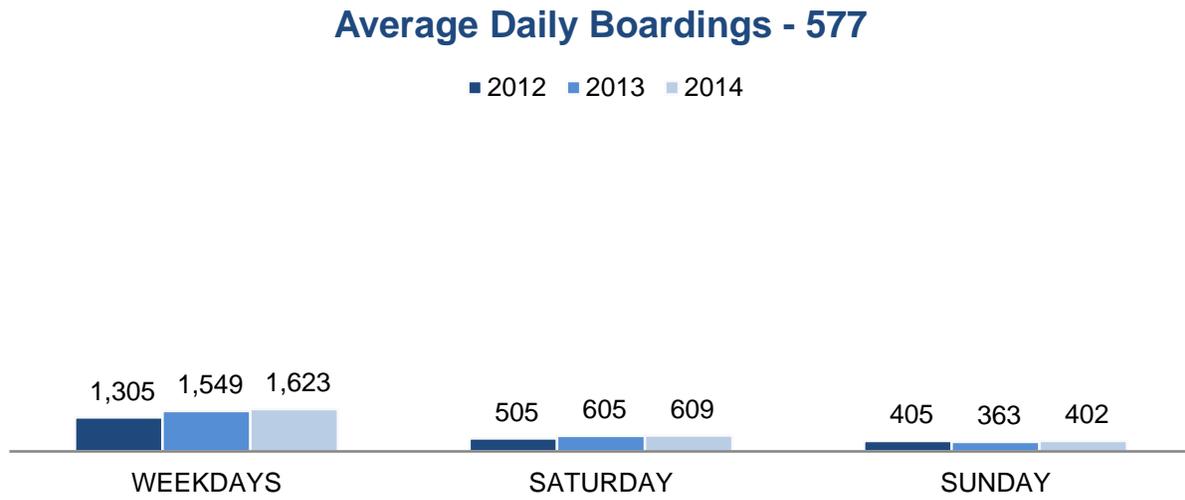
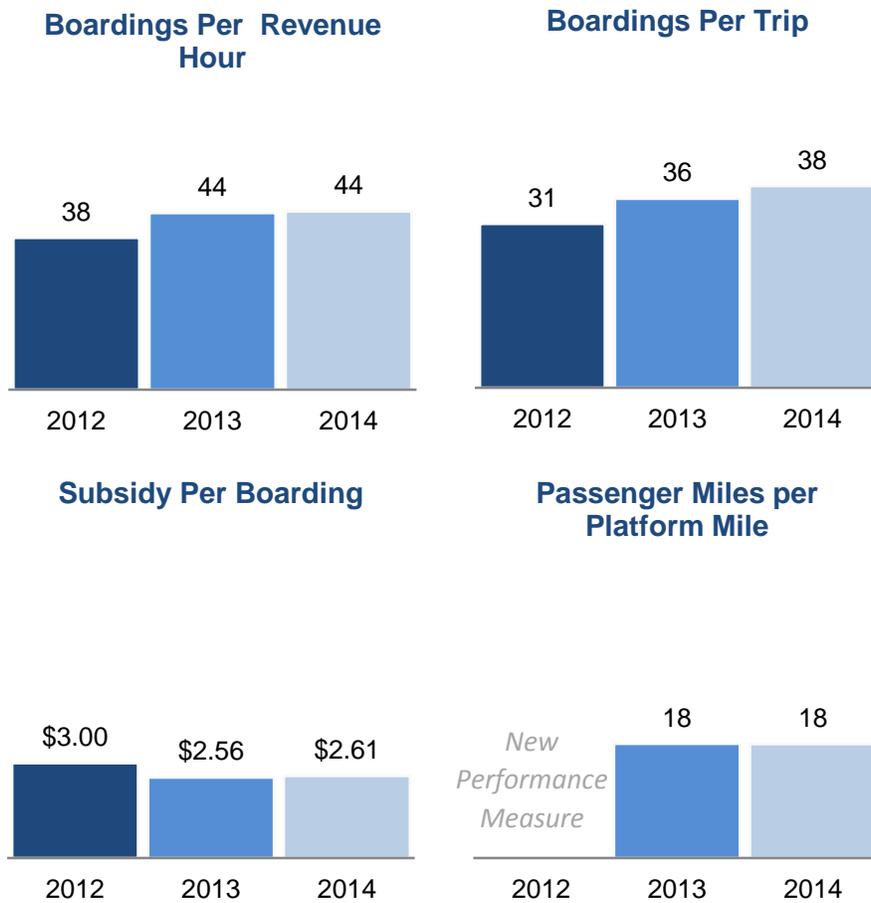


Figure 72 - Route 577 Performance Measures



Route 578: Puyallup – Seattle

The route operates seven days a week between Federal Way and downtown Seattle. Buses run every 30 to 60 minutes.

- June 2009: Route begins with one trip to replace Sounder trip that was moved from 6:45 p.m. to 6:15 p.m.
- February 2010: Service expanded to operate off-peak hours on weekdays with peak-hour, peak-direction service to downtown Tacoma replacing Route 582
- June 2010: Saturday service begins
- June 2012: Sunday service begins and service between Puyallup and Tacoma replaced by Pierce Transit Route 400

2016 Service Change

Midday ridership has steadily increased and an additional four new trips starting in March 2016 was approved.

Figure 73 - Route 578 Map

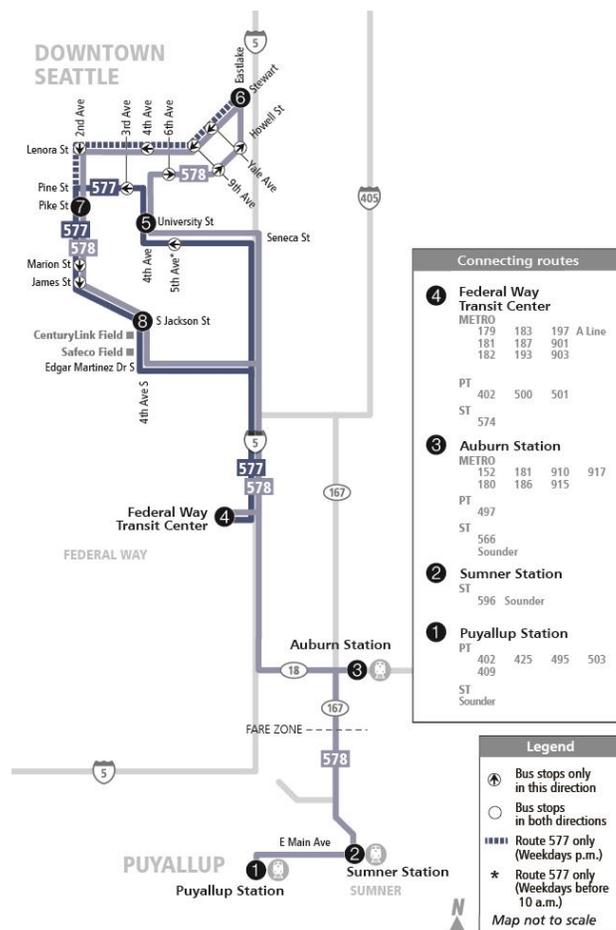


Figure 74 - Route 578 Average Daily Boardings

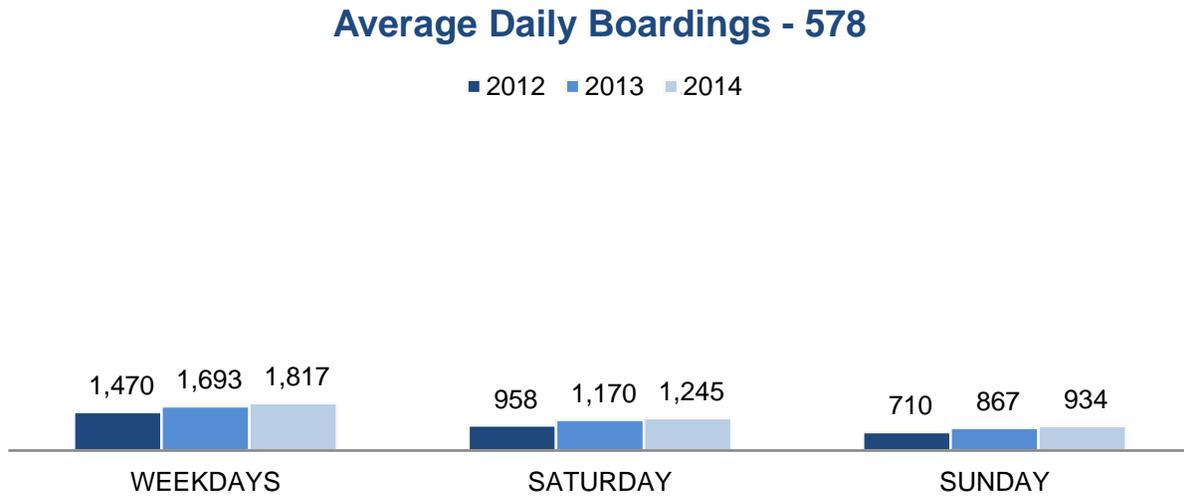
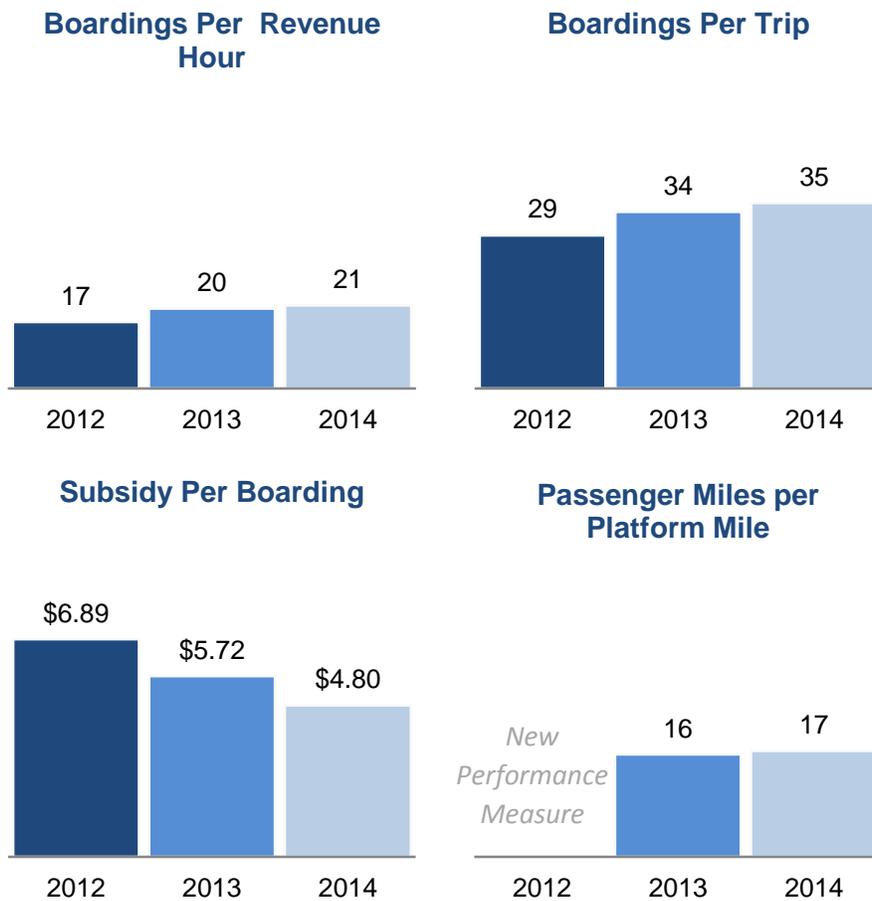


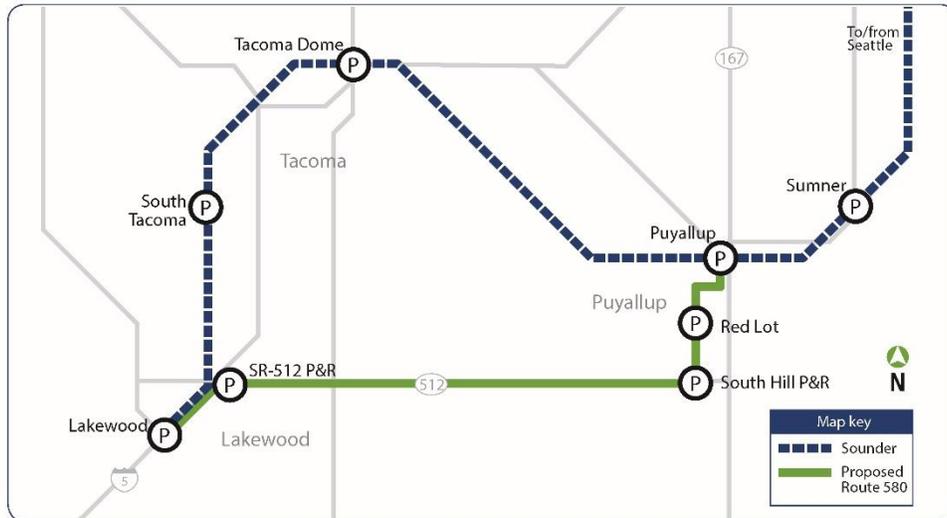
Figure 75 - Route 578 Performance Measures



 **Route 580: Lakewood – Puyallup**

New ST Express Route 580 operates 20 trips per day between Lakewood Station and Puyallup Station with intermediate stops at SR-512 Park-and-Ride, South Hill Park-and-Ride, and Puyallup Fairgrounds Red Lot. The service operates during peak periods only. Service is designed to meet all trains, including the reverse-commuter trains, to provide additional opportunities for people to commute to Lakewood. This route began service in September 2015.

Figure 76 - Route 580 Map



2016 Service Change

In order to provide connections to new Sounder trips, two new trips have been approved for Route 580 in September 2016.



Route 586: Tacoma – University District

The route operates five days a week between Tacoma and the University District. Buses run every 15 to 30 minutes.

- September 2002: Route begins
- June 2004: First summer that midday trips did not operate
- September 2012: Portion of route between downtown Tacoma and Tacoma Dome discontinued
- September 2015: Travel time analysis completed and midday trips discontinued

Figure 77 - Route 586 Map

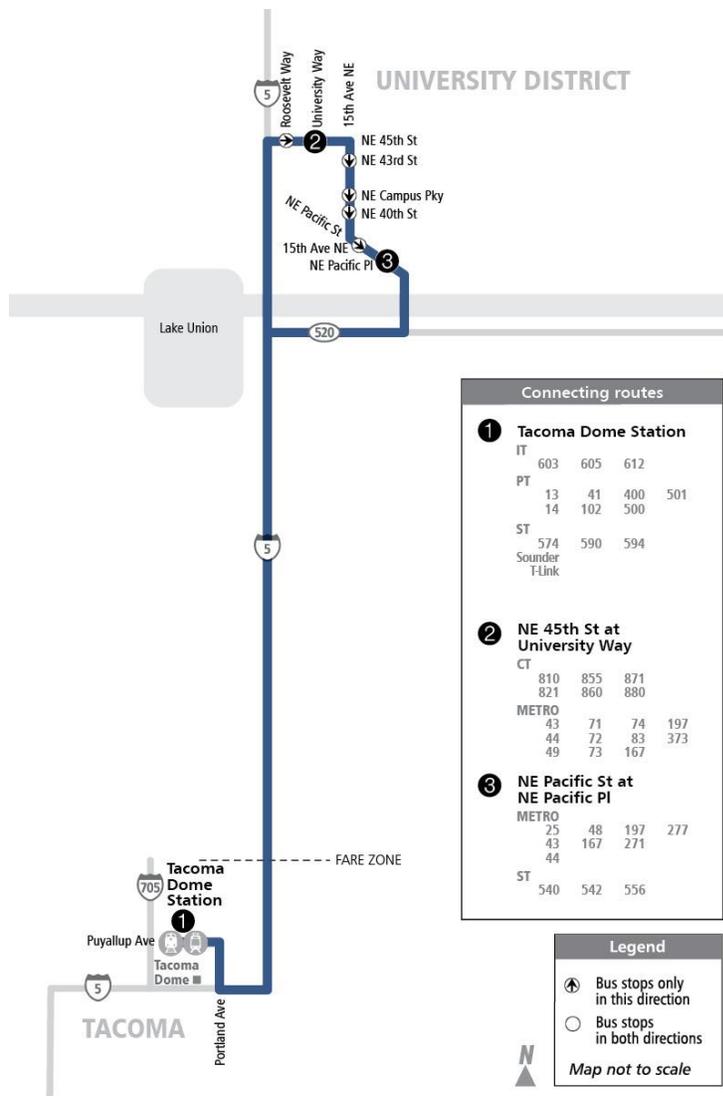


Figure 78 - Route 586 Average Daily Boardings

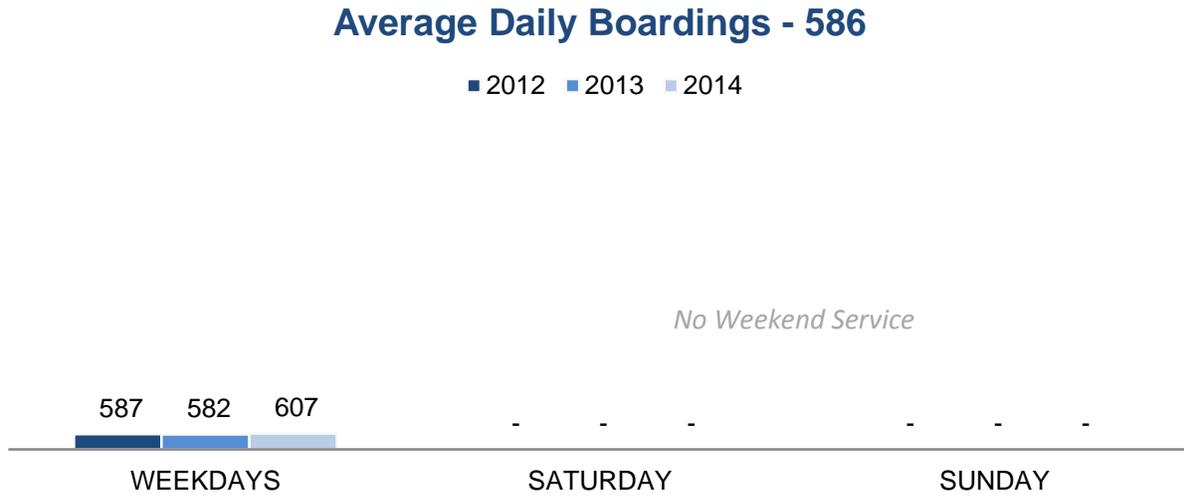


Figure 79 - Route 586 Performance Measures

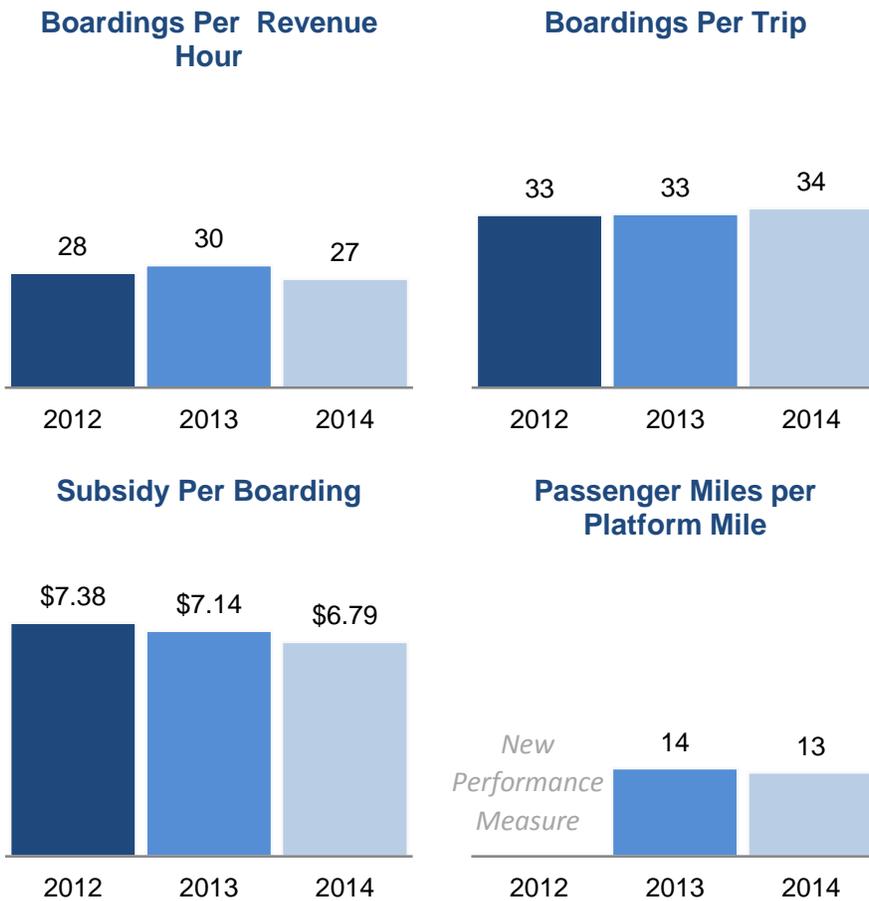


Figure 81 - Route 590 Average Daily Boardings

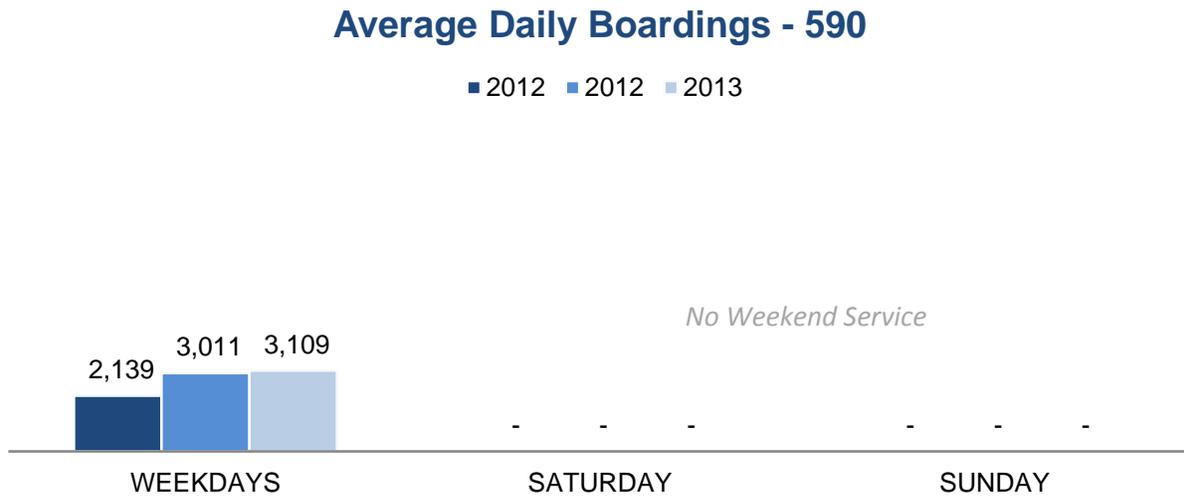
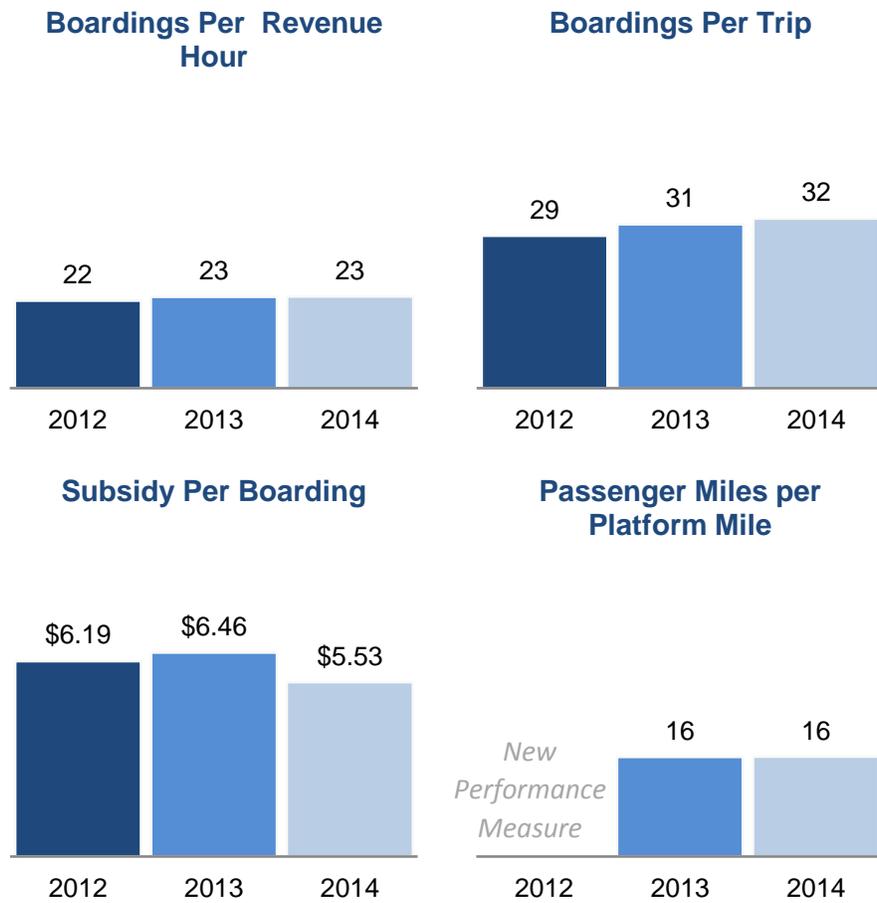


Figure 82 - Route 590 Performance Measures



Route 592: Olympia/DuPont – Seattle

Route 592 connects Olympia, Lacey, DuPont, and Lakewood with Downtown Seattle via the Seneca St off-ramp during weekday peak periods. It does not serve Tacoma. Service between DuPont and Olympia is funded by Intercity Transit.

