

Service Delivery Quarterly Performance Report



System-wide Boardings

Boardings by Service