- September 1991: Route begins as Pierce Transit funded route
- September 1999: Sound Transit assumes operation of Route 592
- February 2002: Route extended to DuPont Station
- September 2008: Lakewood Station opens
- October 2012: Peak service frequency changes from every 10 minutes to every 15 minutes with all trips beginning and ending at DuPont Station and service revised to operate via Seneca Street
- September 2013: Route extended to Lacey and Olympia

Figure 83 - Route 592 Map

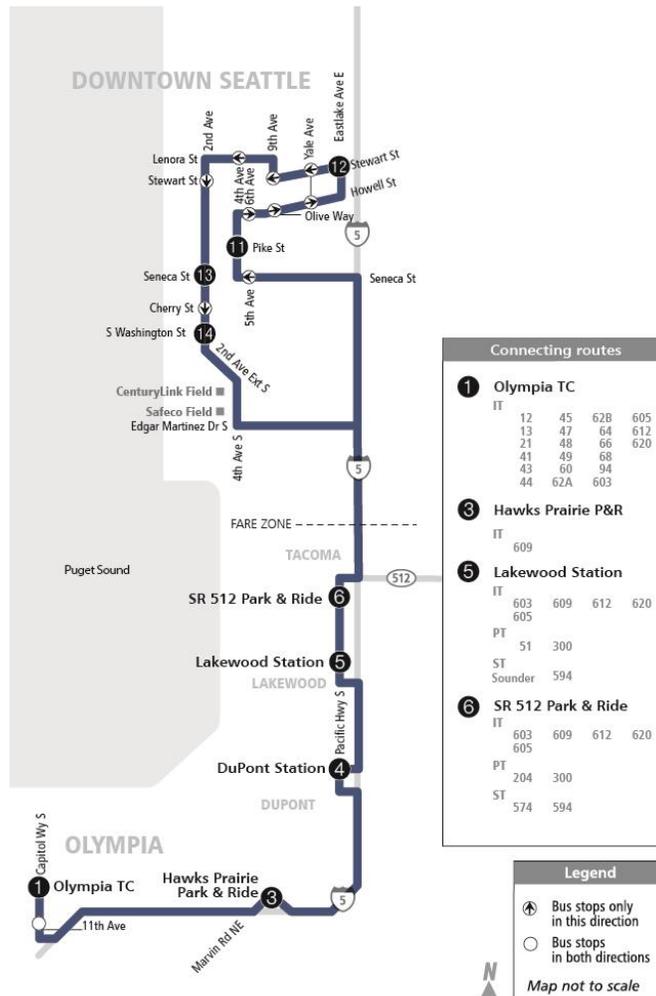


Figure 84 - Route 592 Average Daily Boardings

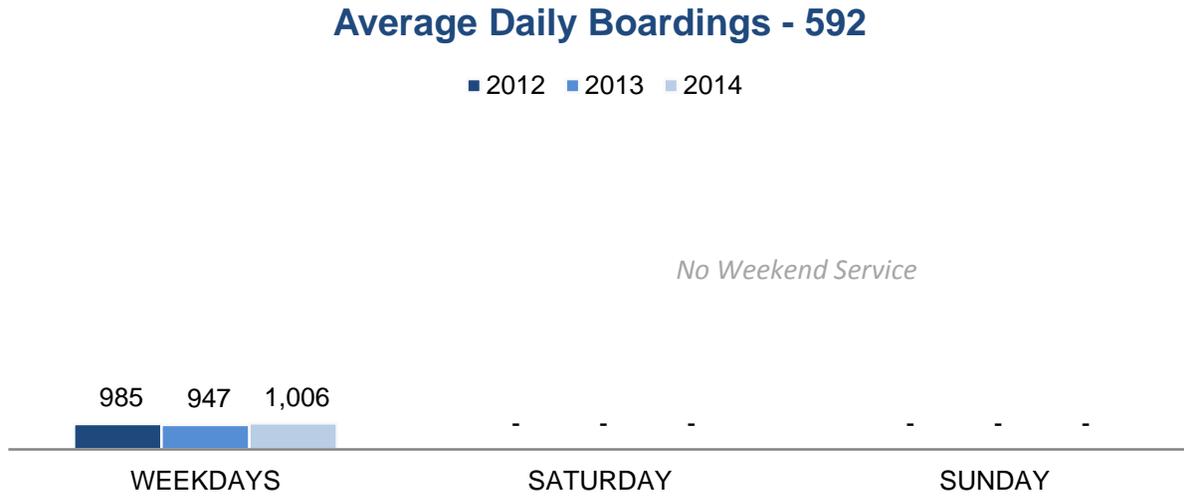
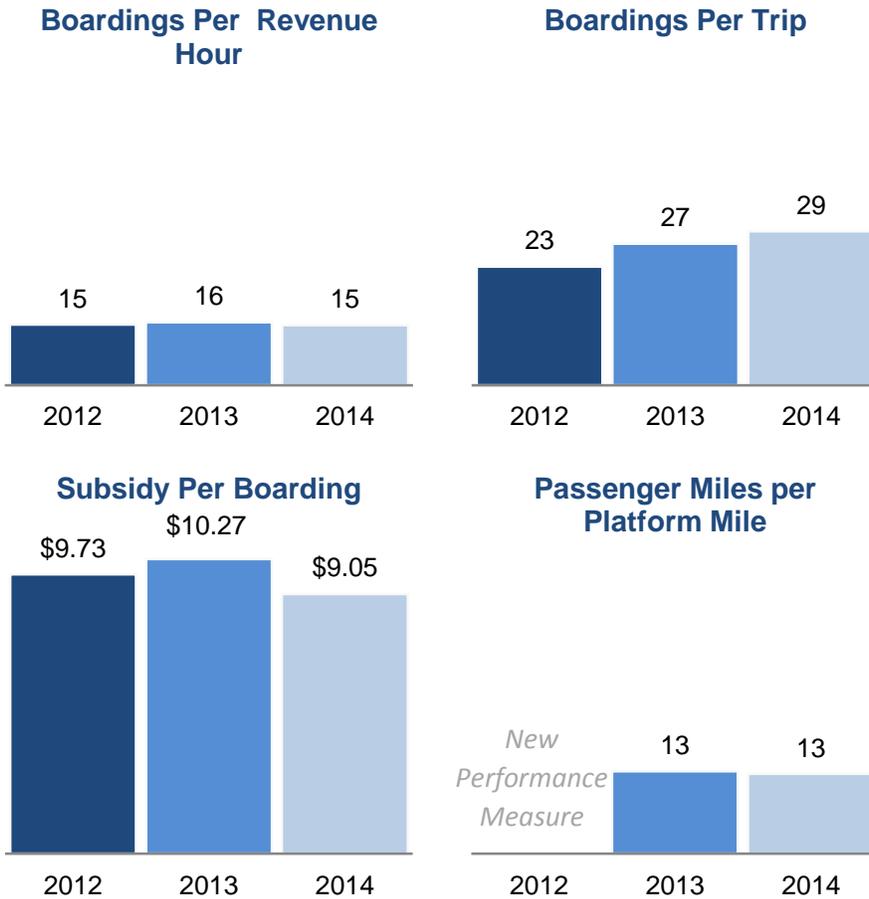


Figure 85 - Route 592 Performance Measures





Route 594: Lakewood – Seattle

Route 594 connects DuPont, Lakewood and Tacoma with Downtown Seattle during off-peak periods, and in the reverse off-peak direction during the peak.

- September 1999: Sound Transit assumes operation of Route 594
- June 2002: Sunday service improved to 30 minute service
- September 2008: Lakewood Station opens and route extended
- February 2015: Shoulder peak service improved to every 20 minutes

Figure 86 - Route 594 Map

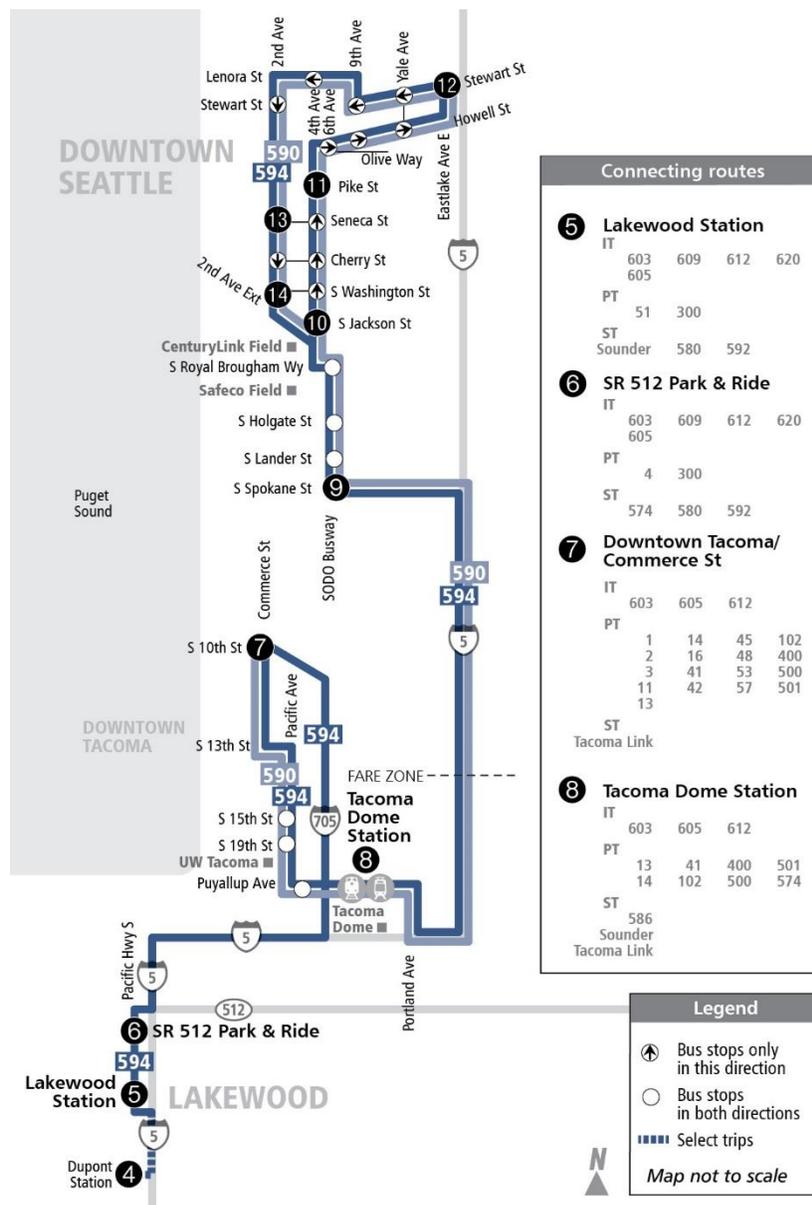


Figure 87 - Route 594 Average Daily Boardings

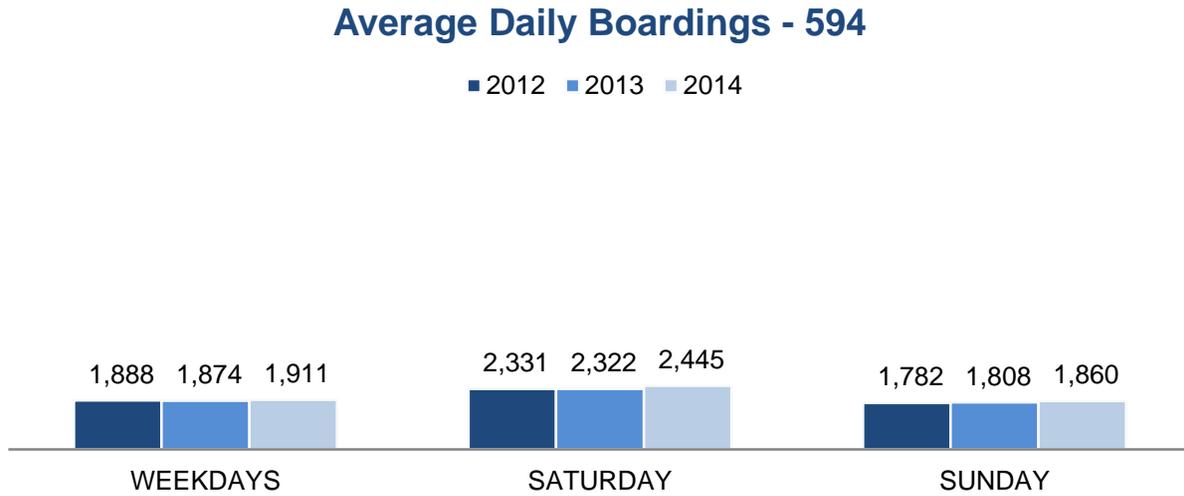
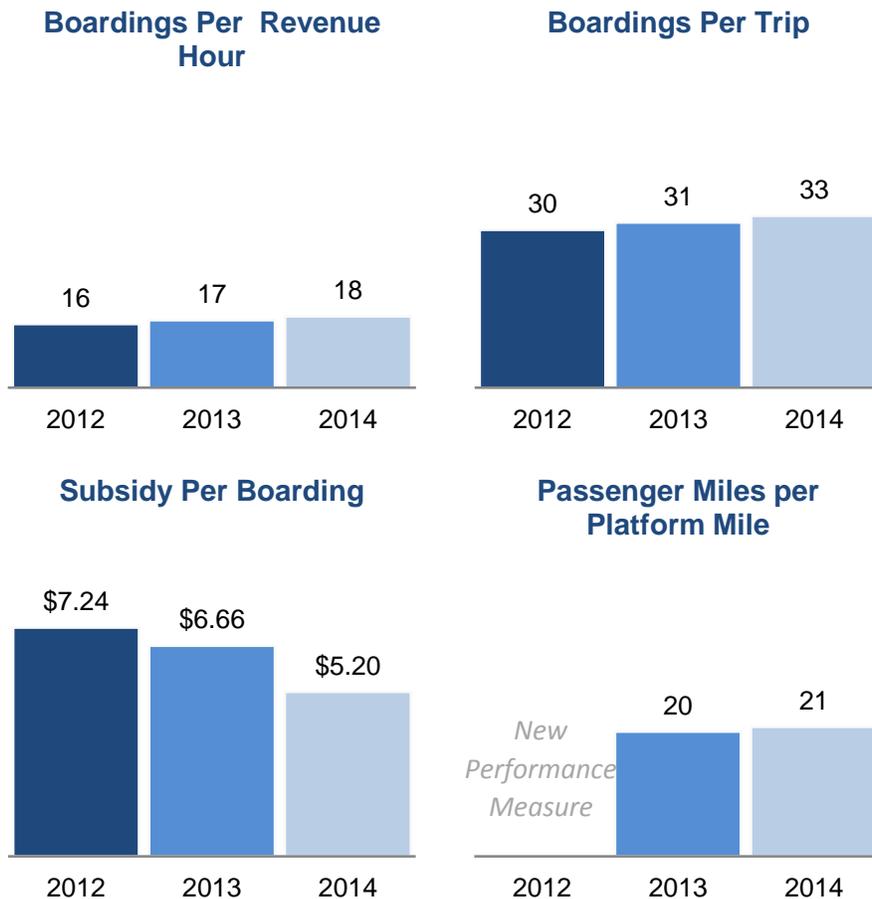


Figure 88 - Route 594 Performance Measures



Route 595: Gig Harbor – Seattle

Route 595 connects Gig Harbor to downtown Seattle via the Tacoma Narrows Bridge and West Tacoma. Service between Narrows Park-and-Ride and Gig Harbor/Purdy is funded by Pierce Transit.

Figure 89 - Route 595 Map

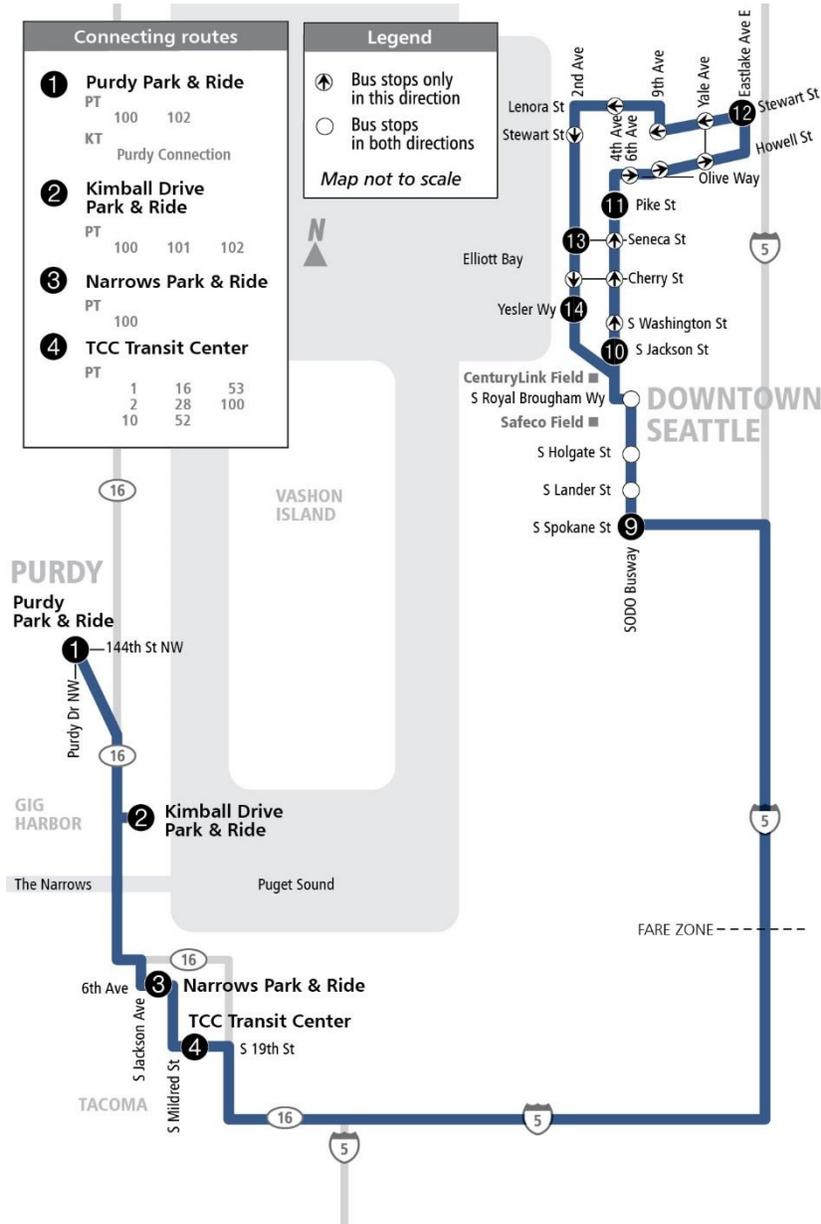


Figure 90 - Route 595 Average Daily Boardings

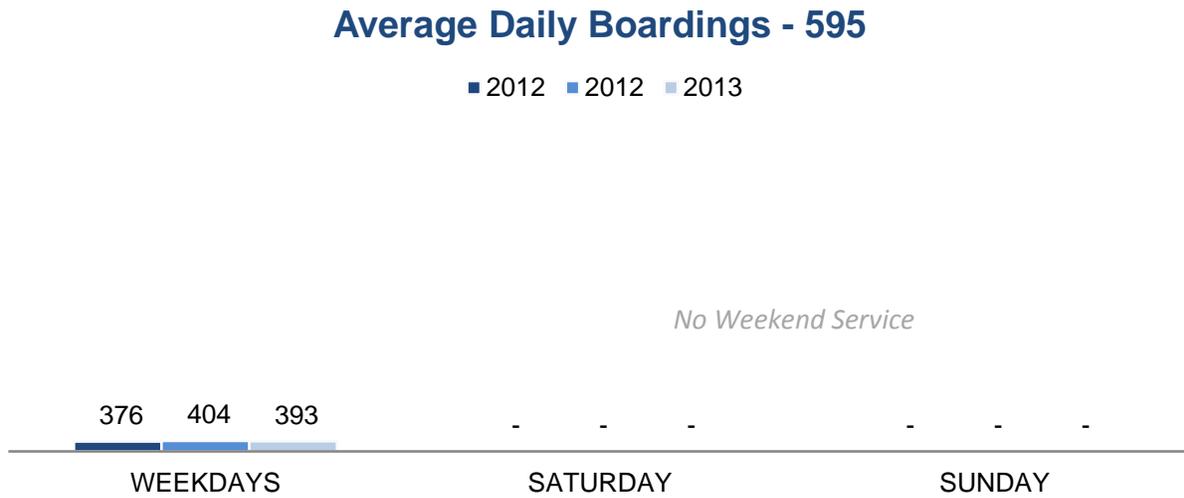
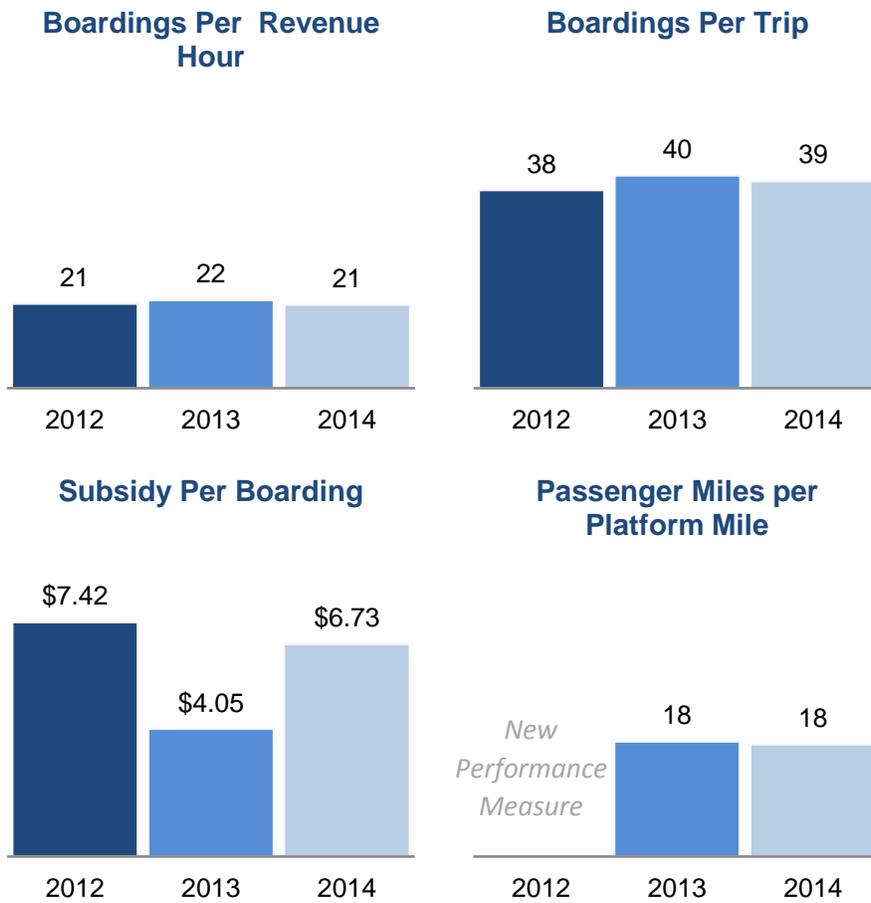


Figure 91 - Route 595 Performance Measures





Route 596: Bonney Lake – Sumner

Route 596 connects the Bonney Lake Park and Ride to the Sumner Sounder station. There are no intermediate stops.

- June 2012: Route begins replacing Pierce Transit Route 496

2016 Service Change

In order to provide connections to new Sounder trips, two new trips have been approved for Route 596 in September 2016.

Figure 92 - Route 596 Map

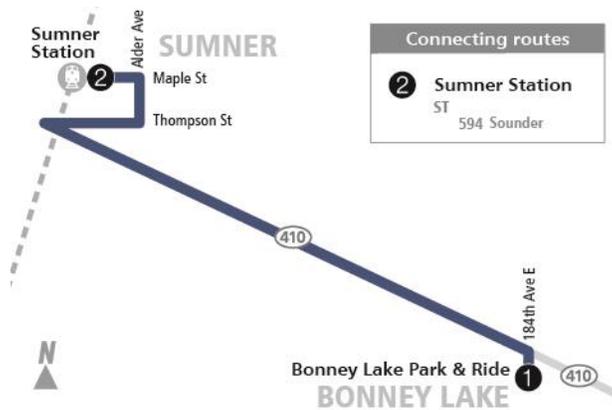


Figure 93 - Route 596 Average Daily Boardings

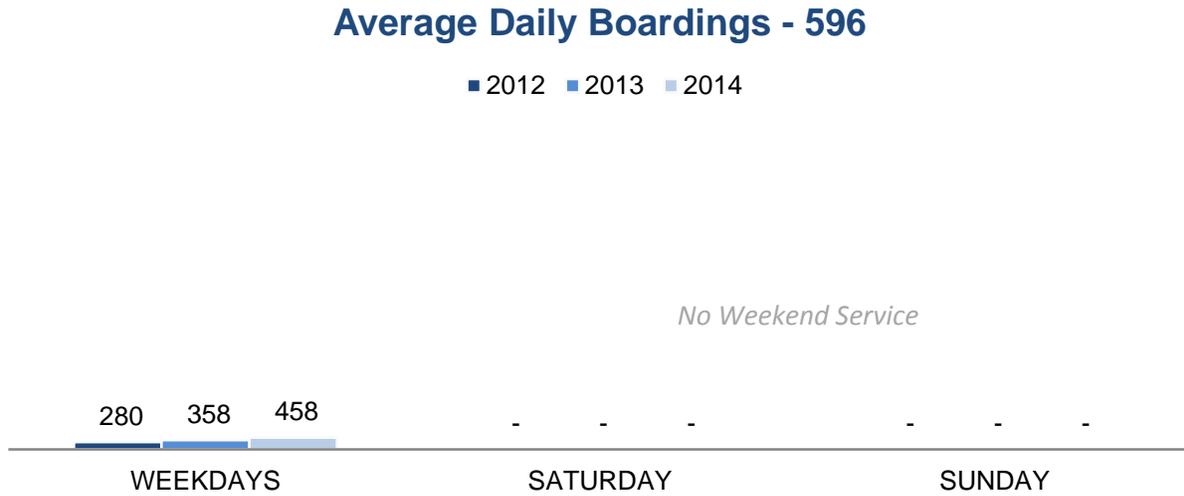
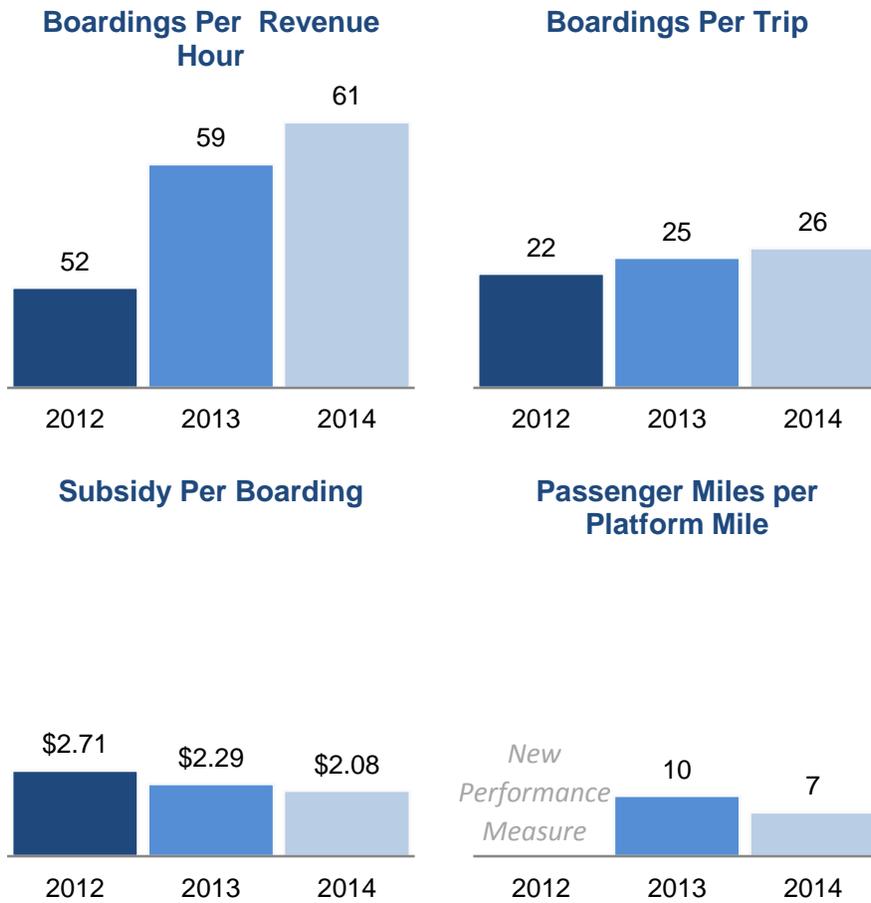


Figure 94 - Route 596 Performance Measures



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Chapter 3: Service Integration

In June 2014, King County Executive and Sound Transit Board Chair Dow Constantine announced a new initiative to better integrate the projects and services of the region's transit agencies. During the past year, Sound Transit and King County Metro have worked closely together to develop a bus-rail service integration plan for U Link. The public outreach process included many jointly-planned outreach events, direct on-line links between the agency websites and common public information materials. Three separate phases of public outreach were conducted to gather public input. King County Metro focused on bus service changes in Seattle, while Sound Transit developed service changes for expanded express bus connections between East King County and U Link. Staff from both agencies collaborated on an analysis to ensure that adequate light rail capacity was provided for connecting bus passengers during peak demand times. Many joint meetings were held with King County Metro staff and other key stakeholders, including representatives from the UW and the cities of Seattle, Redmond and Bellevue. A key objective in bringing in these other partners is to improve the customer experience for making rail-bus connections by installing wayfinding signage, relocating bus stops closer to stations and providing real-time bus departure information. The Metro bus service proposals have been finalized and King County Council action on the package was passed in October 2015.

ST Express Bus/Rail Integration Results

In cooperation with King County Metro, Sound Transit Service Planning conducted an extensive inter-agency planning effort to develop network concepts to improve bus connections to new Link stations. While a majority of planning efforts focused on changes to the local transit service provided by King County Metro, several alternative network concepts were developed to connect ST Express service to Link.

Overview of Service Concepts Considered

Sound Transit's objectives for the SR-520 corridor:

- Increase total transit ridership and maintain or reduce travel times.
- Improve connectivity for increased accessibility to major destinations.
- Leverage the travel time reliability and people carrying capacity of U-Link.
- Address bus overcrowding and reliability; mitigate park & ride closure.

Alternative One (Released March 2015)

- **Route 540:** Re-route to serve Houghton Park and Ride. Discontinue service at South Kirkland Park and Ride.
- **Route 542:** Operate all-day, all-week service. Extend to Bear Creek P&R and retain existing trips to Green Lake P&R. Add westbound deviation into Overlake Transit Center after noon. Service frequency during the peaks remains unchanged.
- **Route 545:** Maintain existing alignment and convert span to two-way extended peak only service. Limited improvements to service frequency on shoulder of the peak by adding several trips in each direction. Eliminate weekend service and replace with 542/U-Link.

Alternative Two (Released March 2015)

- **Route 540:** Maintain existing alignment and service levels and monitor performance changes as a result of new connection opportunities created by U Link.
- **New Route 541:** Add new service pattern from Overlake Village to Campus Parkway during the peak of the peak to create frequent service to feed Link.
- **Route 542:** No Change
- **Route 545:** Add new service pattern with turn-back trips at Overlake Transit Center to increase service frequency.

Alternative Three (Released May 2015)

- **Route 540:** Re-route to serve Houghton Park and Ride. Discontinue service at South Kirkland Park and Ride
- **New Route 541:** Operate new 15-minute frequency peak-only service from Overlake Village Park & Ride to U-District (Campus Parkway) in both directions
- **Route 542/545:** Convert selected peak 545 trips into Route 542 trips to/from Bear Creek Park & Ride, reducing the number of peak 545 trips to downtown. Redeploy saved resources from truncation to extend Route 542 to Bear Creek P&R and operate additional peak trips.

Recommended Option

Following an eight month process of inter-agency staff collaboration, public participation, and extensive analysis, ST Service Planning staff recommended modest changes to ST Express service. The recommendations add new peak-only service on the busiest portion of the SR-520 corridor between Overlake and UW Station to provide additional capacity and new connection opportunities to U-Link. The new Route 541 is shown in Figure 95. Both the truncation of Route 545 at UW Station and the re-routing of Route 540 were not recommended.

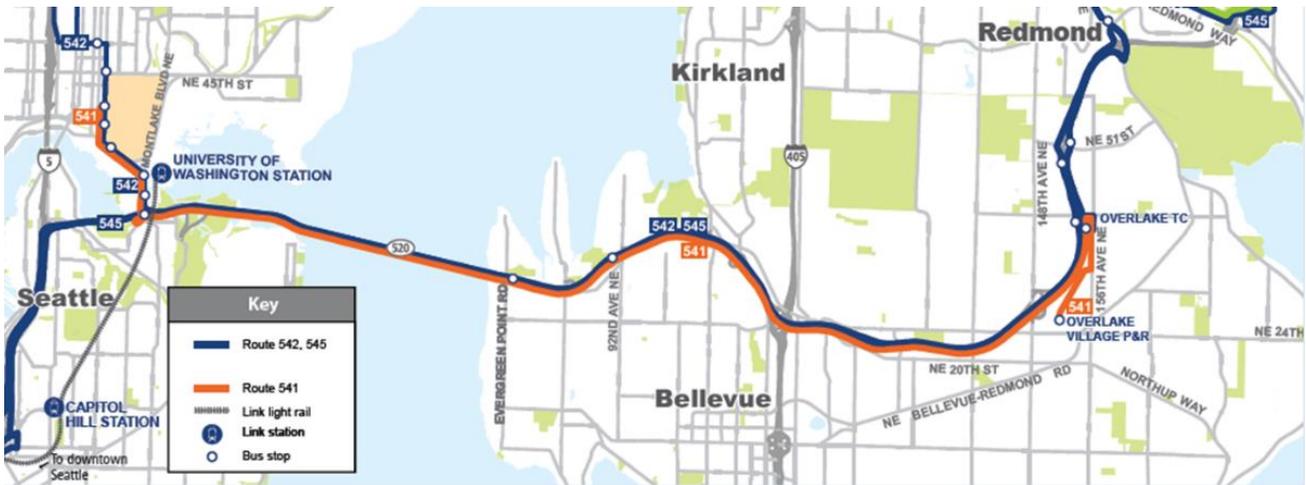
Figure 95 - Route 541 Map

PROPOSED SERVICE CHANGES **REDMOND – UNIVERSITY DISTRICT – DOWNTOWN SEATTLE**

 **541**

Redmond – Downtown Seattle

When University Link opens in early 2016, it will offer additional capacity and travel time reliability to downtown Seattle. The proposed changes will provide additional peak bus service across the lake from Redmond to the University of Washington Station, offering new opportunities to transfer to fast, reliable light rail service.



New Route 541

SERVICE FREQUENCY PEAK: 15 | OFF-PEAK: n/a | WEEKENDS: n/a

- New route from Overlake Village Park-and-Ride to U District (Campus Parkway) via NE 40th Street Freeway Station operating during peak periods in both directions with connections to Link at University of Washington Station.

Public and Stakeholder Engagement

Both agencies shared a common goal of proactively engaging the public and stakeholders to help shape the final service changes. Opportunities for public input included public meetings, information tables at transit centers, and an online survey. Key themes from both the March and May public outreach efforts are summarized below:

Eastside Advisory Committee Meeting

This group consisted of transit advocates and past members of outreach groups focused on Eastside transit planning. The group of 8 members had a vested interest in transportation within their community. The committee reviewed the service concepts and gave feedback to service planners. Below is a summary of the Eastside Advisory Committee Meeting's concerns, themes, and suggestions.

- **Route 545 is a transit success story, very important to connect Redmond with region and serve Redmond internally.**
- **Interest in taking advantage of the opening of U-Link.**
 - Consistent with City's plans to connect to regional transit spines (building a network in/to/from Redmond).
 - Better connections to/from Capitol Hill, North Seattle.
 - Reliability of travel to downtown.
 - Opportunity to address overcrowding and high demand with additional trips.
- **Importance of maintaining convenience.**
 - Improve the transit experience, do not make it worse.
 - Customers' willingness to transfer will depend on overall travel time and perceived benefit.
 - Some will prefer to stay on the bus and not connect with rail.
 - Question of stop location on the Montlake Triangle, why not stop right next to station?
- **Concern about any concept that reduces the number of trips to Redmond TC and Bear Creek.**
- **Interest in Route 541.**
 - Alleviate overcrowding on the "choke-point" between Overlake and Downtown.
 - Serves TOD currently without commuter service.
 - Provides a new option for customers on the most traveled part of the corridor.
- **Suggested staff return with a hybrid approach which includes elements of both Alt 1 and Alt 2 as part of the preferred alternative in April/May.**

Summary Results Sound Transit Link Connections Survey May 2015

Sound Transit conducted an on-line survey to gain customer input on the service changes in the SR 520 corridor during the May 2015 outreach. The ST online survey in May 2015 received 675 responses. The following key themes were gained from the feedback and incorporated into the final recommendation:

- Feedback during the March outreach was generally negative towards Route 545 off-peak truncation alternative. During the May outreach, 63% of existing Route 545 riders opposed the proposed changes.
- In May, nearly 80% of those who answered the question supported new Route 541 proposed in Alternative three.
- Of Route 540 riders, 77% oppose the change to Route 540. Approximately 52% of overall respondents oppose the change.
- Maintain direct midday, evening, and weekend service between Eastside and downtown Seattle.
- Travel time was critical to rider's decision to transfer to Link. Riders want more information about transferring to Link. Riders want to take advantage of the opportunity provided by investment in Link where service changes make sense.
- Concern about creating more acute crowding conditions on remaining Route 545 trips if customers did not choose to transfer to U Link.
- Provide additional capacity across Lake Washington and increase reliability of travel times during the peak.
- Ensure the transfer at the Montlake Triangle works well; minimize walk distances and wait times, support way-finding.

Open Houses

Public open houses

Tuesday, May 19, 6-8:00 p.m.

Kirkland City Hall—Peter Kirk Room
123 5th Ave
Kirkland, WA 98033

Tuesday, May 26, 6-8:00 p.m.

Redmond City Hall—Bytes Café—South Wing, First Floor
15670 NE 85th St.
Redmond, WA 98499

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Chapter Four: Title VI Evaluation

Introduction

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, which 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 transit service to many diverse communities throughout the Central Puget Sound area. Each year, the agency prepares a detailed update on the development of its services, the Service Implementation Plan, which may include recommendations for proposed service changes in the upcoming year. The Title VI Evaluation of the SIP provides an assessment of potential impacts resulting from major service changes on minority, low income and limited English speaking communities.

A service change is defined as major if vehicle hours of a route change by 25% or more or a stop or station location moves by more than half a mile.

Methodology

Each service change is classified as either major or administrative as defined by Sound Transit's *Service Standards and Performance Measures*. A service change is defined as major if vehicle hours of a route change by 25% or more or a stop or station location moves by more than half a mile. Sound Transit conducts a Title VI evaluation for all major service changes to assess potential impacts on minority, low income and limited English speaking communities.

Due to Sound Transit's service characteristics, generally long-distance regional service with few stops, the impacts of any changes are quantified only for residents of those census tracts where Sound Transit stops and stations are actually located. The service area evaluated for each major service change is defined in in Table 8. The population of Title VI communities as a percentage of the total population of the Sound Transit district is shown in Table 9.

Table 8 - ST Express Service Area

Type	Service Area (miles)
Bus Stop without parking	0.5
Rail station without parking	1.0
Major bus facilities	2.5
Rail station with parking	5.0

Table 9 - Title VI Populations in Sound Transit District

Title VI Populations	Percentage of Sound Transit District Population
Minority	29.79%
Low Income	11.57%
Limited English Proficiency	4.87%

2016 Service Changes

Table 9 describes both administrative and major service changes that are part of the 2016 SIP. The service changes identified as major include a new ST Express route, ST Express construction re-routes which removes stops or moves existing stop locations by more than half a mile, a new Sounder roundtrip and the opening of new light rail extensions. As shown in Table 10, none of service changes were identified as major based on the percentage change in vehicle hours criteria. Other service changes planned for 2016 will be implemented administratively as they do not meet the definition of a major service change.

Table 10 - 2016 SIP Service Changes

Route	Description	Service Change	Service Change Date	Service Change Type
541	Overlake-U. District	New peak-only weekday route, 15-minute frequency, 48 weekday trips.	March	Major
542	Redmond-Greenlake	Mid-day service added to address ridership growth with 30-minute frequency.	March	Minor
545	Redmond-Seattle	Address crowding and ridership growth, add 15 weekday trips.	September	Minor
554	Issaquah-Seattle	Add 12 weekday trips to operate 15-minute peak service.	March	Minor
555	Northgate-Issaquah	Long-term construction re-route in Bellevue due to closure of 112 th Ave SE. Re-route via Bellevue Way SE to NE 4th St to 110 th NE, continue regular route. Add 4 weekday trips to address ridership growth.	Re-route: September Trip adds: September	Major
556	Issaquah-Northgate			Major
560	Westwood Village-Bellevue	Long-term construction re-route in Bellevue due to closure of 112 th Ave SE. Re-route continues on I-405 now exiting at NE 6 th St to Bellevue TC.	September	Major
567	Kent-Overlake	Add two new trips to meet new Sounder trips.	September	Minor
577	Federal Way-Seattle	Add three new weekday trips to address ridership growth.	September	Minor
578	Puyallup-Seattle	Add four new weekday trips to address midday ridership growth.	March	Minor
580	Lakewood-Puyallup	Add two new trips to meet new Sounder trips.	September	Minor
596	Bonney Lake-Sumner	Add two new trips to meet new Sounder trips.	September	Minor
Sounder	<i>South Line</i> Lakewood-Seattle	New off-peak roundtrip.	September	Major
Link	<i>Seattle-UW</i>	New segment opens serving Capitol Hill Station and UW Station with trains every 6 minutes in the peak.	Early 2016	Major
Link	Angle Lake-SeaTac-	Later in 2016 new segment from SeaTac to Angle Lake opens.	Late 2016	Major

Evaluation of 2016 Service Changes

ST Express System Level Platform Hours Change

For each Title VI population, Table 10 indicates if the service area of an individual ST Express route is above the Sound Transit District average. In addition, Table 10 shows the percentage change in platform hours for the route as part of the 2016 SIP. The analysis shows that none of the approved service changes modify any one route's vehicle hours by more than twenty-five percent (25%), with the exception of the implementation of the new Route 541. The service hours invested through the 2016 SIP are aimed at addressing recurring peak crowding conditions identified for action by guidelines in Sound Transit's *Service Standards and Performance Measures*.

Table 10 – Change in Platform Hours

Route	Minority Route	LEP Route	Low Income Route	2015 Projected Platform Hours	2016 Estimated Platform Hours	Percentage Change in Platform Hours
541	Yes	Yes	No	N/A	7,319	New Route
542	No	No	No	18,067	22,060	22%
545	No	No	No	73,293	74,855	2%
554	Yes	No	No	32,934	36,805	12%
555	No	No	No	6,738	6,996	4%
556	No	No	No	8,639	8,898	3%
560	Yes	Yes	No	39,142	39,204	0%
567	Yes	Yes	Yes	10,673	11,266	6%
577	Yes	Yes	Yes	19,883	22,051	11%
578	No	No	Yes	31,299	33,844	8%
580 ¹	No	No	No	1,447	5,445	n/a
596	No	No	No	3,420	3,558	4%
Affected Routes Total				245,535	272,301	11%
ST Express System Total				720,035	745,740	4%

New Route 541 – Major Service Change

As a result of the Link Connections public outreach process done for the University Link extension to the University of Washington, described in more detail in Chapter 3, Sound Transit staff recommended the implementation of a new ST Express route that would connect North East King County to the University of Washington. The new Route 541 would provide a two-way peak connection across Lake Washington from Overlake to the University of Washington Link Station, offering new opportunities to transfer to and from fast, reliable light rail service. Existing bus service in the corridor experiences high ridership and crowded conditions during the peak period. The approved new route would add capacity to alleviate crowding and connect communities served by Link light rail to regional employment centers on the eastside.

Results of the Title VI evaluation, shown in Table 12, indicated that the new service area for Route 541 would serve a higher percentage of minority populations than the system average. The new route does not cause a disparate impact on minority populations.

¹ Route 580 began service in September 2015. Projected platform hours for 2015 represent operation from only part of the year. The 2016 estimated platform hours represent a full year of service, not an increase in service levels. All hours are projected estimates subject to change based on end of year actuals.

The analysis also shows that based on Sound Transit’s adopted major service change policies, the accrual of benefits resulting from the addition of a new route are less for low-income populations. Therefore, the new route does cause a disproportionate burden on the low income populations. Although, based on the adopted policy, the disproportionate burden is not an adverse effect given that this is a service extension and not a service reduction.

In addition, the analysis shows no impact to LEP populations, as the route is expected to benefit a higher proportion of LEP populations than the Sound Transit district average.

Table 11- Route 541 Title VI Evaluation Results

Title VI Populations	Route 541	Sound Transit District Average
Minority	32.9%	29.8%
Low Income	8.8%	11.6%
Limited English Proficiency	13.4%	10.4%

Maps detailing the population characteristics of the route are included on the next pages.

Routes 555/556 Construction Re-Route and Moved Stops – Major Service Change

Construction re-routes on Routes 555/556 are scheduled to begin in September of 2016, due to the construction of East Link light rail and other construction projects along 112th Ave SE. As a result, Routes 555/556 would no longer serve two stops along 112th Ave SE, SE 15th St & 4th Ave NE. The re-route is an effort to avoid construction delays in the area and continue to provide reliable express bus service. For each closed stop a replacement stop has been identified. Table 13 outlines the distance between the closest replacement stop and the closed stop. Additionally, the table also provides an estimate of how many average weekday riders will be affected by these displacements. The stops identified as replacement stops were the closest existing stops to these routes. Approximately three percent (3%) of existing riders on Route 555, and approximately one percent (1%) of Route 556 riders would experience a change in stop location of up to a mile, adding an additional 10-18 minutes of walking to their trip. It is important to note that the replacement stops that have been identified are also served by more frequent routes. For example, ST Express Route 550 which runs at 5-min frequencies during the weekday peak periods and 15-min during the weekday off-peak times.

Table 12 – Stop Closure Impacts for Routes 555/556

Closed Stops	Distance to New Stop	New Stop	Average Weekday Boardings	% of Total Weekday Boardings
Route 555				
112 th Avenue SE & 4 th Avenue NE	0.9 mile	Bellevue Way SE & SE 3 rd St	12	1.6%
112 th Ave SE & SE 15 th St	0.6 mile	Bellevue Way SE & SE 16 th St	14	1.9%
Total			26	3.4%
Route 556				
112 th Avenue SE & 4 th Avenue NE	0.9 mile	Bellevue Way SE & SE 3 rd St	6	0.7%
112 th Ave SE & SE 15 th St	0.6 mile	Bellevue Way SE & SE 16 th St	4	0.4%
Total			10	1.1%

Results of the Title VI evaluation, shown in Table 14, display the percentages of Title VI populations in the service areas of both the stops to be removed and the replacement stops. The new stops provide access to similar populations compared to the removed stops. In fact, the replacement stops will service a higher percentage of minority and low income populations in the area.

The analysis also shows that based on Sound Transit’s adopted major service change policies, the removal of the stops, or the addition of replacement stops, for Routes 555 and 556 does not create a disparate impact on minority populations or a disproportionate burden on the low income populations.

Maps detailing the population characteristics of the changes are included at the end of this section.

Table 13- Routes 555/556 Title VI Evaluation Results

Title VI Populations	Routes 555/556 Removed Stops Area	Routes 555/556 New Stops Area	Sound Transit District Average
Minority	30.5%	31.2%	29.8%
Low Income	8.8%	9.4%	11.6%
Limited English Proficiency	14.5%	13.0%	10.4%

Route 560 Construction Re-Route and Moved Stops – Major Service Change

A construction re-route on Route 560 is scheduled to begin in September of 2016, due to the construction of East Link light rail, as well as other construction projects along 112th Ave SE. With the approved re-route, heading northbound Route 560 would no longer exit onto I-90, from I-405, to access Bellevue Way SE and then 112th Ave SE or heading southbound the route would no longer use 112th Ave SE to access Bellevue Way SE and then I-90, to I-405. The route would instead remain on I-405 freeway with access to the Bellevue Transit Center at NE 6th St HOV exit. The re-route is an effort to avoid cumulative construction delays to ST Express costumers during the various construction projects along the route.

As shown in Table 15, the largest displacement of existing riders will occur as a result of the removal of South Bellevue Park & Ride stop from the route. The closest remaining stop for Route 560 will be at the Bellevue Transit Center which is 2.2 miles north of the South Bellevue Park & Ride, and 1.3 miles and 0.8 miles, respectively, from the other two stops scheduled to be removed. Approximately six percent (6%) of existing Route 560 weekday riders would be impacted by the re-route and associated stop closures.

Table 14 – Stop Closure Impacts for Route 560

Closed Stops	Distance to New Stop (Bellevue Transit Center)	Average Weekday Boardings	% of Total Weekday Boardings
Route 560			
South Bellevue Park & Ride	2.2 miles	76	4.2%
112 th Ave SE & SE 15 th St	1.3 miles	15	0.8%
112 th Ave SE & SE 4 th St	0.8 mile	24	1.3%
Total		115	6.4%

Results of the Title VI evaluation, shown in Table 16, display the percentages of Title VI populations for the removed stop’s service area.

The analysis also shows that based on Sound Transit’s adopted major service change policies, the removal of the stops, creates both a disparate impact on minority populations, and a disproportionate impact on low income populations, as they have access to the stops today.

Maps detailing the population characteristics of the approved changes are included at the end of this section.

Table 15 – Route 560 Title VI Evaluation Results

Title VI Populations	Route 560 Removed Stops Area	Sound Transit District Average
Minority	32.4%	29.8%
Low Income	7.6%	11.6%
Limited English Proficiency	13.1%	10.4%

Alternatives & Mitigation

Despite the negative impacts due to the approved routing change and stop removal for Route 560, frequent service still remains in the South Bellevue area. As part of the East Link light rail project, a parking mitigation outlines strategies for replacement parking for drivers accessing the South Bellevue Park & Ride. Other impacted riders and Title VI populations in the area are encouraged to utilize existing frequent transit service to access the Bellevue Transit Center, where they can also connect with Route 560. The frequent service includes Sound Transit’s Route 550, which runs at 5 minute frequencies during the AM/PM peaks and 15 minutes during the off-peak hours of the day. In addition, Sound Transit’s Routes 555 & 556, King County Metro Routes 241 and 249, which run at 20-30 minutes during the peak and 45-60 minutes in the off-peak, provide additional connections in the area. Impacted customers may experience longer travel times and may need to use an additional bus trip to access Route 560.

Souder South Line Off-Peak Round Trip

As part of the voter approved ST2 package, three additional Souder South Line round-trips were approved. In 2016, one of the three approve South Line round-trips will be implemented, with the other two scheduled for 2017. Based on Sound Transit’s approved Service Standards and Performance Measures, the addition of the new South Line round-trip does not meet the threshold to be identified as a major service change and therefore requiring a more in-depth analysis. As shown in Table 17, the change in weekly platform hours is 11% for the South Line and 4% for the Souder system overall.

In an effort to keep the Sound Transit Board informed on the completion of all the ST2 approved projects and its impacts, the addition of the trip was categorized as a major service change.

Table 16 – Sounder Trip Major Service Change Evaluation

Estimated Sounder 2015 Service Statistics with Current Service				
Day Type	One-Way Trips Per Day	Plat Hrs. per Day	Plat Hrs. per Week	Plat Hrs. per Yr. ²
North Line	8	11	56	2,856
South Line	20	30	151	7,701
System Total	28	41	207	10,557
Estimated Sounder 2015 Service Statistics with New Off-Peak Trip				
Day Type	One-Way Trips Per Day	Plat Hrs. per Day	Plat Hrs. per Week	Plat Hrs. per Yr. ²
North Line	8	11	56	2,856
South Line	22	34	168	8,543
System Total	30	45	224	11,406
North Line Total % Change			0%	0%
South Line Total % Change			11%	11%
System Total % Change			8%	8%

Link Extensions – Major Service Changes

The major service change analysis for both Link extensions scheduled for 2016, University Link to the University of Washington and Angle Lake to S 200th in the City of SeaTac, are described in more detail in their respective Service and Fare Equity Analysis (SAFE). The University Link extension SAFE analysis also includes the Title VI analysis for the Improvement in AM/PM frequencies for Link, planned as part of the University Link extension. Preferred alternative analysis and impacts were evaluated as part of the original project development/EIS phase.

Conclusion

The majority of approved service changes as part of the 2016 SIP, are service enhancements that provide additional mobility options or improve the quality of existing Sound Transit service. For the service changes that include removal of or relocation of stops more than ½ mile, which cause disproportionate burdens or disparate impacts, other existing services provide alternatives for affected customers. Sound Transit has taken steps to ensure that the adverse effects of the identified disproportionate burdens and disparate impacts, are minimized. This includes coordination with partners to distribute information, as well as establishing mitigation and outreach plans for specific changes.

² Annualized on a factor of 255 weekdays.

Figure 96 –Route 541: Title VI Analysis – Minority Population Map

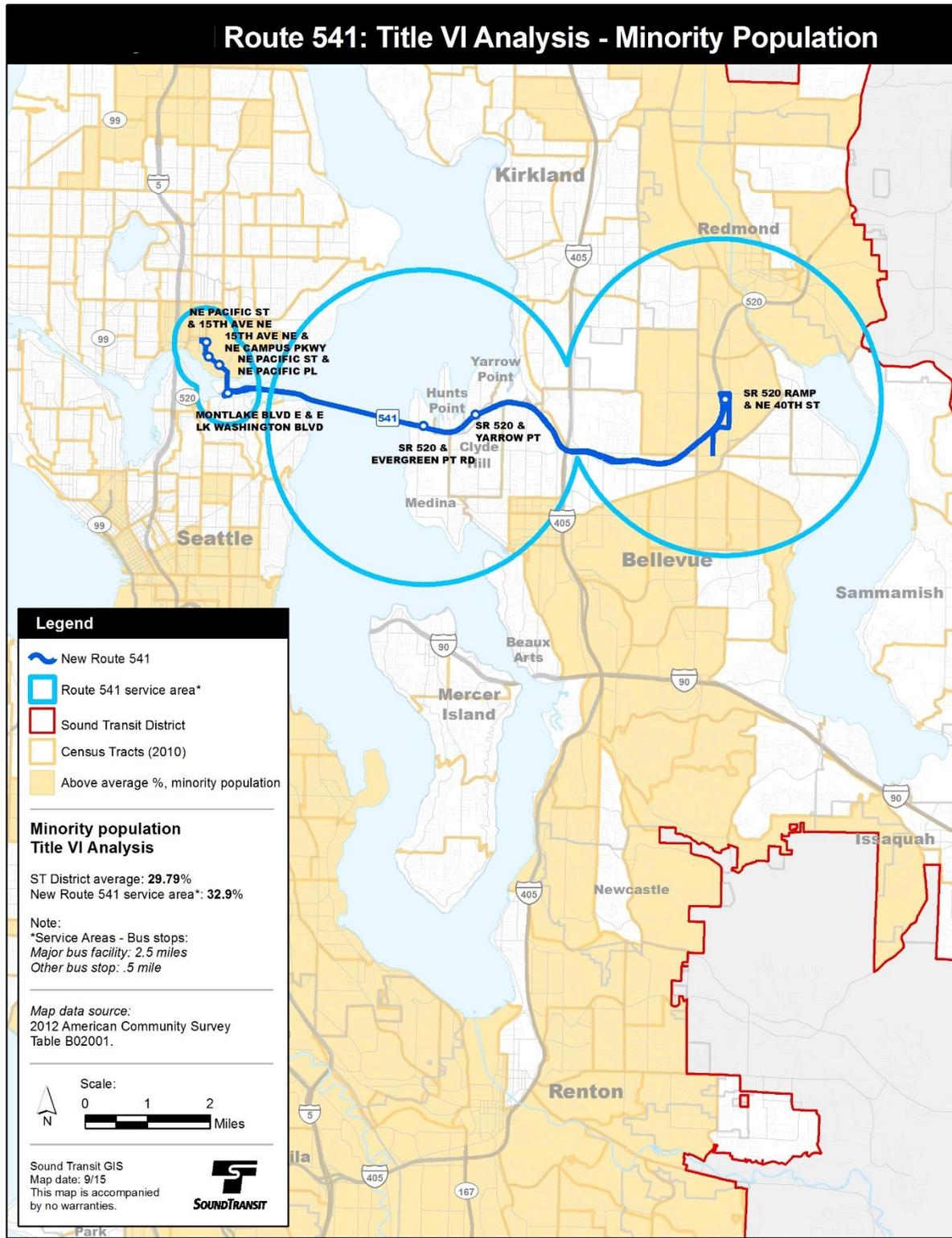


Figure 97 –Route 541: Title VI Analysis – Low Income Population Map

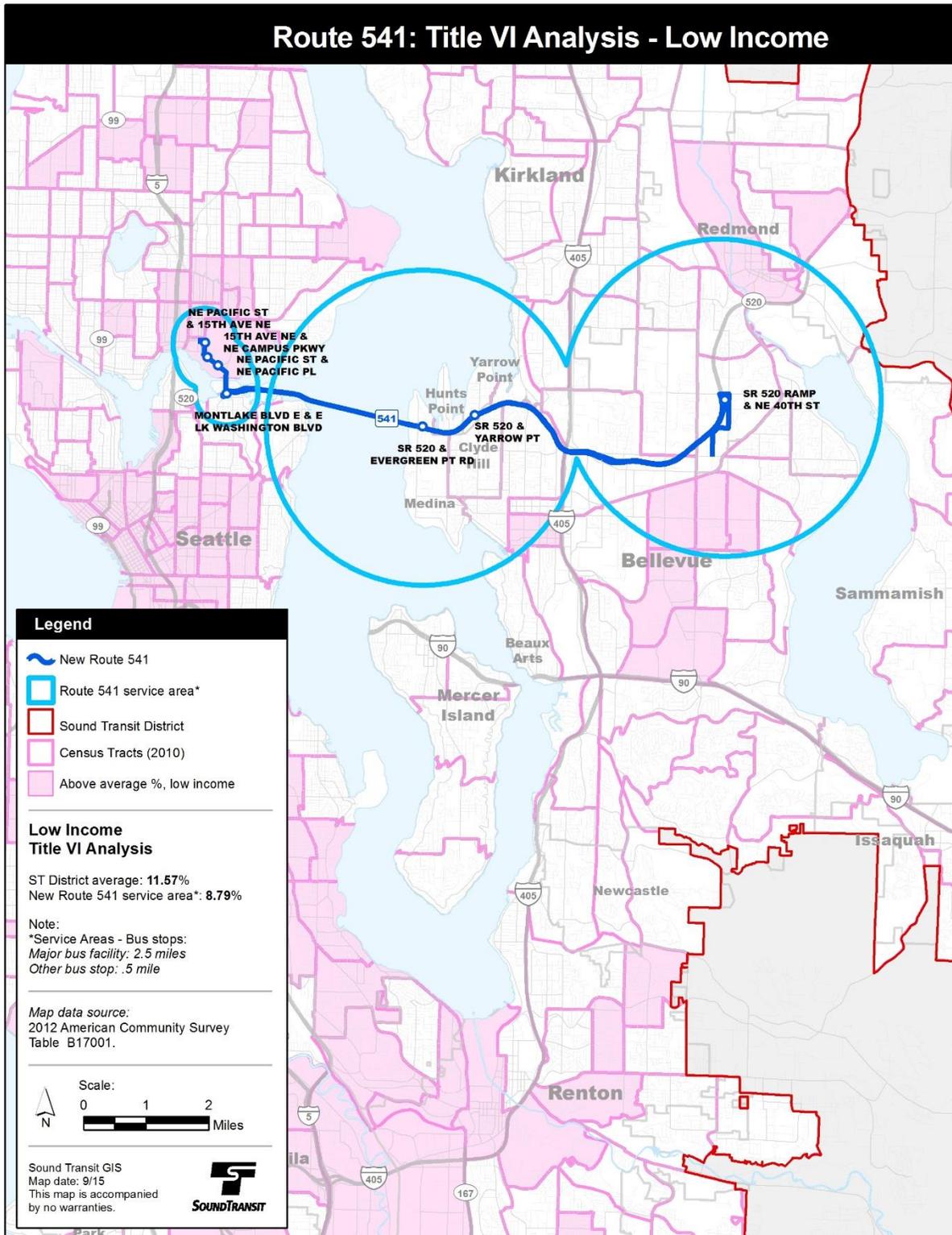


Figure 98 –Route 541: Title VI Analysis – Limited English Proficiency Population Map

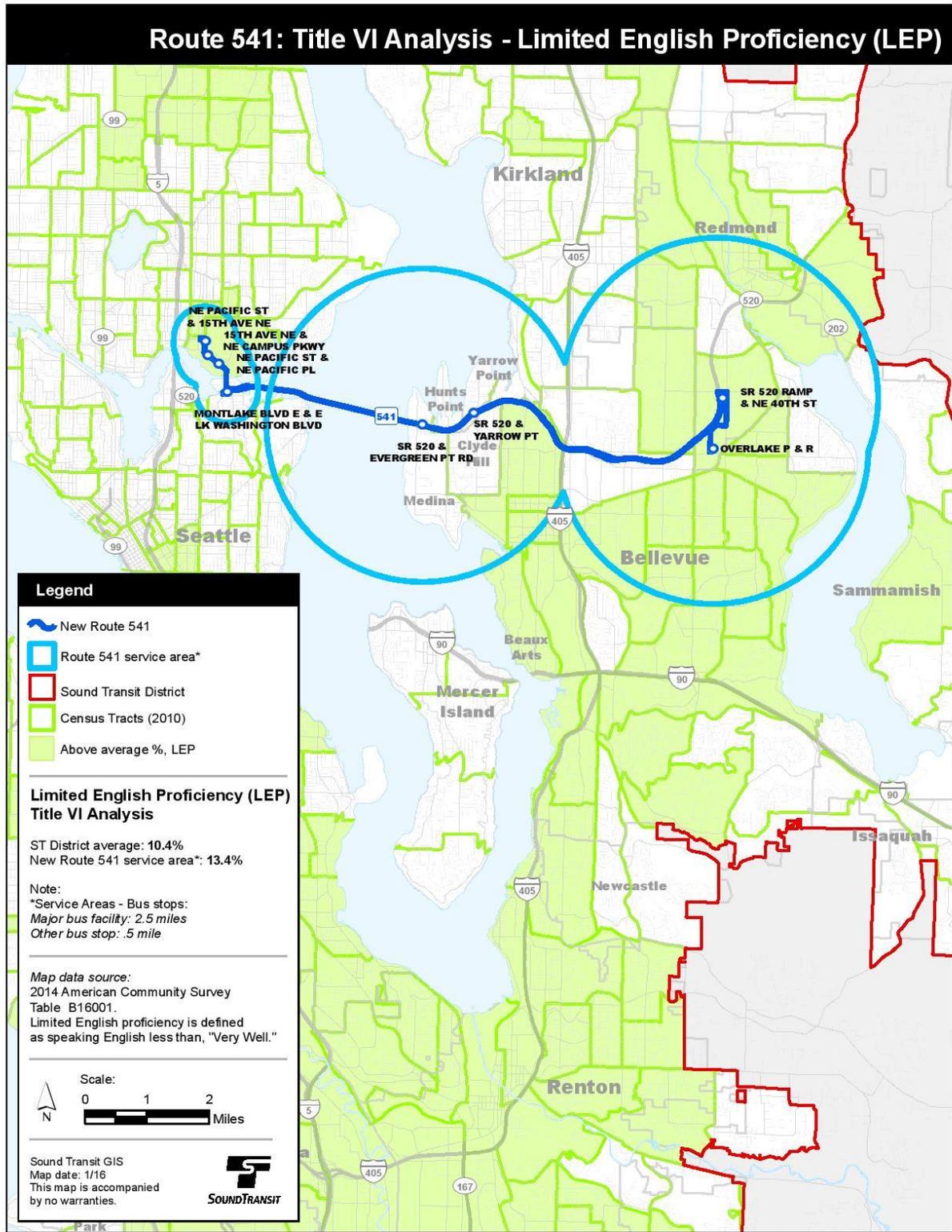


Figure 99 – Route 555 & 556: Title VI Analysis – Minority Population Map

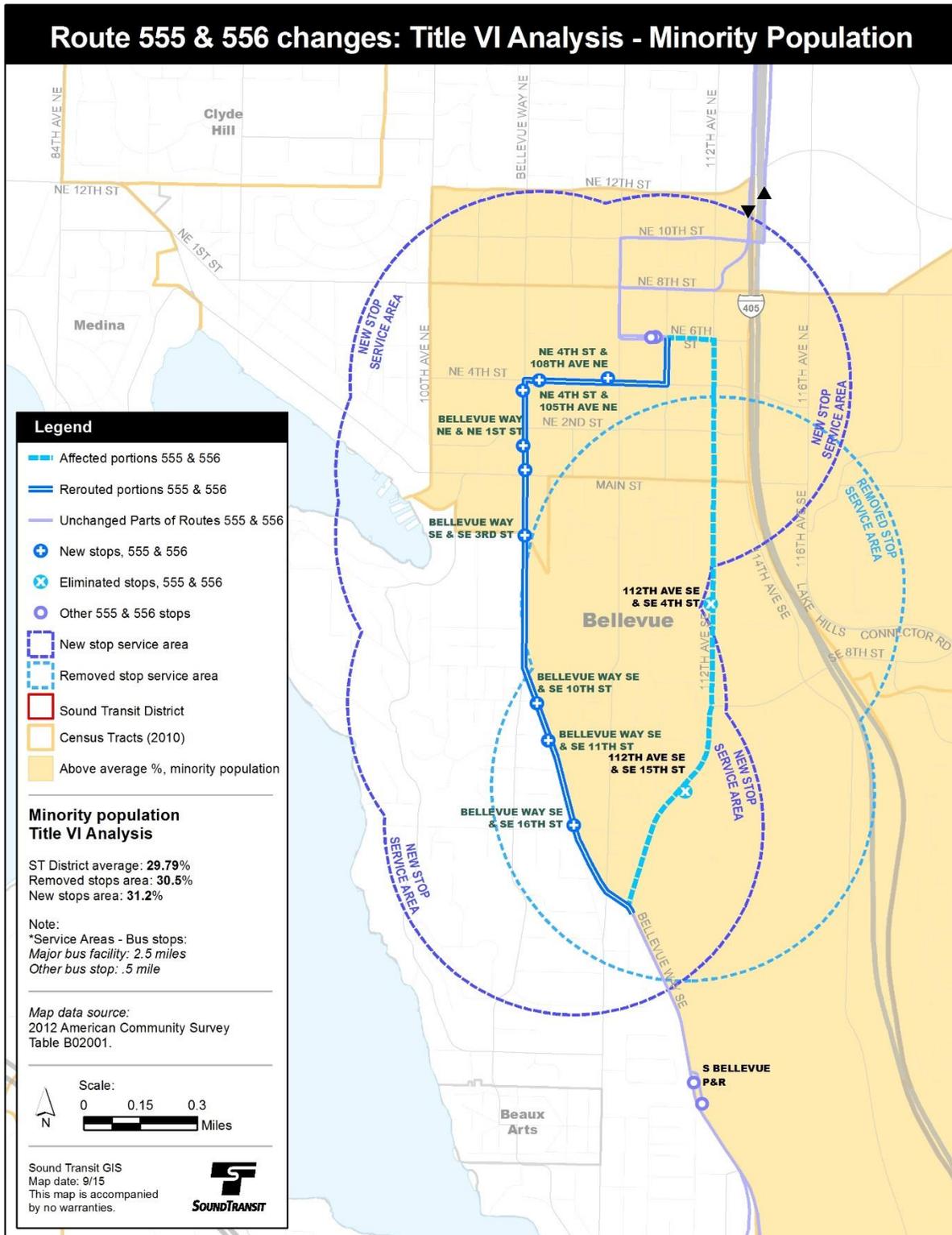


Figure 100 – Route 555 & 556: Title VI Analysis – Low Income Population Map

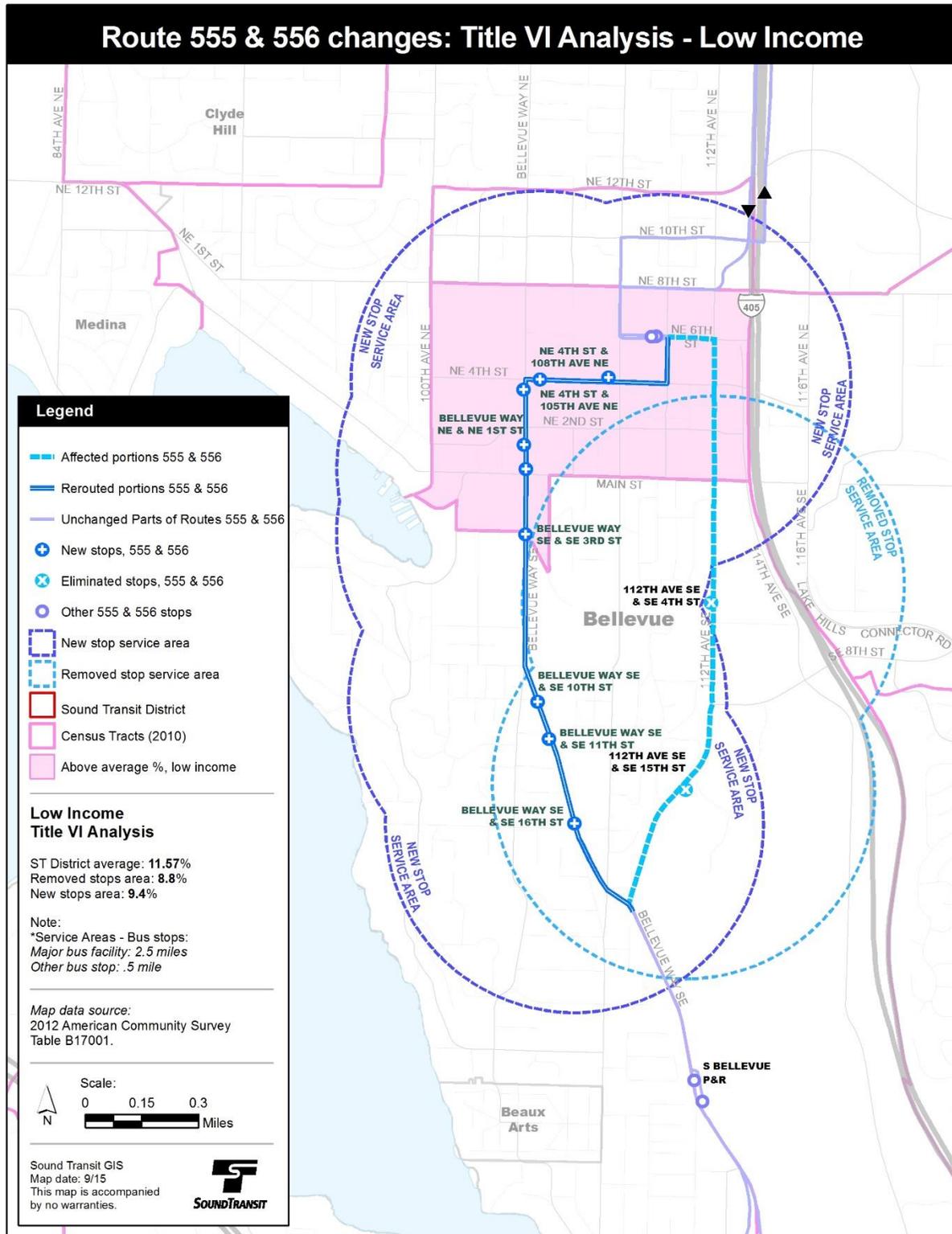


Figure 101 – Route 555 & 556: Title VI Analysis – Limited English Proficiency Population Map

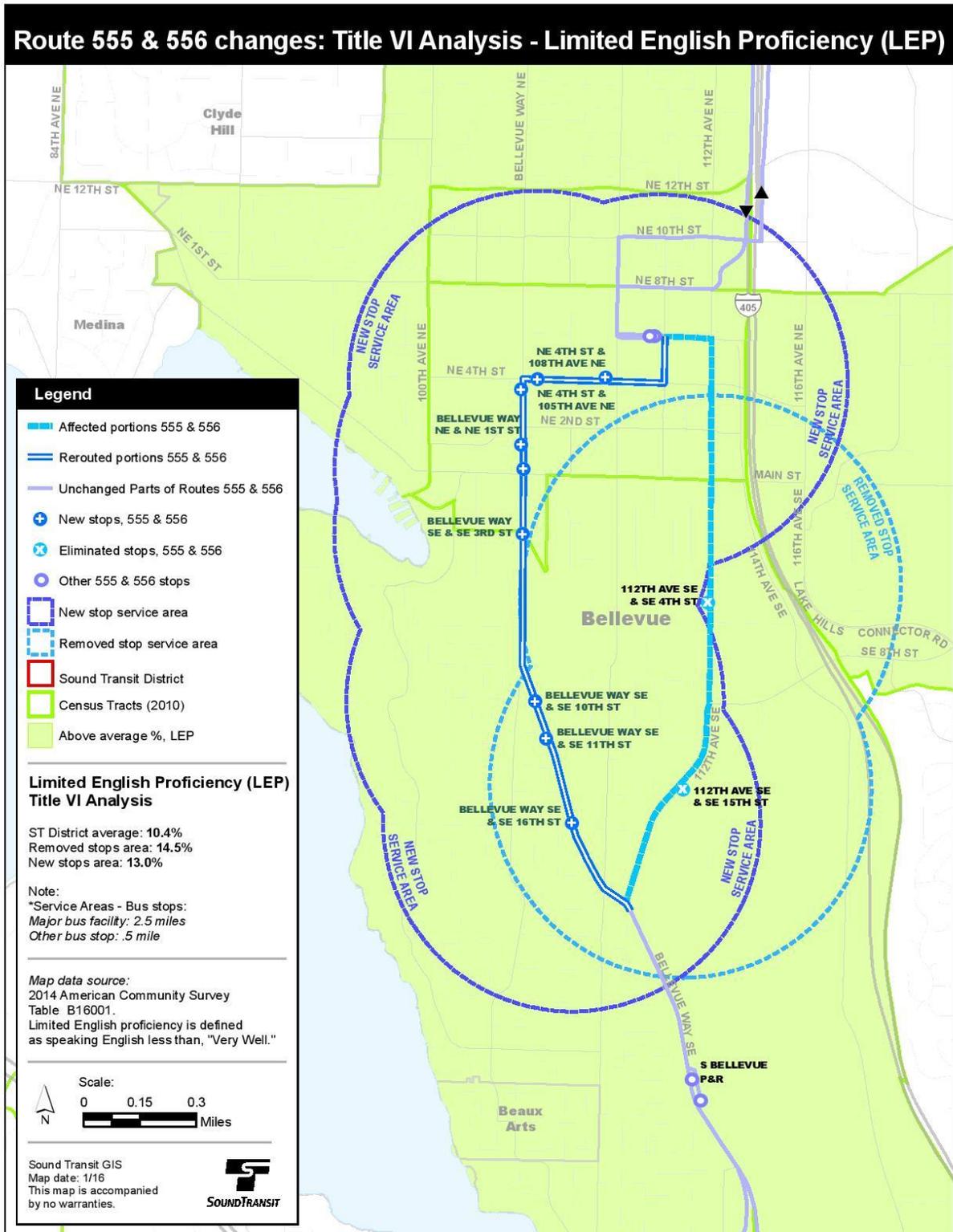


Figure 102 – Route 560: Title VI Analysis – Minority Population Map



Figure 103 – Route 560: Title VI Analysis – Low Income Population Map

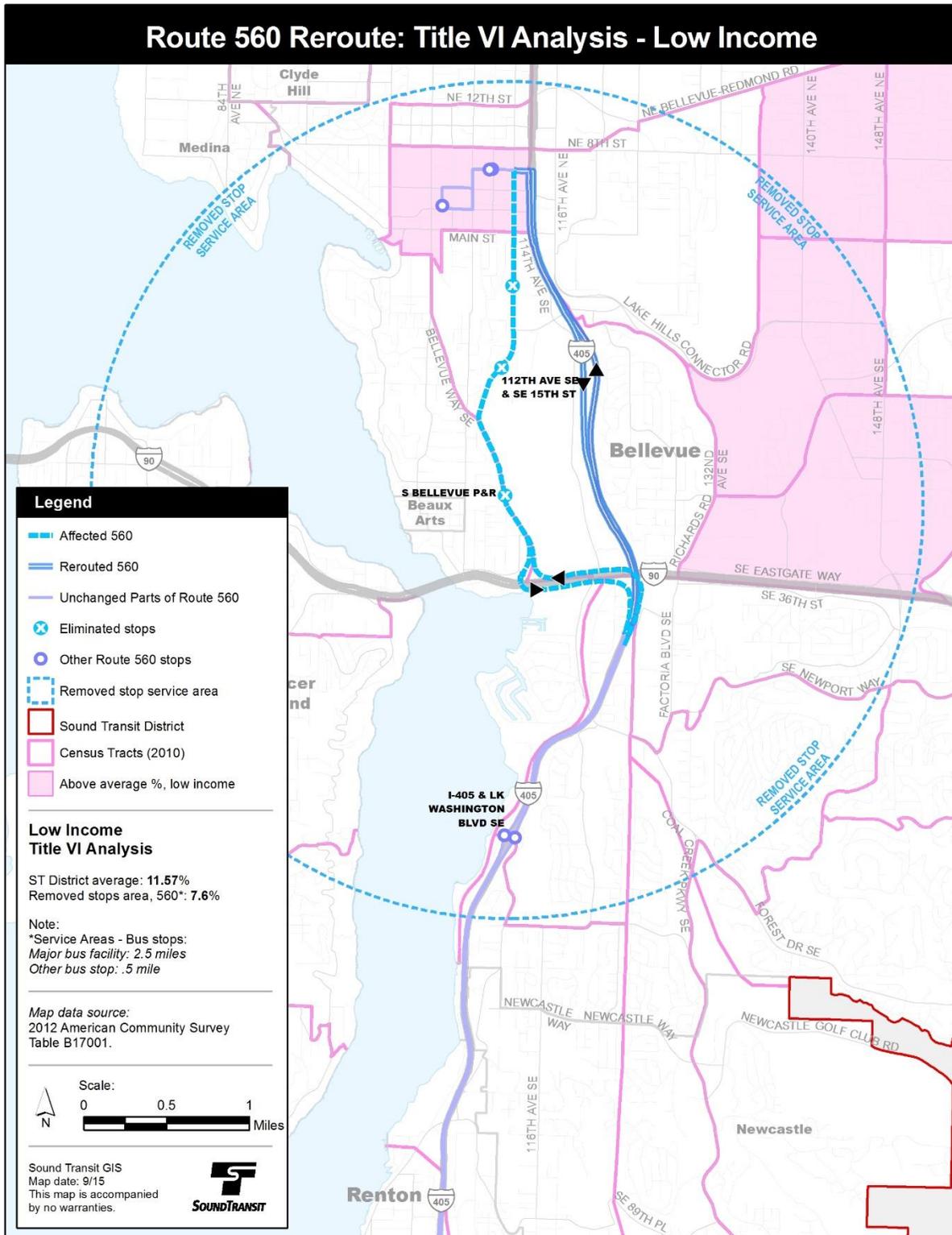
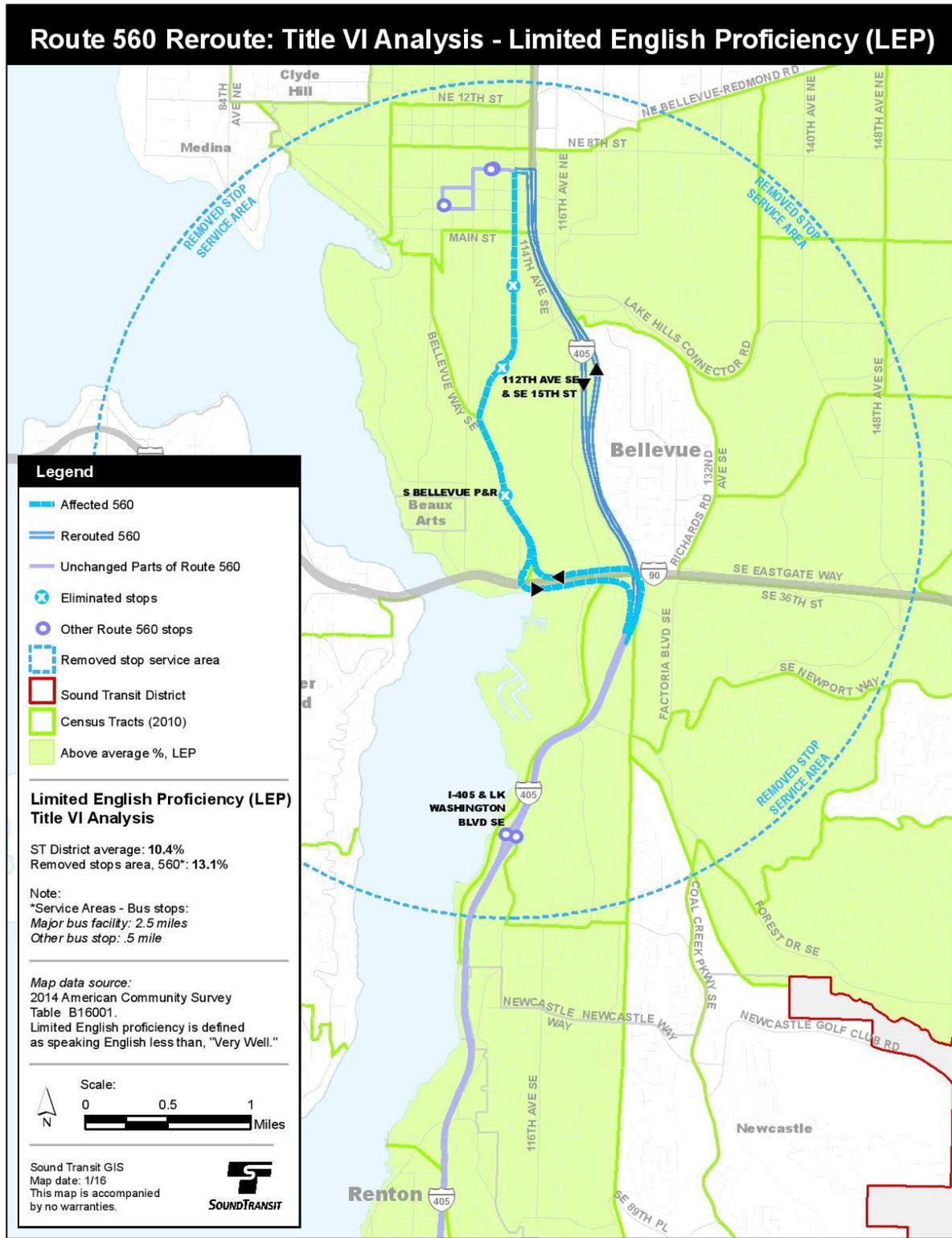


Figure 104 – Route 560: Title VI Analysis – Limited English Proficiency Population Map



Chapter Five: Preliminary Service Plan

2017-2021

Chapter Five describes preliminary service proposals for the following five years. A detailed report on the status of each bus and rail route is also included, along with performance objectives for the coming year. Based on Sound Transit's ridership forecasts, this chapter indicates the number of added trips needed on ST Express to improve passenger comfort. It also identifies a critical overcrowding that needs to be addressed immediately or potential critical overcrowding that might occur by 2021.

Tacoma Link

Table 17 - Tacoma Link Service Schedule through 2021 (For Planning Purposes Only)

Time of Day	Time	Headway (min.) Current	Headway (min.) 2021
Weekday			
Early	5:00 a.m. to 6:36 a.m.	24	20
Base	6:36 a.m. to 8:00 p.m.	12	10
Late	8:00 a.m. to 10:12 p.m.	24	20
Saturday			
Base	7:48 a.m. to 10:12 p.m.	12	10
Sunday			
Base	9:48 a.m. to 6:00 p.m.	24	20

Tacoma Link service levels are expected to remain stable through late 2021. Large-scale special events, such as Tacoma Dome and Convention Center activities, may result in the need for additional service from time to time. It is also anticipated that fares will be implemented on Tacoma Link in 2016. Staff will monitor service to examine the effect fares have on the performance measures.

Work is progressing on a 2.4 mile extension of Tacoma Link to the Hilltop neighborhood that is scheduled to open in late 2021. This extension will also include an expansion of the operating and maintenance facility in addition to acquiring five new cars for the service. When the extension opens, frequencies will be improved to operate every 10 to 20 minutes.

Link

Table 18 - Link Service Schedule through 2021 (For Planning Purposes Only)

Time of Day	Time	Headway (min.)
Weekday		
Early/Late	5:00 a.m. to 6:00 a.m.	15
AM Peak	6:00 a.m. to 9:00 a.m.	6
Base	9:00 a.m. to 3:00 p.m.	10
PM Peak	3:00 p.m. to 6:30 p.m.	6
Base	6:30 p.m. to 10:00 p.m.	10
Early/Late	10:00 p.m. to 1:00 a.m.	15
Saturday		
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		
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

Link Extensions

The University Link Extension will add 3.40 route miles and two new stations to Link in early 2016. Capitol Hill Station will serve the state's most densely populated urban area, and the University of Washington Station will serve the largest educational institution in the Northwest. Together, the two stations will significantly increase ridership on Link and require increased passenger capacity. Revenue service is anticipated to begin in the first quarter of 2016.

On the south end of Link, construction of a 1.56 mile extension from Sea-Tac/Airport Station to a new terminus at South 200th Street is underway. The Angle Lake Station will include a park-and-ride lot with approximately 1,050 stalls. It is anticipated that the Angle Lake extension will be opened for service late in 2016.

The preliminary operations plan for the Angle Lake-University of Washington and preliminary Angle Lake-Northgate service is summarized in Table 20. As peak ridership levels increase approaching 2018, revisions will need to be made by ST with consideration of operating two and three car consists.

Table 19 - 2015-2021 Link Service: Angle Lake to UW Operations Summary

	Pine St	Angle Lake – University of Washington					Northgate
	2015	2016	2017	2018	2019	2020	2021
Alignment Length	15.3	20.2	20.2	20.2	20.2	20.2	24.3
Stations	13	16	16	16	16	16	19
Projected End-to-End Travel Times	40	49	49	49	49	49	49
Minimum Cycle (turnaround) Time	92	114	114	114	114	114	120
Actual Cycle (turnaround) Time	96	114	114	114	114	114	120
Peak Headway	6	6	6	6	6	6	6
Number of Train Sets	16	19	19	19	19	19	20
Train Length	2	2	2	2	2	2	4
Peak Cars in Service	30	42	42	42	42	42	88
Fleet Size	62	62	62	62	70	94	115
Spare Ratio	107%	48%	48%	48%	67%	124%	31%
Peak One Hour Ridership Demand	1,800	2,600	2,900	3,000	3,100	3,400	5,100
Peak One Hour Capacity	2,960	2,960	2,960	2,960	2,960	2,960	5,920
Design Load Factor	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Actual Load Factor	1.62	1.76	1.96	2.03	2.09	2.30	1.72

(Source: ST Link Project, Link Rail Fleet Management Plan 2010 to 2019, University of Washington to SeaTac/Airport with an Extension to S 200th Street dated February 4, 2015 and the ST Link Project, System Wide Rail Fleet Management Plan Link 2020 to 2030 Lynnwood to Kent/Des Moines and Lynnwood to Overlake Transit Center dated August 28, 2015)

The agency plans to begin acquiring light rail vehicles as early as 2019 (two to three vehicles delivered per month) to have sufficient fleet for the opening of Lynnwood and East Link. However, with this delivery plan, acquisition of the vehicles would exceed the capacity of the OMF during the beginning of 2021.

Sounder

North Line

Service levels are expected to remain unchanged on the North Line through 2021. Although there may be some schedule adjustments contingent on Washington State Ferry staff schedule revisions on the Mukilteo-Clinton or Edmonds-Kingston lines. Currently Sound Transit is allowed a 105-minute window for schedule adjustments. Service on the North Line currently falls within a 90-minute window so there is some flexibility to maintain connections with the ferries.

South Line

Table 20 - Sounder South Line Service Implementation

Roundtrip Easement #	Description	Start Date
2	Off peak round trip	Sep-16
3	Peak/peak direction round trip	Sep-17
4	Peak/reverse direction round trip	Sep-17

Under a 2010 agreement between Sound Transit and BNSF Railway, four new South Line weekday round trips will be phased in through 2017. The initial round trip was implemented in September 2013, increasing service from nine to ten round trips every weekday. The eleventh round trip begins in September 2016. The preliminary implementation schedule for the remaining two round trips is shown in Table 21 and the Sounder ridership/revenue estimates in the SIP reflect these start dates. The Tacoma-Lakewood segment of the South Line is largely single track, and there is limited platform space at King Street Station, so changes to some existing train times may be necessary as trips are added to accommodate train meets at passing sidings. Capital projects are in the planning stages to double track the South Line segment between the L Street Yard and Tacoma Dome Station (the Tacoma Trestle replacement project), and the segment between the 66th Street bridge in Tacoma and Bridgeport Way in Lakewood. These improvements are scheduled for completion in 2017, however these projects need to be completed before the final two round trips can be implemented.

When these trips are added, staff will consider converting some existing ST Express Route 578 trips to operate as ST Express Route 577 in the early evening to reduce duplication of service between Seattle and Auburn, Sumner, and Puyallup.

ST Express

Preliminary ST Express service change concepts for 2017 through 2021 are described below. These proposals are shown for preliminary planning purposes and are subject to change.

Seattle Transit Operations

There is a regional effort consisting of Sound Transit, Community Transit, King County Metro, Seattle Department of Transportation (SDOT) and WSDOT to resolve issues of downtown Seattle transit coordination given all the construction and service revisions that are occurring through 2023. This effort includes development of eight solution teams focused on downtown issues:

- Interim Pathways (discuss SR-99 viaduct issues)
- Downtown Seattle Transit Tunnel
- I-90 Transit Express Lanes (D-2 Roadway)
- Service Integration
- Surface Street Operation
- Layover
- Long-Term Service Integration

These teams work as needed either independently or in joint workshops to resolve transit issues. They work under the direction of a Planning Team that provides guidance as needed. Overall coordination is led by a Management Team that is scheduled to meet monthly and an Executive Team that is scheduled to meet quarterly. These teams are intended to address transit issues from several major projects that will impact ST Express operations including:

- Completion of the SR-99 highway tunnel beneath downtown Seattle, the demolition of the Alaska Way Viaduct and the construction of a new waterfront surface arterial will affect all surface street traffic in downtown Seattle. Tolls required to use the tunnel will result in some SR-99 traffic diversion to downtown streets. Traffic from the Elliott Avenue corridor cannot use the tunnel, so it will likely shift either to downtown streets or the new waterfront surface arterial. At this time, tunneling has been stalled due to mechanical issues.
- The I-90 Transit Express Lanes are expected to close for construction in 2019. There is a regional effort consisting of Sound Transit, Community Transit, King County Metro, Seattle Department of Transportation (SDOT) and WSDOT that is examining alternative routings between I-90 and downtown Seattle. Two alternatives are being examined for further evaluation. The first alternative is routing buses from I-90 via Rainier Avenue S and S Jackson Street and the second alternative is via I-90 and 4th Avenue S. Work continues by the D-2 Roadway and Service Integration Solution Team on evaluating the alternatives.
- Expansion of the Washington State Convention Center will have impacts on tunnel operations beginning in 2017 or 2018. At this date, it is not clear what impacts construction will have to the layover and passenger facilities at Convention Place Station.
- The Seattle end of the SR-520 project is expected to be under construction through 2019. The project will result in the closure of the Montlake Freeway Station, but it will eventually provide direct access HOV ramps at Montlake to and from the east and continuous SR-520 HOV lanes in

both directions connecting with Interstate 5. Construction activity and the final build-out will require revisions and potential restructuring of ST Express service. The timing of these changes depends on the funding plan and construction schedule for the project, which has not been finalized as of this writing.

Angle Lake Link Bus-Rail Integration

With full-time service on South 188th Street now provided by King County Metro Route 180, the opening of Angle Lake Station provides an opportunity to evaluate the routing of ST Express Route 574 (Lakewood to SeaTac Airport) in the City of SeaTac. In addition to serving the new station, the potential re-route could serve major employment centers near International Boulevard and South 200th Street, such as the Federal Detention Center and the Alaska Airlines corporate headquarters.

South Lake Union

Sound Transit services from Federal Way and Pierce County currently layover on the edge of the South Lake Union neighborhood. Staff will work with King County Metro and Seattle Department of Transportation staff to examine ways to better serve the neighborhood.

Souder Expansion

Resources have been reserved to provide further Souder connector service on ST Express routes 567, 580 and 596 when additional Souder trips begin in 2017. When Souder trips are added, staff will consider converting some existing ST Express Route 578 trips to operate as ST Express Route 577 in the early evening to reduce duplication of service between Seattle and Auburn, Sumner, and Puyallup.

Unfunded Needs

The Sound Transit Board has adopted the 2014 *Service Standards and Performance Measures*. Changes to the service standards give staff guidance on when staff must take action to relieve overcrowding

During peak demand times, ST Express passenger loads often exceed bus seating capacity on individual trips. Standing loads are a normal occurrence and is not by itself cause for immediate action. Two indicators are used to measure the impact of passenger crowding, the load factor (ratio between seated and standing passengers) and the number of minutes passengers have to stand. The purpose of these guidelines is to assign priority for action at the trip level when conditions exceed the thresholds for either of these two indicators.

Load Factor

Corrective action should be evaluated whenever the following load factors are exceeded on individual bus trips on a regular basis (at least three days a week for weekday service, two times a month for Saturday or Sunday service):

Table 21 - Load Factor Standards by Bus Type

Bus Type	Number of Seats	Max. Passenger Load	Load Factor
40' High Floor	42	63	1.5
40' Low Floor	37	55	1.5
45' High Floor	57	70	1.23
60' Low Floor	56	81	1.45
42' Double Deck	77	95	1.23

Standing Time

In early 2014, the Sound Transit Board adopted updated *Service Standards and Performance Measures* that include new passenger load guidelines for ST Express. The guidelines recognize that standing passengers during peak hours are an ongoing reality, and lists priorities for corrective action based on the severity of overcrowding and the amount of time passengers have to stand. Sound Transit staff continually monitors service and uses several service management tools to reduce overcrowding, including schedule adjustments to balance loads, assigning larger buses and adding extra bus trips if the budget allows.

Corrective action should be evaluated whenever standing time exceeds the following thresholds on a regular basis (at least three days a week for weekday trips, two times a month for Saturday or Sunday trips).

Table 22- Standing Time Corrective Action Priority for ST Express

Minutes of Passenger Standing Time	Action Priority
More than 45 minutes	High priority; mitigating action should be implemented as soon as possible; meets criteria for use of budget contingency if available
30 to 44 minutes	Medium priority; mitigating action should be implemented at next regular service change date if budget available
Less than 30 minutes	No immediate mitigating action required, but may be candidate for future service improvement

These guidelines may be relaxed during temporary surges in demand or for special event service.

Trips that exceed the load standards are identified as “High Priority” in Table 23. Trips that exceed the load standard 50% of the time are identified as “Watch.”

Table 23 - Trips Exceeding Current Load Standards Requiring Action

Line	Action Priority
545 Redmond-Seattle	Watch: Westbound trip departing Bear Creek P&R at 8:25 a.m. High Priority: Westbound trip departing Bear Creek P&R at 8:42 a.m. High Priority: Westbound trip departing Bear Creek P&R at 8:51 a.m. Watch: Eastbound trip departing 6 th S./S. Atlantic at 4:59 p.m.
550 Bellevue-Seattle	Watch: Eastbound trip departing Convention Place at 4:06 p.m. Watch: Eastbound trip departing Convention Place at 4:24 p.m.

Based on Sound Transit’s ridership forecasts, the number of added trips needed on ST Express to lower the average maximum load to 100% during each half-hour period in the peak hours are identified in Table 26. The list also indicates needed trips that would bring the average maximum load to 80% during each hourly period during off-peak hours to improve passenger comfort. It also identifies a critical overcrowding that needs to be addressed immediately or potential critical overcrowding that might occur by 2021. Trips that are identified as “Close” exceed the load factor described on the previous page over 50% of the time. Data is based on ridership during the Spring 2015 service change.

Sound Transit passenger load guidelines for Link is that standees are permitted, up to a maximum of 200% of seated capacity per train (2.0 load factor). Corrective action should be evaluated whenever the 2.0 load factor or 30 minute standing time is exceeded at least three days a week for weekday service and twice a month for Saturday or Sunday service. At this point, there are no areas of concern, but staff will monitor ridership levels and loads when service is extended to the University of Washington Station.

For Sounder, it is intended that most passengers will have a seat for at least a majority of their trip. When standing load conditions occur three days a week or more on scheduled commuter train trips, the target guideline is to limit standing time to 30 minutes or less. Standing time limits do not apply to event trains. Actions that could reduce standing time include minor schedule adjustments to balance loads, adding cars to trains to increase capacity and making passengers aware of other trains that may have available seats.

Table 24 - Standing Time Corrective Action Priority for Rail Modes

Mode	Action Priority
Link	2.0 load factor for over 30 minutes
Sounder Commuter Rail	1.0 load factor for over 30 minutes
Tacoma Link	Standees occur regularly on five or more consecutive trips when 24-minute headways are scheduled

Table 25 -Unfunded Sound Transit Service Needs to Meet Existing and Projected Demand

Route/Line	Day	Resolution	Immediate Need	Need By 2021
510 Everett-Seattle	Weekday		Add 1 SB trip between 4:00 and 5:00 Add 1 SB trip between 5:00 and 5:30 Add 1 NB trip between 14:30 and 15:00	Operate all trips with double-decked buses
511 Ash Way-Seattle	Weekday		Add 1 SB trip between 4:00 and 5:00 Add 4 SB trips between 5:00 and 7:00 Add 1 SB trip between 8:00 and 9:00 Add 2 NB trips between 15:00 and 16:00 Add 2 NB trips between 16:30 and 17:00 Add 1 NB trip between 18:00 and 19:00	Operate all trips with double-decked buses
512 Everett-Seattle	Weekday		Add 1 NB trip between 14:00 and 14:30 Add 2 NB trips between 19:00 and 21:00 Add 1 NB trip between 22:00 and 23:00	Operate all trips with double-decked buses
512 Everett-Seattle	Saturday		Begin 15-minute frequency SB at 8:00 Extend 15-minute frequency NB to 19:00 Extend 20-minute frequency NB to 23:00	Operate all trips with double-decked buses
512 Everett-Seattle	Sunday		Operate 20-minute frequency SB from 9:00 to 13:00 (4 trips) Operate 20-minute frequency NB from 15:00 to 19:00 (4 trips)	Operate all trips with double-decked buses
522 Woodinville-Seattle	Weekday	1 trip 9/15 2 trips 9/15	Add 4 SB trips between 6:30 and 9:00 Add 1 SB trip between 10:00 and 11:00 Add 5 NB trips between 15:30 and 18:00 Add 2 NB trips between 18:00 and 20:00	Add 1 SB trip before 5:00 Add 1 SB trip between 8:00 and 9:00 Add 1 SB trip between 9:00 and 10:00 Add 1 SB trip between 11:00 and 12:00 Add 1 NB trip between 16:00 and 16:30 Add 1 NB trip between 18:00 and 19:00 Extend 30-minute frequency NB to 23:00
522 Woodinville-Seattle	Saturday		None	Operate 20-minute frequency SB from 8:00 to 15:00 Operate 20-minute frequency NB from 17:00 to 19:00 Extend 30-minute frequency NB to 23:00
522 Woodinville-Seattle	Sunday		None	Add 1 NB trip between 16:00 and 17:00
532 Everett-Bellevue	Weekday		Add 1 SB trip between 5:30 and 6:00 Add 2 SB trips between 7:30 and 8:30	Operate all trips with articulated buses Add 1 SB trip between 5:00 and 5:30 Add 2 SB trips between 6:00 and 7:00 Add 2 NB trips between 15:30 and 16:30 Add 1 NB trip between 17:00 and 17:30
535 Lynnwood-Bellevue	Weekday		Add 3 SB trips between 6:30 and 8:00 Add 1 SB trip between 8:00 and 9:00	Operate all trips with articulated buses
540 Kirkland-U. District	Weekday		Add 3 WB trips between 7:00 and 8:30 Operate WB trips between 9:00 and 10:00 with articulated buses	Operate all trips with articulated buses
545 Redmond-Seattle	Weekday		Add 1 WB trip between 5:00 and 6:00 Add 3 WB trips between 6:30 and 8:00 Add 2 WB trips between 8:00 and 8:30 Add 2 WB trips between 8:30 and 9:00 Add 3 WB trips between 9:00 and 10:00 Add 3 WB trips between 16:30 and 18:00 Add 1 EB trip between 7:30 and 8:00 Add 1 EB trip between 8:30 and 9:00 Add 5 EB trips between 15:30 and 18:00 Add 3 EB trips between 18:00 and 19:00 Add 1 EB trip between 19:00 and 20:00	Add 1 WB trip between 6:00 and 6:30 Add 1 WB trip between 7:00 and 7:30 Add 1 EB trip between 7:00 and 7:30 Add 1 EB trip between 8:00 and 8:30 Add 1 EB trip between 14:00 and 15:00 Add 1 EB trip between 15:00 and 15:30 Add 2 EB trips between 16:30 and 17:30
545 Redmond-Seattle	Saturday		Add 2 WB trips between 10:00 and 12:00 Add 1 WB trip between 16:00 and 17:00 Add 1 EB trip between 17:00 and 18:00 Operate 30-minute service EB until 22:00	Operate 20-minute frequency WB from 9:00 to 14:00 Operate 20-minute frequency EB from 16:00 to 19:00
545 Redmond-Seattle	Sunday		Add 1 WB trip between 11:00 and 12:00	Add 1 EB trip between 16:00 and 17:00

Chapter Five: Preliminary Service Plan 2017-2021

Unfunded Sound Transit Service Needs to Meet Existing and Projected Demand (continued)

Route/Line	Day	Resolution	Immediate Need	Need By 2021
550 Bellevue-Seattle	Weekday		Add 1 WB trip between 5:00 and 6:00 Add 1 WB trip between 6:30 and 7:00 Add 2 WB trips between 7:00 and 7:30 Add 2 WB trips between 8:00 and 9:00 Add 1 WB trip between 16:30 and 17:00 Add 1 WB trip between 17:30 and 18:00 Add 2 WB trips between 18:00 and 19:00 Add 1 EB trip between 7:00 and 7:30 Add 1 EB trip between 9:00 and 10:00 Add 1 EB trip between 14:00 and 15:00 Add 2 EB trip between 16:00 and 17:00 Add 2 EB trips between 17:00 and 17:30 Add 1 EB trip between 17:30 and 18:00 Add 1 EB trip between 18:00 and 19:00 Add 1 EB trip between 20:00 and 20:30	Add 1 WB trip between 7:30 and 8:00 Add 1 WB trip between 16:00 and 16:30 Add 1 WB trip between 17:00 and 17:30 Add 1 WB trip between 20:00 and 21:00 Add 2 EB trips between 8:00 and 9:00 Add 1 EB trip between 18:00 and 19:00
550 Bellevue-Seattle	Saturday		Add 1 EB trip between 7:00 and 8:00	Add 1 WB trip between 7:00 and 8:00 Add 1 EB trip between 8:00 and 9:00 Add 1 EB trip between 20:00 and 21:00
550 Bellevue-Seattle	Sunday		Add 2 WB trips between 11:00 and 13:00 Add 1 WB trip between 15:00 and 16:00 Add 1 WB trip between 19:00 and 20:00 Add 4 EB trips between 15:00 and 19:00	Add 1 WB trip between 10:00 and 11:00 Add 1 EB trip between 10:00 and 11:00 Add 1 EB trip between 13:00 and 14:00
554 Issaquah-Seattle	Weekday		Add 3 WB trips between 5:30 and 7:00 Add 3 WB trips between 7:30 and 9:00 Add 1 EB trip between 14:00 and 15:00 Add 4 EB trips between 16:00 and 18:00 Add 1 EB trip between 19:00 and 20:00	Add 1 WB trip between 9:00 and 10:00 Add 1 EB trip between 15:30 and 16:00
554 Issaquah-Seattle	Saturday		None	Add 1 WB trip between 8:00 and 9:00
555 Northgate-Issaquah	Weekday		Add 2 WB trips between 7:00 and 8:00 Add 3 EB trips between 15:00 and 16:30	None
556 Issaquah-Northgate	Weekday		Add 1 WB trip between 7:00 and 7:30	Add 1 WB trip between 6:30 and 7:00
560 Westwood-Bellevue	Saturday		Add 1 EB trip between 7:00 and 8:00	Add 1 EB trip between 6:00 and 7:00
560 Westwood-Bellevue	Sunday		None	Add 1 EB trip between 7:00 and 8:00
574 Lakewood-SeaTac	Weekday		Add 1 NB trip between 3:00 and 4:00 Add 2 SB trips between 15:30 and 16:30 Add 1 SB trip between 22:00 and 23:00	None
574 Lakewood-SeaTac	Saturday		Add 1 NB trip between 3:00 and 4:00	None
574 Lakewood-SeaTac	Sunday		None	Add 1 NB trip between 3:00 and 4:00
577 Federal Way-Seattle	Weekday	9/15 add 9/15 add	Add 1 NB trip before 5:00 Add 1 NB trip between 5:00 and 6:00 Add 1 NB trip between 6:00 and 7:00	Add 5 NB trips between 6:00 and 8:30 Add 1 NB trip between 15:00 and 15:30 Add 1 SB trip between 16:00 and 16:30
577 Federal Way-Seattle	Saturday		Convert trips to Route 578	None
578 Puyallup-Seattle	Weekday	3/16 add 3/16 add 3/16 add	Add 2 NB trips between 8:30 and 10:00 Add 1 SB trip between 14:00 and 14:30 Add 1 SB trip between 19:00 and 20:00	Add 2 NB trips between 10:00 and 12:00 Add 1 SB trip between 12:00 and 13:00
578 Puyallup-Seattle	Saturday		Operate Route 577 trips as Route 578	
590 Tacoma-Seattle	Weekday		Add 1 NB trip between 4:00 and 5:00	Add 1 NB trip between 4:00 and 5:00 Add 1 NB trip between 5:30 and 6:00 Add 1 NB trip between 6:30 and 7:00 Add 1 NB trip between 8:00 and 9:00 Add 1 SB trip between 15:00 and 15:30

Unfunded Sound Transit Service Needs to Meet Existing and Projected Demand (continued)

Route/Line	Day	Resolution	Immediate Need	Need By 2021
592 Olympia/DuPont-Seattle	Weekday		None	Add 1 NB trip between 4:00 and 5:00
594 Lakewood-Seattle	Weekday		None	Add 2 NB trips between 8:00 and 9:30 Add 1 SB trip between 14:00 and 14:30 Add 2 SB trips between 18:30 and 20:00
594 Lakewood-Seattle	Saturday		Add 1 NB trip between 10:00 and 11:00 Add 1 NB trip between 12:00 and 13:00 Add 2 SB trips between 16:00 and 18:00	Add 1 NB trip between 5:00 and 6:00 Add 1 NB trip between 9:00 and 10:00 Add 1 NB trip between 13:00 and 14:00 Add 1 SB trip between 15:00 and 16:00 Add 1 SB trip between 18:00 and 19:00
594 Lakewood-Seattle	Sunday		None	Add 1 SB trip between 16:00 and 17:00
595 Gig Harbor-Seattle	Weekday		None	Add 1 NB trip between 4:30 and 5:00
596 Bonney Lake-Sumner	Weekday		Operate high-floor 40-foot coach on all trips	Operate with high capacity coach
South Line	Weekday		None	Watch for overcrowding on trip departing King Street Station around 16:15

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Chapter Six: Financial Plan, Ridership, and Revenue Forecast

Ridership Forecasts

Ridership forecasts for Sound Transit services are developed through various modeling processes conducted and reviewed by an internal team of finance, long-range planning, modeling, service planning, and operations staff. Annual boardings and average weekday boardings for 2014 and forecasts for 2015-2021 are shown for each mode of service in Table 27 and Table 28, respectively. The assumptions for each method of forecasting are summarized below.

Tacoma Link ridership forecasts through 2020 are based on a 1 percent annual growth rate. Ridership forecasts for 2021 reflect a planned extension of Tacoma Link tentatively scheduled to begin operation in late 2021. In 2014, the Sound Transit Board approved a \$1.00 adult fare for Tacoma Link that was to begin in September 2014; however implementation was deferred when the Tacoma Business Improvement Area provided the funding for Sound Transit to continue the no fare service through September 2016. Ridership forecasts for 2016-2021 reflect implementation of fares in the fourth quarter of 2016.

Ridership forecasts for Link are provided by Planning, Environment and Project Development Department staff. Estimates are based on historical ridership growth, service levels operated and planned, assumed opening of the University Link and S. 200th Link extensions in 2016, and assumed levels of service on local and regional bus routes operating in the vicinity of the Link alignment.

Ridership forecasts for Sounder commuter rail are based on a regression model developed by a consultant under contract with the Planning, Environment, and Project Development department. The model accounts for the following variables: Historical ridership data, seasonal variability in ridership, number of platform hours operated and planned, fuel price, employment, and fares.

Ridership forecasts for ST Express are based on a regression model developed by a consultant under contract with the Planning, Environment, and Project Development department. The model accounts for the following variables: Historical ridership data, seasonal variability in ridership, number of platform hours operated and planned, fuel price, employment, fares, parking supply, and Lake Washington bridge tolls.

Paratransit ridership is estimated on the basis of historical system performance in the Link system area, which represents a three-quarter mile linear corridor along the Link alignment. An annual growth rate of 3% is used to forecast ridership in the corridor. After the Link expansion to the University of Washington campus and South 200th Street in the City of SeaTac, paratransit ridership is assumed to grow in proportion to the new service area of the expanded Link system.

Table 26 - Annual Boardings, 2014-2021 (Millions)

Mode	2014 Actual	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
ST Express	17.66	18.41	19.50	19.80	20.12	20.39	20.76	21.07
Sounder	3.36	3.65	3.73	3.81	3.89	3.96	4.03	4.10
Tacoma Link	0.96	1.00	0.95	0.82	0.83	0.83	0.84	1.06
Link	11.00	11.50	17.20	20.10	21.80	22.70	23.50	26.50
Paratransit	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.09
Total	33.04	34.62	41.45	44.61	46.72	47.96	49.21	52.82

Table 27 - Average Weekday Boardings, 2014-2021

Mode	2014 Actual	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
ST Express	60,962	64,198	67,903	68,873	70,015	70,902	72,142	73,182
Sounder	12,856	13,701	14,022	14,344	14,631	14,901	15,159	15,428
Tacoma Link	3,313	3,410	3,234	2,786	2,814	2,842	2,871	3,599
Link	33,057	34,600	51,800	60,500	65,600	68,400	70,800	79,800
Paratransit	154	159	204	210	216	223	229	248
Total	110,342	116,068	137,163	146,713	153,276	157,268	161,201	172,257

Projected Fares and Fare Revenue

Fare Revenue Assumptions

Tacoma Link, Link, Sounder and ST Express fare revenue projections are based on ridership forecasts together with estimates of the average fare per boarding (AFB). Ridership forecasts and fare assumptions for 2016-2021 reflect implementation of fares on Tacoma Link in the fourth quarter of 2016.

There is no fare revenue associated with paratransit operations.

Fare Structure

ST Express bus fare structure is zone-based; each county in the Sound Transit district is one zone. Single-ride fares for adult riders are currently \$2.50 for rides within one county and \$3.50 for inter-county travel. Corresponding monthly pass prices are \$90.00 and \$126.00. Riders with a Regional Reduced Fare Permit may ride for a cost of \$0.75 for travel within one county and \$1.50 for inter-county travel. Monthly passes are priced at \$27.00 and \$54.00, respectively. Youth fares are \$1.25 for travel within one county, and \$2.50 for inter-county travel. Monthly youth passes are priced at \$45 and \$90.

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 \$5.25. Monthly pass prices range from \$99.00 to \$189.00. Riders with a Regional Reduced Fare Permit are approximately 50 percent of the adult fare and youth fares are discounted about 25 percent from the adult fare.

In March of 2015, Orca LIFT was introduced. Orca LIFT is a reduced fare program for low-income riders of the Link. Those who qualify, pay a fare of \$1.50 regardless of distance traveled along with a 2-hour transfer period. These fares must be paid with a valid Orca LIFT card.

Link fares were established in 2009 using a station-to-station fare structure. A fare increase went into effect on June 1, 2011 that revised the base fare to \$2.25 and five cents per mile rounded to the nearest quarter. Regular adult fares range from \$2.25 to \$3.00. Monthly pass prices range from \$81.00 to \$109.00. Riders with a Regional Reduced Fare Permit are \$0.75 and monthly passes are available for \$27.00. Youth fares are \$1.25 and monthly passes are \$45.00.

In 2014, the Sound Transit Board approved a \$1.00 adult fare for Tacoma Link that was to begin in September 2014; however implementation was deferred when the Tacoma Business Improvement Area provided the funding for Sound Transit to continue the no fare service through September 2016. Starting in October 2016, Tacoma Link will begin charging fares of \$1.50 for adults, and \$0.75 for riders with a Regional Reduced Fare Permit.

Table 28 - Annual Fare Revenue 2013-2019 (\$ millions)

Mode	2014 Actual (\$000)	2015 Forecast (\$000)	2016 Forecast (\$000)	2017 Forecast (\$000)	2018 Forecast (\$000)	2019 Forecast (\$000)	2020 Forecast (\$000)	2021 Forecast (\$000)
ST Express	33.84	35.21	36.86	37.42	38.03	38.54	39.24	39.82
Sounder	10.46	11.37	11.56	11.81	12.06	12.28	12.49	12.71
Tacoma Link		-	0.26	0.81	0.82	0.82	0.83	1.05
Link	15.88	17.94	24.42	32.16	35.97	37.46	38.78	43.73
Total	60.18	64.52	73.10	82.20	86.88	89.09	91.34	97.31

Operations and Maintenance Costs

Tacoma Link

Financial projections are based on annual Consumer Price Index (CPI) increases, historical trends, and updated expense assumptions as provided by the Finance Department. Projections are broken down by salaries, services, materials, supplies, insurance, and agency overhead. An extension of Tacoma Link is in the planning stages and tentatively scheduled to begin operation in late 2021. Additional operations and maintenance costs are included in the assumptions shown for 2021.

Link

Approximately half of the operation and maintenance (O&M) expenses for Link are related to the service provided by King County Metro staff under the terms of an inter-governmental agreement. Each year, Sound Transit and King County Metro staffs meet and agree on staffing levels and other budget items to arrive at an estimated purchased transportation budget.

Other scope elements retained by Sound Transit are modeled based on current security and safety requirements, insurance, transit systems, fare collection, traction power consumption and estimated utility rates, and spare parts.

Downtown Seattle Transit Tunnel (DSTT)

In 2015 Sound Transit's share of the DSTT operations and maintenance and debt service costs is 46 percent based on a negotiated agreement with King County. The O&M and debt service costs are split between ST Express and Link in proportion to the amount of service operated in the tunnel (currently 42.5% ST Express/57.5% Link). Link operating and maintenance costs are shown in Table 30.

Sound Transit has been working with King County Metro on the appropriate level of bus service through the DSTT following the opening of University Link. A change in bus volumes in the DSTT could result in a change in the share that Sound Transit pays for DSTT operations and maintenance. For the 2016 budget, Sound Transit has assumed that it will pay 64% of the share of the tunnel costs.

Souder Commuter Rail

Expenditures for operations and maintenance increase each year at the estimated contract escalation (based on cost indices), together with the cost of any added service. Expenditure projections also include Purchased Transportation costs (the costs billed to Sound Transit for the provision of commuter rail service by BNSF Railroad), maintenance of rail vehicles by Amtrak, services, materials and supplies, facilities maintenance, insurance, and administration. Souder operating and maintenance costs are shown in Table 30.

ST Express Bus

Purchased Transportation costs comprise the majority of operating and maintenance costs for ST Express. These 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 costs are negotiated with the transit partners to establish annual baseline costs. Bus Contingency hours are not included in the estimates and the Bus Contingency budget is managed by Sound Transit directly.

Other costs include Operations Department staff salaries and benefits, other staff costs (such as rent, office supplies, etc.), and costs allocated to Service Delivery by support departments (Executive, Board Administration, Facilities Maintenance, Legal, Communications, DECM and Finance & Information Technology). Costs also include a portion of DSTT debt service costs and operations and maintenance costs (see Link section above). Bus operating and maintenance costs are shown in Table 30.

Paratransit

Sound Transit is responsible for 50 percent of the trip costs of the paratransit trips having both origin and destination within the Link paratransit service area corridor and 50 percent of the registration and certification costs for those registered paratransit riders within the Link paratransit service corridor. The average system trip cost for all King County paratransit trips is used for trips within the Link service area. Paratransit operating and maintenance costs are shown in Table 30.

Table 29 - Operating and Maintenance Costs (Thousands)

Mode	2014 Actual (\$000)	2015 Adopted (\$000)	2016 Estimate (\$000)	2017 Estimate (\$000)	2018 Estimate (\$000)	2019 Estimate (\$000)	2020 Estimate (\$000)	2021 Estimate (\$000)
ST Express	108,129	116,785	124,108	129,883	129,900	133,291	132,031	136,734
Souder	38,885	43,552	45,820	48,850	52,143	53,770	56,120	58,646
Tacoma Link	3,951	4,623	5,069	5,290	5,384	5,565	6,464	11,631
Link	55,006	61,743	86,110	90,262	93,261	96,102	101,996	116,146
Paratransit	1,456	1,710	1,906	2,060	2,115	2,169	2,225	2,388
Total	207,426	228,413	263,014	276,345	282,803	290,898	298,837	325,545

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Appendix A: Modal Hours and Miles

Summary Tables

Appendix A includes five tables that show the planned operations for each mode through 2021. For Sounder commuter rail, Tacoma Link and Link, information includes revenue miles and hours, and platform hours and miles by train and passenger coach. ST Express information includes platform hours and includes total platform hours by each subarea.

Table 30 - ST Express Platform Hours Summary

		ST Express							
		2014	2015	2016	2017	2018	2019	2020	2021
		Actual	Estimated						
510	Everett/Seattle	16,754	17,769	19,096	19,096	19,096	19,096	19,096	19,096
511	Lynnwood/Seattle	17,425	16,310	17,118	17,214	17,282	17,282	17,282	17,282
512	Everett/Lynnwood/Seattle	60,725	57,725	59,059	59,059	59,059	59,059	59,059	59,059
513	Eastmont/Seattle	11,189	10,496	11,113	11,113	11,113	11,113	11,113	11,113
522	Woodinville/Seattle	53,129	54,265	55,342	55,342	55,342	55,342	55,342	55,342
532	Everett/Bellevue	17,580	17,711	17,711	17,711	17,728	17,728	17,728	17,728
535	Lynnwood/Bellevue	23,356	23,256	23,293	23,293	23,293	23,293	23,293	23,293
540	Kirkland/U. District	8,112	8,473	8,441	8,441	8,441	8,441	8,441	8,441
541	Overlake/U. District	-	-	7,319	9,068	9,104	9,104	9,104	9,104
542	Redmond/U. District	18,077	18,067	18,084	18,084	18,084	18,084	18,084	18,084
545	Redmond/Seattle	71,742	73,293	74,855	78,314	78,314	78,314	78,314	78,314
550	Bellevue/Seattle	56,065	55,089	55,383	55,383	55,383	55,383	55,383	55,383
554	Issaquah/Seattle	34,129	32,934	36,805	38,425	38,482	38,482	38,482	38,482
555	Northgate/Issaquah	5,773	6,738	6,996	7,746	7,746	7,746	7,746	7,746
556	Issaquah/Northgate	7,834	8,639	8,898	9,648	9,648	9,648	9,648	9,648
560	West Seattle/Airport/Seattle	38,762	39,142	39,204	39,204	39,204	39,204	39,204	39,204
566	Auburn/Overlake	29,680	30,967	31,335	31,335	31,335	31,335	31,335	31,335
567	Kent/Overlake	10,317	10,673	11,266	12,188	13,362	13,362	13,362	13,362
574	Lakewood/Sea-Tac	43,357	43,957	43,919	43,919	43,919	43,919	43,919	43,919
577	Federal Way/Seattle	17,531	19,883	22,051	22,795	22,844	22,844	22,844	22,844
578	Puyallup/Seattle	31,015	31,299	33,844	34,344	34,344	34,344	34,344	34,344
580	Lakewood/Puyallup	-	1,447	5,445	6,442	7,135	7,135	7,135	7,135
586	Tacoma/U. District	11,733	11,739	9,996	9,996	9,996	9,996	9,996	9,996
590-595	Lakewood/Tacoma/Seattle	128,618	126,744	121,633	121,633	121,633	121,633	121,633	121,633
596	Bonney Lake/Sumner	3,268	3,420	3,558	4,017	4,386	4,386	4,386	4,386
RL	Red Lot Service	848	375	-	-	-	-	-	-
ST Express Total		717,021	720,411	741,762	753,808	756,270	756,270	756,270	756,270
Schedule Maintenance & Extra Service		3,032	4,750	3,197	3,401	939	939	939	939
Total ST Express Budgeted Hours		720,053	725,161	744,959	757,209	757,209	757,209	757,209	757,209
All projected service miles and hours are estimates subject to change based on end of year actuals.									

Table 31 - ST Express Platform Hours Summary by Subarea

ST Express								
	2014	2015	2016	2017	2018	2019	2020	2021
	Actual	Estimated						
Snohomish County	125,485	121,786	125,884	125,981	126,065	126,065	126,065	126,065
East King County	323,812	327,676	342,757	351,842	352,897	352,897	352,897	352,897
South King County	72,298	75,705	78,442	79,352	79,612	79,612	79,612	79,612
Pierce County	195,426	195,244	194,679	196,634	197,696	197,696	197,696	197,696
ST Express Total	717,021	720,411	741,762	753,808	756,270	756,270	756,270	756,270

Projected service includes only scheduled service and does not include special event or extra service. All projected service miles and hours are estimates subject to change based on end of year actuals.

Table 32 – Sounder Commuter Rail Miles and Hours Summary

Sounder Commuter Rail									
Year		Train Statistics				Passenger Car Statistics			
		Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
North Line									
Estimated	2014 (Actual)	2,472	2,641	64,775	66,241	6,680	7,171	176,609	180,651
	2015	2,719	2,896	70,760	72,407	7,456	7,948	194,393	200,267
	2016	2,803	2,982	72,846	74,550	7,331	7,798	190,494	194,950
	2017	2,803	2,982	72,846	74,550	7,331	7,798	190,494	194,950
	2018	2,814	2,993	73,120	74,830	7,357	7,826	191,178	195,650
	2019	2,814	2,993	73,120	74,830	7,357	7,826	191,178	195,650
	2020	2,825	3,004	73,393	75,110	7,384	7,854	191,862	196,350
	2021	2,814	2,993	73,120	74,830	7,357	7,826	191,178	195,650
South Line									
Estimated	2014 (Actual)	6,243	6,691	203,885	208,859	43,695	46,824	1,427,194	1,460,347
	2015	6,807	7,333	219,115	224,354	47,651	51,329	1,533,807	1,570,480
	2016	7,455	8,041	235,939	241,858	52,186	56,290	1,651,574	1,693,003
	2017	8,568	9,219	269,414	276,012	59,979	64,532	1,885,895	1,932,087
	2018	9,807	10,454	303,525	310,127	68,652	73,179	2,124,674	2,170,890
	2019	9,807	10,454	303,525	310,127	68,652	73,179	2,124,674	2,170,890
	2020	9,845	10,494	304,697	311,324	68,918	73,461	2,132,878	2,179,271
	2021	9,807	10,454	303,525	310,127	68,652	73,179	2,124,674	2,170,890
Total									
Estimated	2014 (Actual)	8,715	9,332	268,660	275,100	50,375	53,994	1,603,802	1,640,998
	2015	9,527	10,229	289,875	296,762	55,107	59,278	1,728,200	1,770,747
	2016	10,259	11,023	308,785	316,408	59,517	64,088	1,842,068	1,887,953
	2017	11,372	12,201	342,260	350,562	67,310	72,330	2,076,389	2,127,037
	2018	12,621	13,447	376,644	384,957	76,009	81,005	2,315,852	2,366,540
	2019	12,621	13,447	376,644	384,957	76,009	81,005	2,315,852	2,366,540
	2020	12,670	13,499	378,090	386,434	76,302	81,315	2,324,740	2,375,621
	2021	12,621	13,447	376,644	384,957	76,009	81,005	2,315,852	2,366,540

Projected service includes only scheduled service and does not include special event or extra service. All projected service miles and hours are estimates subject to change based on end of year actuals.

Table 33 – Tacoma Link Miles and Hours Summary

Tacoma Link									
Year		Train Statistics				Passenger Car Statistics			
		Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
Estimated	2014(Actual)	9,837	10,029	76,239	76,523	9,837	10,029	76,239	76,523
	2015	9,794	9,928	75,904	76,184	9,794	9,928	75,904	76,184
	2016	9,844	9,978	76,291	76,573	9,844	9,978	76,291	76,573
	2017	9,794	9,928	75,904	76,184	9,794	9,928	75,904	76,184
	2018	9,815	9,949	76,065	76,346	9,815	9,949	76,065	76,346
	2019	9,792	9,926	75,891	76,172	9,792	9,926	75,891	76,172
	2020	9,825	9,959	76,142	76,424	9,825	9,959	76,142	76,424
	2021	16,384	16,599	127,503	127,820	16,384	16,599	127,503	127,820
Projected service includes only scheduled service and does not include special event or extra service. All projected service miles and hours are estimates subject to change based on end of year actuals.									

Table 34 - Link Miles and Hours Summary

Link									
Year		Train Statistics				Passenger Car Statistics			
		Revenue Hours	Platform Hours	Revenue Miles	Platform Miles	Revenue Hours	Platform Hours	Revenue Miles	Platform Miles
Estimated	2014 (Actual)	72,032	75,774	1,350,853	1,466,675	143,880	151,351	2,697,521	2,929,676
	2015	79,767	84,299	1,468,016	1,544,586	159,535	168,598	2,936,032	3,089,173
	2016	88,955	94,692	1,764,095	1,824,745	177,911	189,384	3,528,190	3,649,491
	2017	95,252	102,281	1,936,057	2,013,128	190,504	204,562	3,872,114	4,026,256
	2018	95,322	102,364	1,937,624	2,014,888	190,645	204,729	3,875,248	4,029,777
	2019	95,322	102,364	1,937,624	2,014,888	190,645	204,729	3,875,248	4,029,777
	2020	95,602	102,668	1,943,355	2,020,889	191,204	205,335	3,886,709	4,041,780
	2021	97,101	104,054	2,077,152	2,161,644	388,404	416,216	8,308,608	5,170,780

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Appendix B: Fleet Plans

Appendix B includes a table that shows the fleet plan through 2021. Each table includes a projection of total fleet size maximum peak pull, number of spares and the spare ratio.

Table 35 - ST Express Bus Fleet Through 2021

	Make	Year in Service	Type	2015	2016	2017	2018	2019	2020	2021
Leased	Gillig	1999	40-foot	2	0					
Current Fleet	New Flyer	2001	40-foot	3	0					
	New Flyer	2003	40-foot	1	1	1	1	0		
	New Flyer	2004	60-foot	38	38	22	0			
	Gillig	2005	40-foot	2	2	2	2	0		
	MCI	2005	45-foot	13	13	13	13	13	13	
	Gillig	2008	40-foot	30	30	30	30	30	30	
	New Flyer	2008	60-foot	2	2	2	2	2	2	
	MCI	2008	45-foot	7	7	7	7	7	7	7
	MCI	2009	45-foot	3	3	3	3	3	3	3
	New Flyer	2010	60-foot	37	37	37	37	37	37	37
	MCI	2010	45-foot	17	17	17	17	17	17	17
	New Flyer	2011	60-foot	35	35	35	35	35	35	35
	Gillig	2012	40-foot	24	24	24	24	24	24	24
	New Flyer	2012	60-foot	19	19	19	19	19	19	19
	New Flyer	2015	60-foot	22	22	22	22	22	22	22
	AD	2015	Double Deck	5	5	5	5	5	5	5
Gillig	2015	40-foot	20	20	20	20	20	20	20	
Planned Fleet		2016	40-foot		5	5	5	5	5	5
		2016	45-foot		13	13	13	13	13	13
		2017	Double Deck			32	32	32	32	32
		2018	60-foot				22	22	22	22
		2019	60-foot					3	3	3
		2021	45-foot							13
		2021	40-foot							30
		2021	60-foot							2
Fleet Statistics	Total Assigned Fleet			280	293	309	309	309	309	309
	Peak Bus Requirements			232	253	258	258	258	258	258
	Spares			48	40	51	51	51	51	51
	Spare Ratio			20.7%	15.8%	19.8%	19.8%	19.8%	19.8%	19.8%

Table 36 - Tacoma Link Fleet Through 2021

	Vehicle Number	Manufacturer	Year in Service	Type	2015	2016	2017	2018	2019	2020	2021
Existing Fleet	1001-1003	Skoda	2003	66-foot LR	3	3	3	3	3	3	3
	TBD	TBD	2021	TBD						1	6
	Total Assigned Fleet				3	3	3	3	3	4	9
	Peak Vehicle Requirements (including ready reserve):				2	2	2	2	2	2	7
	Spares:				1	1	1	1	1	2	2
	Spare Ratio (in assigned fleet):				50%	50%	50%	50%	50%	100%	29%

Appendix B

Table 37 - Link Fleet Through 2021

	Vehicle Number	Manufacturer	Year in Service	Type	2015	2016	2017	2018	2019	2020	2021
Existing Fleet	101-135	Kinkisharyo	2009	95-foot LR	35	35	35	35	35	35	35
	136-162	Kinkisharyo	2011	95-foot LR	27	27	27	27	27	27	27
	TBD	TBD	2019	TBD					8	32	53
	Total Assigned Fleet				62	62	62	62	70	94	115
	Peak Vehicle Requirements (including ready reserve):				30	42	42	42	42	42	88
	Spares:				32	20	20	20	20	52	27
Spare Ratio (in assigned fleet):				107%	48%	48%	48%	67%	124%	31%	

Table 38 - Sounder Fleet Through 2021

	Vehicle Number	Manufacturer	Year in Service	Type	2015	2016	2017	2018	2019	2020	2021	
Existing	901-911	GM	2000-2001	Locomotive	11	11	11	11	11	11	11	
	101-111, 301-307	Bombardier	2000-2003	Cab Car	18	18	18	18	18	18	18	
	201-240, 401-410	Bombardier	2000-2003	Coach	40	40	40	40	40	40	40	
	921-923	Motive Power	2012	Locomotive	3	3	3	3	3	3	3	
Planned	TBD	Bombardier	2016	Cab Car		9	9	9	9	9	9	
Fleet Statistics	Total Locomotives on Property:				14	14	14	14	14	14	14	
	Peak Vehicle Requirements (including ready reserve):				11	12	12	12	12	12	12	
	Spares:				3	2	2	2	2	2	2	
	Spare Ratio (in assigned fleet):				27%	17%	17%	17%	17%	17%	17%	
	Total Passenger Cars on Property:				58	67	67	67	67	67	67	
	Peak Vehicle Requirements (including ready reserve):				54	59	59	59	59	59	59	
	Spares:				4	8	8	8	8	8	8	
	Spare Ratio (in assigned fleet):				7%	14%	14%	14%	14%	14%	14%	
	Total Vehicles on Property:				72	81	81	81	81	81	81	81
	Peak Vehicle Requirements (including ready reserve):				65	71	71	71	71	71	71	71
	Spares:				7	10	10	10	10	10	10	
Spare Ratio (in assigned fleet):				11%	14%	14%	14%	14%	14%	14%		

Appendix C: Public Outreach Summary Report

Overview

The public outreach process for the 2016 SIP included three outreach events, a public hearing and an open-house. The public was encouraged to review the service changes and provide feedback at a Sound Transit Open House or Public Hearing, by phone, or via e-mail.

Goals of Outreach

- Raise awareness of Sound Transit and its 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.

Outreach Methodology

The Draft 2016 SIP and its public information document, *Regional Transit News*, were posted on the Sound Transit website on October 14, 2015. *Regional Transit News* contains explanations and maps of the service changes proposed in the SIP and encouraged riders and the general public to contact Sound Transit with their comments.

A link to the SIP was e-mailed to local jurisdictions, transportation agencies, and other key stakeholders and persons who signed up to receive Sound Transit reports. Copies of *Regional Transit News* were distributed at open houses and on board Sounder trains, ST Express buses, the Overlake Transit Center, and at Sounder stations along the South Line. An electronic version of the SIP was posted on Sound Transit's website.

Public Feedback

Outreach Events

Service Planning and Communications teamed up for three outreach events to provide customers with information of this year's service changes. Sound Transit staff distributed 1,500 copies of "Regional Transit News" at locations selected on where service changes were most affected. Staff chose the times to distribute information based on an analysis of hourly ridership patterns, in order to reach as many riders as possible with each event.

Street teams were placed along the:

- **SR 520 corridor** during the **AM peak**
- **I-90 corridor** during the **PM peak**
- **Overlake Transit Center** during the **PM peak**

Key Themes

- Many people were happy with the additions in service and hope to see **more service additions in the future**
- There were many people who were looking forward to the **additional stations** added to Link
- Concerns about **bus crowding** were expressed

Public Feedback

We had a total of 7 formal responses during this year’s public outreach period. All respondents received a reply or receipt of their comment in person or via e-mail, if contact information was provided. Responses are summarized below:

- 2 respondents support the implementation of Route 541
- 1 respondent supports additional service to Route 545
- 4 respondents supported the mid-day service trip addition to the Sounder south line

Open House

There were 6 people who attended the public open house. The service planning department was there to answer questions, provide information, and collect comment cards from those who attended. Out of 3 comment cards that were collected, 2 of them were written by the same respondent.

Thursday, November 5, 9 a.m.

Union Station—Ruth Fisher Board Room
401 S. Jackson St.
Seattle, WA 98104

Public Hearing

A public hearing was held on November 5th, 2015. No relevant public testimony was received.

Thursday, November 5, Noon

Union Station—Ruth Fisher Board Room
401 S. Jackson St.
Seattle, WA 98104

Appendix D: Stop Level Ridership Data

Following are total weekday passenger activity data (i.e. boardings and alightings) in both directions for many major transit facilities served by multiple Sound Transit services, with information from the Spring 2015 service change period. Note that the data presented are only for Sound Transit modes and do not include any partner agency transit service at these locations.

Following the facility summaries are passenger activity information for individual Sound Transit lines.

Ash Way Park-and-Ride		
Route	Total Ons	Total Offs
511 Lynnwood-Seattle	364	325
512 Everett-Seattle	331	388
532 Everett-Bellevue	307	285
	1,002	998

Bothell Park-and-Ride		
Route	Total Ons	Total Offs
522 Woodinville-Seattle	238	215
535 Lynnwood-Bellevue	94	96
	332	311

Auburn Station		
Route	Total Ons	Total Offs
566 Auburn-Overlake	115	104
578 Puyallup-Seattle	216	226
Souder South Line	1,445	1,313
	1,776	1,643

Brickyard Park-and-Ride		
Route	Total Ons	Total Offs
532 Everett-Bellevue	5	5
535 Lynnwood-Bellevue	122	137
	127	142

Bellevue Transit Center		
Route	Total Ons	Total Offs
532 Everett-Bellevue	712	768
535 Lynnwood-Bellevue	571	631
550 Bellevue-Seattle	1,491	1,524
555 Northgate-Issaquah	298	306
556 Issaquah-Northgate	193	230
560 Westwood Village-Bellevue	407	444
566 Auburn-Overlake	477	513
567 Kent-Overlake	201	218
	4,350	4,634

Canyon Park Freeway Station		
Route	Total Ons	Total Offs
532 Everett-Bellevue	296	317
535 Lynnwood-Bellevue	139	128
	435	445

Eastgate Freeway Station/ Eastgate Park-and-Ride		
Route	Total Ons	Total Offs
554 Issaquah-Seattle	806	898
555 Northgate-Issaquah	25	27
556 Issaquah-Northgate	86	79
	917	1,004

Appendix D

Everett Station		
Route	Total Ons	Total Offs
510 Everett-Seattle	581	478
512 Everett-Seattle	542	466
532 Everett-Bellevue	172	154
Souder North Line	207	233
	1,502	1,331

I-90/Rainier Ave Freeway Station		
Route	Total Ons	Total Offs
550 Bellevue-Seattle	317	370
554 Issaquah-Seattle	122	96
	439	466

Evergreen Point Freeway Station		
Route	Total Ons	Total Offs
540 Kirkland-U. District	31	20
542 Redmond-U. District	44	27
545 Redmond-Seattle	78	81
555 Northgate-Issaquah	8	4
556 Issaquah-Northgate	11	19
	172	151

Issaquah Highlands Park-and-Ride		
Route	Total Ons	Total Offs
554 Issaquah-Seattle	247	217
555 Northgate-Issaquah	7	13
556 Issaquah-Northgate	118	78
	372	308

Federal Way Transit Center		
Route	Total Ons	Total Offs
574 Lakewood-SeaTac	447	481
577 Federal Way-Seattle	812	575
578 Puyallup-Seattle	514	611
	1,773	1,667

Issaquah Transit Center		
Route	Total Ons	Total Offs
554 Issaquah-Seattle	498	571
555 Northgate-Issaquah	20	20
556 Issaquah-Northgate	139	135
	657	726

Kent Station		
Route	Total Ons	Total Offs
566 Auburn-Overlake	245	231
567 Kent-Overlake	235	231
Souder South Line	1,672	1,664
	2,152	2,126

King Street Hub		
Route	Total Ons	Total Offs
510 Everett-Seattle	131	97
511 Ash Way-Seattle	117	102
512 Everett-Seattle	426	300
513 Everett-Seattle	28	28
522 Woodinville-Seattle	430	228
545 Redmond-Seattle	670	462
550 Bellevue-Seattle	1,054	1,297
554 Issaquah-Seattle	411	434
577 Federal Way-Seattle	52	47
578 Puyallup-Seattle	128	11
590 Tacoma-Seattle	198	216
592 Olympia-Seattle	27	12
594 Lakewood-Seattle	101	195
595 Gig Harbor-Seattle	29	24
Souder South Line	4,712	4,688
Souder North Line	615	537
Link	2,938	3,442
	12,067	12,120

Boardings and alightings for ST Express Route 550 and Link are at International District/Chinatown Station. All other ST Express routes are for the stops that are closest to S. Jackson Street.

Lakewood Station		
Route	Total Ons	Total Offs
592 Olympia-Seattle	186	118
594 Lakewood-Seattle	109	113
Souder South Line	200	226
	495	457

Lynnwood Transit Center		
Route	Total Ons	Total Offs
511 Ash Way-Seattle	434	434
512 Everett-Seattle	608	654
535 Lynnwood-Bellevue	318	206
	1,360	1,294

Mercer Island		
Route	Total Ons	Total Offs
550 Bellevue-Seattle	1,114	1,190
554 Issaquah-Seattle	278	171
	1,392	1,361

Montlake Freeway Station		
Route	Total Ons	Total Offs
540 Kirkland-U. District	24	16
542 Redmond-U. District	92	61
545 Redmond-Seattle	468	526
555 Northgate-Issaquah	44	46
556 Issaquah-Northgate	8	8
	636	657

ST Express routes 540, 542 and 545 stop on Montlake Boulevard E.

Mountlake Terrace Freeway Station		
Route	Total Ons	Total Offs
511 Ash Way-Seattle	219	242
512 Everett-Seattle	166	224
513 Everett-Seattle	151	142
	536	608

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Overlake Transit Center		
Route	Total Ons	Total Offs
542 Redmond-U. District	283	344
545 Redmond-Seattle	1,825	2,144
566 Auburn-Overlake	213	198
567 Kent-Overlake	91	73
	2,412	2,759

Boardings and alightings include the freeway stop at the westbound onramp to SR-520.

SeaTac/Airport Station		
Route	Total Ons	Total Offs
560 Westwood Village-Bellevue	163	97
574 Lakewood-SeaTac	78	183
Link	5,571	4,887
	5,812	5,167

Pioneer Square Station		
Route	Total Ons	Total Offs
550 Bellevue-Seattle	650	728
Link	2,000	2,134
	2,650	2,862

Sea-Tac Airport Terminal (Lower Drive)		
Route	Total Ons	Total Offs
560 Westwood Village-Bellevue	185	272
574 Lakewood-SeaTac	634	407
	819	679

Puyallup Station		
Route	Total Ons	Total Offs
578 Puyallup-Seattle	102	94
Sounder South Line	1,244	1,168
	1,346	1,262

SODO Station		
Route	Total Ons	Total Offs
590 Tacoma-Seattle	69	81
594 Lakewood-Seattle	36	35
595 Gig Harbor-Seattle	8	6
Link	1,244	1,187
	1,357	1,309

Renton Transit Center		
Route	Total Ons	Total Offs
560 Westwood Village-Bellevue	233	226
566 Auburn-Overlake	323	346
	556	572

South Bellevue Park-and-Ride		
Route	Total Ons	Total Offs
550 Bellevue-Seattle	809	813
555 Northgate-Issaquah	9	4
556 Issaquah-Northgate	30	22
560 Westwood Village-Bellevue	75	69
	923	908

South Everett Freeway Station		
Route	Total Ons	Total Offs
510 Everett-Seattle	310	339
512 Everett-Seattle	156	183
532 Everett-Bellevue	134	125
	600	647

Sumner Station		
Route	Total Ons	Total Offs
578 Puyallup-Seattle	78	94
596 Bonney Lake-Sumner	242	228
Souder South Line	1,107	1,026
	1,427	1,348

SR-512 Park-and-Ride		
Route	Total Ons	Total Offs
574 Lakewood-SeaTac	238	245
592 Olympia-Seattle	161	157
594 Lakewood-Seattle	143	99
	542	501

Tacoma Dome Station		
Route	Total Ons	Total Offs
574 Lakewood-SeaTac	374	401
586 Tacoma-U. District	284	243
590 Tacoma-Seattle	1,202	830
594 Lakewood-Seattle	350	433
Souder South Line	784	955
Tacoma Link	1,102	1,008
	4,096	3,870

Stadium Station		
Route	Total Ons	Total Offs
522 Woodinville-Seattle	74	62
545 Redmond-Seattle	125	62
590 Tacoma-Seattle	40	54
594 Lakewood-Seattle	63	58
595 Gig Harbor-Seattle	4	3
Link	1,030	1,225
	1,336	1,464

Union Station/S 19 th St (UW-Tacoma)		
Route	Total Ons	Total Offs
590 Tacoma-Seattle	57	37
594 Lakewood-Seattle	100	93
Tacoma Link	723	710
	880	840

ST Express routes 522 and 545 board and alight along 6th Avenue S.

University Street Station		
Route	Total Ons	Total Offs
550 Bellevue-Seattle	1,059	991
Link	2,583	2,712
	3,642	3,703

UW-Bothell/Cascadia Community College		
Route	Total Ons	Total Offs
522 Woodinville-Seattle	291	304
535 Lynnwood-Bellevue	290	275
	581	579

Westlake Hub

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Route	Total Ons	Total Offs
510 Everett-Seattle	355	277
511 Ash Way-Seattle	396	249
512 Everett-Seattle	720	641
513 Everett-Seattle	135	88
522 Woodinville-Seattle	619	885
545 Redmond-Seattle	911	1,067
550 Bellevue-Seattle	1,469	1,209
554 Issaquah-Seattle	401	340
577 Federal Way-Seattle	260	431
578 Puyallup-Seattle	315	532
590 Tacoma-Seattle	162	250
592 Olympia-Seattle	74	91
594 Lakewood-Seattle	171	222
595 Gig Harbor-Seattle	23	22
Link	6,728	6,161
	12,739	12,465

Yarrow Point/Clyde Hill Freeway Station		
Route	Total Ons	Total Offs
540 Kirkland-U. District	12	7
542 Redmond-U. District	23	12
545 Redmond-Seattle	67	56
555 Northgate-Issaquah	6	5
556 Issaquah-Northgate	9	4
	117	84

510 Line: Everett-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	S Jackson St	134	0
	S Washington St	29	1
	Cherry St	124	3
	Seneca St	175	6
	Pike St	205	17
	6th Ave	131	8
	9th Ave	102	8
	South Everett	17	333
	34th St	1	64
	Everett	0	478
Northbound Total		918	918
Southbound	Fulton St	8	0
	Lombard Ave	1	0
	Wall St	3	0
	Rockefeller Ave	1	0
	Everett	581	0
	34th St	48	1
	South Everett	293	6
	Yale Ave	19	141
	9th Ave	9	82
	7th Ave	6	91
	Pine St	20	252
	Seneca St	14	176
	Marion St	1	110
	Jefferson St	8	55
	S Jackson St	0	98
Southbound Total		1,013	1,013
Ridership Totals:		1,931	1,931

511 Line: Ash Way-Seattle				
	Stop Name	Total Ons	Total Offs	
Northbound	S Jackson St	117	0	
	S Washington St	13	0	
	Cherry St	122	3	
	Seneca St	226	5	
	Pike St	206	11	
	6th Ave	173	6	
	9th Ave	117	4	
	Mountlake Terrace	25	236	
	Lynnwood	20	429	
	Ash Way	0	325	
	Northbound Total		1,018	1,018
	Southbound	Ash Way	364	0
Lynnwood		414	5	
Mountlake Terrace		194	6	
Yale Ave		19	155	
9th Ave		7	87	
7th Ave		5	108	
Pine St		18	232	
Seneca St		14	209	
Marion St		1	101	
Jefferson St		7	37	
S Jackson St		0	102	
Southbound Total		1,043	1,043	
Ridership Totals:		2,061	2,061	

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512 Line: Everett-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	S Jackson St	432	0
	S Washington St	46	2
	Cherry St	164	68
	Seneca St	228	41
	Pike St	412	43
	6th Ave	247	20
	Terry Ave	204	18
	NE 45th St	250	105
	NE 145th St	44	44
	Mountlake Terrace	29	189
	Lynnwood	66	585
	Ash Way	27	354
	South Everett	14	161
	34th St	1	60
	Everett	2	66
	Rockefeller Ave	0	0
	Wall St	0	3
	Lombard Ave	0	1
	Virginia Ave	0	4
	Northbound Total	2,166	2,166

512: Everett-Seattle			
	Stop Name	Total Ons	Total Offs
Southbound	Everett	540	0
	34th St	42	2
	South Everett	143	22
	Ash Way	304	34
	Lynnwood	542	69
	Mountlake Terrace	138	35
	NE 145th St	50	52
	NE 45th St	81	266
	Yale Ave	33	182
	9th Ave	19	102
	7th Ave	16	83
	Pine St	60	579
	Seneca St	27	153
	Marion St	24	99
	Jefferson St	17	59
	S Jackson St	0	299
	Southbound Total	2,035	2,035
	Ridership Totals:	4,201	4,201

513 Line: Everett-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	S Jackson St	28	0
	S Washington St	5	0
	Cherry St	39	1
	Seneca St	70	3
	Pike St	63	5
	6th Ave	63	2
	9th Ave	46	1
	Yale Ave	22	2
	Mountlake Terrace	5	139
	Eastmont	3	151
	79th PI SE	0	41
Northbound Total		345	345
Southbound	79th PI SE	36	0
	Eastmont	160	1
	Mountlake Terrace	146	3
	Yale Ave	7	52
	9th Ave	4	33
	7th Ave	3	51
	Pine St	8	80
	Seneca St	6	76
	Marion St	0	38
	Jefferson St	4	12
	S Jackson St	0	27
Southbound Total		373	373
Ridership Totals:		718	718

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522 Line: Woodinville-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	S Atlantic St	74	0
	S Jackson St	426	17
	James St	178	37
	Madison St	322	54
	University St	598	66
	6th Ave	592	34
	NE 125th St	155	334
	NE 130th St	96	122
	NE 137th St	22	165
	NE 145th St	37	169
	NE 153rd St	10	60
	NE 165th St	5	29
	Lake Forest Park	16	100
	Ballinger Way NE	13	16
	61st Ave NE	13	98
	68th Ave NE	62	169
	73rd Ave NE	30	345
	80th Ave NE	17	95
	NE 180th St	12	91
	103rd Ave NE	9	203
	UWB/Cascadia	46	264
	NE 195th St	6	54
	132nd Ave NE	2	33
	139th Ave NE	2	38
	138th Pl NE	2	49
	Woodinville	0	143
Northbound Total	2,747	2,747	

522 Line: Woodinville-Seattle			
	Stop Name	Total Ons	Total Offs
Southbound	Woodinville	116	0
	NE 180th Pl	25	1
	NE 190th St	35	1
	132nd Ave NE	19	1
	Ross Rd	44	4
	UWB/Cascadia	245	40
	Bothell P&R	229	12
	Ormbrek St	81	15
	80th Ave NE	62	15
	Kenmore P&R	374	38
	68th Ave NE	161	30
	61st Ave NE	103	10
	Ballinger Way NE	44	11
	Lake Forest Park	81	12
	NE 165th St	32	4
	NE 153rd St	67	9
	NE 145th St	237	31
	NE 137th St	148	17
	NE 130th St	130	78
	NE 125th St	311	123
	6th Ave	27	851
	4th Ave	7	693
	Marion St	14	225
	James St	2	106
	S Jackson St	5	211
	Royal Brougham	0	62
Southbound Total	2,599	2,599	
Ridership Totals:		5,346	5,346

532 Line: Everett-Bellevue				
	Stop Name	Total Ons	Total Offs	
Northbound	102nd Ave NE	59	0	
	108th Ave NE	67	2	
	Bellevue	710	6	
	Totem Lake	88	145	
	Brickyard	3	1	
	NE 195th St	1	5	
	Canyon Park	38	286	
	Ash Way	33	266	
	South Everett	5	122	
	34th St	0	18	
	Everett	0	154	
	Northbound Total		1,004	1,004
	South	Everett	172	0
34th St		22	2	
South Everett		129	4	
Ash Way		274	21	
Canyon Park		258	33	
NE 195th St		5	2	
Brickyard		2	5	
Totem Lake		120	80	
Bellevue		3	763	
106th Ave NE		0	47	
NE 8th/102nd NE		0	9	
NE 10th/102nd NE		0	18	
Southbound		984	984	
Grand Total		1,988	1,988	

535 Line: Lynnwood-Bellevue			
	Stop Name	Total Ons	Total Offs
Northbound	102nd Ave NE	50	0
	108th Ave NE	20	0
	Bellevue	565	10
	Totem Lake	52	127
	Brickyard	18	118
	Sunrise Dr	11	87
	UWB/Cascadia	153	118
	NE 195th St	10	17
	Canyon Park	32	97
	184th St SW	9	115
	Alderwood Mall	5	32
	Lynnwood	0	206
	Northbound Total		925
Southbound	Lynnwood	318	0
	Alderwood Mall	36	12
	184th St SW	89	8
	Canyon Park	108	35
	Ross Rd	18	17
	UWB/Cascadia	137	157
	Bothell	83	13
	Brickyard	105	23
	Totem Lake	139	61
	Bellevue	6	624
	106th Ave NE	0	27
	NE 8th/102nd NE	0	16
	NE 10th/102nd NE	0	44
Southbound Total		1,036	1,036
Ridership Totals:		1,962	1,962

Appendix D

540 Line: Kirkland-U. District			
	Stop Name	Total Ons	Total Offs
Eastbound	NE 42nd St	2	0
	Memorial Way	24	10
	Pend Oreille Rd	26	7
	Benton Ln	33	6
	Garfield Ln	13	4
	Stevens Way	30	6
	NE 40th St	64	3
	15th Ave NE	32	1
	NE Pacific Pl	76	2
	Montlake (SR-520)	17	3
	Evergreen Point	17	13
	92nd Ave NE	2	2
	South Kirkland	4	172
	NE 58th St	0	9
	NE 68th St	1	33
	Kirkland	0	68
	Northbound Total		340
Westbound	Kirkland	64	0
	9th Ave S	36	0
	NE 58th St	10	0
	South Kirkland	180	2
	92nd Ave NE	10	5
	Evergreen Point	14	6
	E Shelby St	7	13
	NE Pacific Pl	8	118
	15th Ave NE	4	27
	NE Campus Pkwy	3	80
	NE 42nd St	2	65
	Memorial Way	0	5
	Pend Oreille Rd	4	3
	Benton Ln	1	8
	Garfield Ln	0	3
Stevens Way	0	2	
Southbound Total		339	339
Ridership Totals:		678	678

542 Line: Redmond-U. District			
	Stop Name	Total Ons	Total Offs
Eastbound	Green Lake P&R	167	0
	University Way NE	67	1
	NE 45th St	63	6
	NE 43rd St	82	9
	NE Campus Pkwy	116	14
	NE 40th St	65	10
	15th Ave NE	51	23
	NE Pacific Pl	129	37
	Montlake (SR-520)	80	8
	Evergreen Point	12	22
	92nd Ave NE	4	6
	Overlake/NE 40th St	23	331
	NE 51st St	5	84
	Leary Way	0	27
	154th Ave NE	0	44
	161st Ave NE	1	78
	Redmond	0	165
Northbound Total		864	864
Westbound	Redmond	178	0
	160th Ave NE	79	0
	NE 85th St	32	1
	Leary Way	35	1
	NE 51st St	109	4
	Overlake/NE 40th St	260	13
	92nd Ave NE	19	6
	Evergreen Point	32	5
	E Shelby St	12	54
	NE Pacific Pl	49	187
	15th Ave NE	22	46
	NE Campus Pkwy	27	175
	NE 42nd St	15	85
	NE 45th St	6	63
	University Way NE	1	71
Green Lake P&R	0	164	
Southbound Total		875	875
Ridership Totals:		1,739	1,739

2016 Service Implementation Plan

545 Line: Redmond-Seattle			
	Stop Name	Total Ons	Total Offs
Eastbound	S Atlantic St	125	0
	S Jackson St	655	34
	James St	225	58
	Madison St	392	107
	University St	616	92
	Pike St	822	89
	8th Ave	691	65
	Terry Ave	376	47
	E Olive St	465	9
	Montlake	365	118
	Evergreen Point	31	63
	92nd Ave NE	19	39
	Overlake/NE 40th St	158	2,003
	NE 51st St	29	327
	Leary Way	7	200
	154th Ave NE	4	126
	161st Ave NE	18	323
	Redmond	58	587
	166th Ave NE	8	149
	177th Pl NE	5	223
Bear Creek	0	410	
Northbound Total		5,068	5,068

545 Line: Redmond-Seattle			
	Stop Name	Total Ons	Total Offs
Westbound	Bear Creek	457	0
	177th Pl NE	188	8
	NE 79th St	147	10
	Redmond	675	54
	160th Ave NE	320	20
	NE 85th St	78	3
	Leary Way	205	9
	NE 51st St	455	31
	Overlake TC	654	54
	Overlake/NE 40th St	1,013	87
	92nd Ave NE	49	17
	Evergreen Point	48	18
	Montlake	103	409
	Yale Ave	107	893
	9th Ave	44	463
	7th Ave	37	373
	Pine St	89	979
	Seneca St	61	512
	Marion St	36	262
	Jefferson St	33	122
S Jackson St	15	427	
Royal Brougham	0	62	
Southbound Total		4,812	4,812
Ridership Totals:		9,880	9,880

Appendix D

550 Line: Bellevue-Seattle			
	Stop Name	Total Ons	Total Offs
Eastbound	Convention Place	823	0
	Westlake	1,443	36
	University St	1,014	38
	Pioneer Square	558	68
	International District	775	345
	Rainier Ave S	227	141
	Mercer Island	203	1,031
	South Bellevue	88	727
	SE 16th St	14	83
	SE 10th St	14	43
	SE 3rd St	98	94
	Main St	22	226
	105th Ave NE	43	638
	Bellevue	36	1,465
	NE 10th St	0	421
Northbound Total		5,358	5,358
Westbound	NE 10th St	423	0
	Bellevue	1,456	58
	108th Ave NE	250	6
	NE 4th St	380	28
	NE 1st St	155	13
	SE 3rd St	124	50
	SE 11th St	27	16
	SE 16th St	77	13
	South Bellevue	721	87
	Mercer Island	911	158
	Rainier Ave S	90	228
	International District	279	953
	Pioneer Square	91	661
	University St	45	1,056
	Westlake	27	1,173
Convention Place	0	555	
Southbound Total		5,056	5,056
Ridership Totals:		10,413	10,413

2016 Service Implementation Plan

554 Line: Issaquah-Seattle			
	Stop Name	Total Ons	Total Offs
Eastbound	4th Ave	239	0
	Stewart St	263	5
	Seneca St	397	8
	Cherry St	182	6
	4th Ave S	58	7
	S Jackson St	397	19
	Rainier Ave S	100	11
	Mercer Island	72	100
	Eastgate	155	775
	Issaquah	31	539
	Rainier Blvd S	26	163
	NE Ellis Dr	2	106
	Issaquah Highlands	50	208
	Issaquah-Fall City Rd	0	2
	SE 40 th Pl	0	2
	SE 37th Pl	0	3
	South Sammamish	0	5
	SE 8th St	0	4
	NE 8th St	0	6
	NE 25th St	0	3
185th Ave NE	0	3	
Northbound Total	1,974	1,974	

554 Line: Issaquah-Seattle			
	Stop Name	Total Ons	Total Offs
Westbound	185th Ave NE	1	0
	NE 25th Way	0	1
	NE 8th St	2	1
	SE 8th St	0	1
	South Sammamish	2	1
	SE 37th Pl	0	1
	Issaquah Highlands	196	9
	NE Ellis Dr	57	2
	1st Ave NE	175	22
	Issaquah	467	32
	Eastgate	651	124
	Mercer Island	205	72
	Rainier Ave S	22	86
	S Jackson St	15	415
	S Washington St	4	40
	Cherry St	14	227
	Seneca St	4	272
	Pike St	4	332
	Stewart St	0	186
	Southbound Total	1,821	1,821
Ridership Totals:	3,794	3,794	

Appendix D

555 Line: Northgate-Issaquah			
	Stop Name	Total Ons	Total Offs
Eastbound	Northgate	284	0
	Montlake	35	7
	Evergreen Point	2	2
	Yarrow Point/Clyde Hill	3	2
	Bellevue	37	268
	SE 4th St	2	8
	SE 15th St	1	12
	South Bellevue	1	1
	Richards Rd	7	16
	Eastgate	2	24
	Bellevue College	6	5
	Issaquah	2	18
	NE Ellis Dr	1	5
	Issaquah Highlands	1	13
Northbound Total		381	381
Westbound	Issaquah Highlands	7	0
	NE Ellis Dr	4	0
	Issaquah	19	2
	Bellevue College	4	4
	Eastgate	19	3
	Richards Rd	17	2
	South Bellevue	3	3
	SE 15th St	13	1
	SE 4th St	10	1
	Bellevue	261	39
	92nd Ave NE	4	2
	Evergreen Point	5	2
	Montlake	10	39
	Northgate	0	277
Southbound Total		375	375
Ridership Totals:		756	756

556 Line: Issaquah-Northgate			
	Stop Name	Total Ons	Total Offs
Eastbound	Northgate	31	0
	University Way NE	5	2
	NE 45th St	22	2
	NE 43rd St	32	3
	NE Campus Pkwy	55	2
	NE 40th St	23	1
	15th Ave NE	32	1
	NE Pacific Pl	68	4
	Montlake (SR-520)	6	4
	Evergreen Point	2	18
	Yarrow Point/Clyde Hill	2	3
	Bellevue	157	63
	SE 4th St	4	4
	SE 15th St	3	1
	South Bellevue	4	21
	Eastgate	20	61
	Issaquah	5	131
	NE Ellis Dr	2	71
	Issaquah Highlands	0	78
	Northbound Total	472	472

556 Line: Issaquah-Northgate			
	Stop Name	Total Ons	Total Offs
Westbound	Issaquah Highlands	118	0
	NE Ellis Dr	14	0
	Issaquah	134	4
	Eastgate	65	18
	South Bellevue	27	1
	SE 15th St	1	1
	SE 4th St	2	3
	Bellevue	36	167
	92nd Ave NE	8	1
	Evergreen Point	9	0
	E Shelby St	2	4
	NE Pacific Pl	2	69
	15th Ave NE	1	22
	NE Campus Pkwy	1	61
	NE 42nd St	1	26
	NE 45th St	2	14
	University Way NE	2	3
	Northgate	0	29
	Southbound Total	425	425
	Ridership Totals:	897	897

Appendix D

560 Line: Westwood Village-Bellevue			
	Stop Name	Total Ons	Total Offs
Eastbound	SW Barton St	131	5
	20th Ave SW	26	4
	SW 116th St	23	5
	SW 128th St	26	6
	SW 136th St	32	6
	Burien	92	48
	Sea-Tac Airport	125	91
	S 176th St (Link)	116	32
	S 7th St	24	44
	Renton	139	83
	N 6th St	17	9
	N 8th St	12	16
	Garden Ave N	24	8
	Kennydale	47	20
	Newport Hills	30	12
	South Bellevue	26	51
	SE 15th St	8	11
	SE 4th St	5	29
	Bellevue	60	435
	NE 2nd St	0	52
Eastbound Total		964	964

560 Line: Westwood Village-Bellevue			
	Stop Name	Total Ons	Total Offs
Westbound	NE 2nd St	49	0
	Bellevue	347	9
	SE 4th St	19	5
	SE 15th St	7	9
	South Bellevue	50	19
	Newport Hills	12	27
	Kennydale	19	44
	Lake Washington Blvd	7	27
	N 8th St	12	17
	N 6th St	8	12
	Renton	94	143
	S 7th St	35	20
	Sea-Tac Airport	60	181
	S 176th St (Link)	49	65
	Burien	52	85
	SW 136th St	4	27
	SW 128th St	4	20
	SW 116th St	2	16
	20th Ave SW	1	26
	SW Barton St	0	76
Westbound Total		827	827
Ridership Totals:		1,791	1,791

566 Line: Auburn-Overlake			
	Stop Name	Total Ons	Total Offs
Northbound	Auburn Station	115	0
	Auburn P&R	61	7
	4th Ave N	5	9
	Kent Station	208	34
	S 228th St	94	16
	S 7th St	64	35
	Renton	230	87
	N 6th St	29	17
	N 8th St	16	10
	Garden Ave N	28	4
	Bellevue	68	443
	Overlake/NE 40th	0	195
	Northbound Total	858	858
Southbound	Overlake TC	140	0
	Overlake/NE 40th	73	3
	Bellevue	409	69
	Lake Washington Blvd	6	38
	N 8th St	13	26
	N 6th St	14	24
	Renton	93	259
	S 7th St	29	33
	S 228th St	14	24
	Kent Station	36	196
	Smith Ave	4	7
	Auburn P&R	11	58
	Auburn Station	0	104
Southbound Total	842	842	
Ridership Totals:	1,700	1,700	

567 Line: Kent-Overlake			
	Stop Name	Total Ons	Total Offs
Northbound	Kent	235	0
	S 228th St	18	3
	Bellevue	17	195
	Overlake	0	71
Northbound Total		270	270
Southbound	Overlake TC	62	0
	NE 40th St	29	2
	Bellevue	183	23
	S 228th St	3	21
	Kent	0	231
Southbound Total		278	278
Ridership Totals:		547	547

Appendix D

574 Line: Lakewood-SeaTac			
	Stop Name	Total Ons	Total Offs
Northbound	Lakewood TC	236	0
	SR-512 P&R	218	25
	E 25th St	9	20
	Tacoma Dome	296	65
	Federal Way	247	217
	Star Lake	30	22
	Kent-Des Moines	23	41
	Military Rd	6	12
	42nd Ave S	5	9
	36th Ave S	3	5
	S 188th St	4	38
	S 180th St	2	26
	S 176th St (Link)	7	214
	Sea-Tac Airport	0	394
Northbound Total		1,087	1,087
Southbound	S 176th St (Link)	70	0
	Sea-Tac Airport	634	13
	S 182nd St	29	1
	International Blvd	37	4
	36th Ave S	3	5
	42nd Ave S	6	3
	46th Ave S	15	9
	Kent-Des Moines	38	17
	Star Lake	18	30
	Federal Way	200	263
	Tacoma Dome	78	337
	E D St	1	3
	SR-512 P&R	21	220
	Lakewood TC	0	248
Southbound Total		1,152	1,152
Ridership Total:		2,239	2,239

577 Line: Federal Way-Seattle			
	Stop Name	Total Ons	Total Offs
166Northbound	Federal Way	812	0
	5th Ave	2	385
	University St	1	166
	3rd Ave	1	188
	Pike St	1	22
	Marion St	0	30
	James St	0	11
	S Jackson St	0	17
	Northbound Total	819	819
Southbound	Stewart St	35	0
	Yale Ave	30	2
	9th Ave	63	2
	4th Ave	142	5
	Lenora St	8	2
	Pike St	258	77
	Marion St	105	25
	James St	35	10
	S Jackson St	52	30
	Federal Way	0	575
Southbound Total	728	728	
Ridership Totals:		1,546	1,546

578 Line: Puyallup-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	Puyallup	102	0
	Sumner	51	27
	Auburn Station	179	42
	Federal Way	450	75
	University St	9	524
	6th Ave	2	74
	9th Ave	1	25
	Yale Ave	0	12
	Stewart St	0	14
	Northbound Totals	794	794
	Southbound	Stewart St	43
Yale Ave		32	3
9th Ave		59	3
4th Ave		80	5
Lenora St		3	2
Pike St		306	8
Marion St		99	7
James St		47	5
S Jackson St		128	11
Federal Way		64	536
Auburn Station		36	184
Sumner		27	67
Puyallup	0	94	
Southbound Totals	925	925	
Ridership Totals:		1,719	1,719

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586 Line: Tacoma-U. District			
	Stop Name	Total Ons	Total Offs
Northbound	Tacoma Dome	284	0
	Roosevelt Way NE	4	36
	University Way NE	2	51
	NE 43rd St	1	42
	Campus Pkwy	2	75
	NE 40th St	1	24
	15th Ave NE	0	33
	NE Pacific Pl	0	35
Northbound Total		295	295
Southbound	Roosevelt Way NE	31	0
	University Way NE	39	1
	NE 43rd St	34	2
	Campus Pkwy	60	3
	NE 40th St	19	2
	15th Ave NE	28	2
	NE Pacific Pl	43	3
	Tacoma Dome	0	243
Southbound Total		254	254
Ridership Totals:		550	550

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590 Line: Tacoma-Seattle				
	Stop Name	Total Ons	Total Offs	
Northbound	Commerce St	106	0	
	S 14th St	28	1	
	S 19th St	56	2	
	Pacific Ave	40	1	
	Tacoma Dome	1,165	38	
	S Spokane St	15	67	
	S Lander St	19	74	
	S Holgate St	9	22	
	Royal Brougham	5	46	
	S Jackson St	135	187	
	S Washington St	6	47	
	Cherry St	10	336	
	Seneca St	6	255	
	Pike St	7	238	
	6th Ave	8	123	
	9th Ave	2	63	
	Yale Ave	1	38	
	Stewart St	0	83	
	Northbound Totals		1,620	1,620

590 Line: Tacoma-Seattle				
	Stop Name	Total Ons	Total Offs	
Southbound	Stewart St	70	0	
	Yale Ave	45	3	
	9th Ave	96	6	
	4th Ave	88	12	
	Stewart St	155	13	
	Seneca St	221	10	
	Cherry St	108	7	
	S Washington St	63	29	
	Royal Brougham	35	8	
	S Holgate St	16	5	
	S Lander St	49	7	
	S Spokane St	52	8	
	Tacoma Dome	37	791	
	S 24th St	1	19	
	S 19th St	1	36	
	S 14th St	1	20	
	Commerce St	0	65	
	Southbound Totals		1,038	1,038
	Ridership Totals:		2,658	2,658

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592 Line: Olympia-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	Olympia	22	0
	11th Ave	5	0
	Hawks Prairie	15	2
	DuPont	87	9
	Lakewood	174	12
	SR-512 P&R	150	9
	5th Ave	4	195
	University St	2	62
	Pike St	3	86
	6th Ave	4	44
	9th Ave	1	17
	Yale Ave	1	10
	Stewart St	0	20
	Northbound Total		465
Southbound	Stewart St	35	0
	Yale Ave	20	2
	9th Ave	38	3
	4th Ave	40	4
	2nd/Stewart	70	5
	Seneca St	105	4
	Cherry St	41	3
	S Washington St	27	12
	SR-512 P&R	12	148
	Lakewood	12	105
	DuPont	7	74
	Hawks Prairie	1	17
	11th Ave SE	0	6
	Olympia	0	28
Southbound Total		410	410
Ridership Totals:		876	876

594 Line: Lakewood-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	DuPont	2	0
	Lakewood	105	22
	SR-512 P&R	137	8
	Commerce St	132	13
	S 14th St	27	1
	S 19th St	95	5
	Pacific Ave	40	2
	Tacoma Dome	326	24
	S Spokane St	7	44
	S Lander St	4	31
	S Holgate St	6	20
	Royal Brougham	5	53
	S Jackson St	13	188
	S Washington St	2	20
	Cherry St	8	68
	Seneca St	3	80
	Pike St	5	215
	6th Ave	2	35
	9th Ave	1	20
	Yale Ave	1	12
Stewart St	0	57	
Northbound Total		919	919

594 Line: Lakewood-Seattle			
	Stop Name	Total Ons	Total Offs
Southbound	Stewart St	63	0
	Yale Ave	44	2
	9th Ave	79	3
	4th Ave	58	5
	2nd/Stewart	166	7
	Seneca St	172	5
	Cherry St	82	4
	S Washington St	89	7
	Royal Brougham	59	4
	S Holgate St	14	3
	S Lander St	33	4
	S Spokane St	46	4
	Tacoma Dome	24	409
	S 24th St	2	38
	S 19th St	4	88
	S 14th St	2	27
	Commerce St	9	128
	SR-512 P&R	6	124
	Lakewood	4	91
	DuPont	0	5
Southbound Total		957	957
Ridership Totals:		1,876	1,876

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595 Line: Gig Harbor-Seattle			
	Stop Name	Total Ons	Total Offs
Northbound	Purdy	53	0
	Kimball Dr	54	1
	Narrows	19	0
	Tacoma CC	43	5
	S Spokane St	2	10
	S Lander St	2	5
	S Holgate St	1	5
	Royal Brougham	1	2
	S Jackson St	20	21
	S Washington St	1	5
	Cherry St	1	36
	Seneca St	1	44
	Pike St	1	21
	6th Ave	1	19
	9th Ave	0	10
	Yale Ave	0	4
	Stewart St	0	12
	Northbound Total		200
Southbound	Stewart St	15	0
	Yale Ave	4	0
	9th Ave	21	1
	4th Ave	13	1
	2nd/Stewart	22	1
	Seneca St	41	1
	Cherry St	17	1
	S Washington St	10	3
	Royal Brougham	3	0
	S Holgate St	5	0
	S Lander St	6	1
	S Spokane St	8	1
	Tacoma CC	4	49
	Narrows	1	18
	Kimball Dr	1	51
Purdy	0	46	
Southbound Total		171	171
Ridership Totals:		372	372

596 Line: Bonney Lake-Sumner			
	Stop Name	Total Ons	Total Offs
East	Sumner	242	0
	Bonney Lake	0	242
Northbound Total		242	242
West	Bonney Lake	228	0
	Sumner	0	228
Southbound Total		228	228
Ridership Totals:		470	470

Sounder South Line			
	Stop Name	Total Ons	Total Offs
Northbound	Lakewood	200	0
	South Tacoma	141	14
	Tacoma	740	35
	Puyallup	1,187	60
	Sumner	1,022	71
	Auburn	1,255	155
	Kent	1,208	442
	Tukwila	390	679
	King Street	0	4,688
	Northbound Total	6,143	6,143
Southbound	King Street	4,712	0
	Tukwila	564	399
	Kent	465	1,222
	Auburn	190	1,158
	Sumner	85	955
	Puyallup	58	1,108
	Tacoma	44	920
	South Tacoma	10	139
	Lakewood	0	226
Southbound Total	6,127	6,127	
Ridership Totals:		12,270	12,270

Sounder North Line			
	Stop Name	Total Ons	Total Offs
Northbound	King Street	615	0
	Edmonds	23	285
	Mukilteo	11	130
	Everett	0	233
	Northbound Total	649	649
Southbound	Everett	207	0
	Mukilteo	130	12
	Edmonds	284	74
	King Street	0	537
Southbound Total		622	622
Ridership Totals:		1,271	1,271

Tacoma Link			
	Stop Name	Total Ons	Total Offs
Northbound	Tacoma Dome	1,102	0
	S 25th St	256	99
	Union Station	317	434
	Convention Center	63	232
	Commerce St	92	543
	Theater District	0	523
Northbound Total		1,831	1,831
Southbound	Theater District	472	0
	Commerce St	391	25
	Convention Center	237	32
	Union Station	406	276
	S 25th St	179	344
	Tacoma Dome	0	1,008
Southbound Total		1,685	1,685
Ridership Totals:		3,515	3,515

Link Light Rail			
	Stop Name	Total Ons	Total Offs
Northbound	SeaTac/Airport	5,571	0
	Tukwila Int'l Blvd	2,249	446
	Rainier Beach	1,004	369
	Othello	1,387	503
	Columbia City	1,326	424
	Mount Baker	1,182	780
	Beacon Hill	1,250	718
	SODO	629	564
	Stadium	458	605
	Int'l District	1,200	2,040
	Pioneer Square	371	1,734
	University St	204	2,486
	Westlake	0	6,161
Northbound Total		16,830	16,830
Southbound	Westlake	6,728	0
	University St	2,379	226
	Pioneer Square	1,629	400
	Int'l District	1,738	1,401
	Stadium	577	560
	SODO	615	623
	Beacon Hill	702	1,504
	Mount Baker	991	1,096
	Columbia City	457	1,335
	Othello	550	1,500
	Rainier Beach	353	999
	Tukwila Int'l Blvd	463	2,650
	SeaTac/Airport	0	4,887
Southbound Total		17,181	17,181
Ridership Totals:		34,011	34,011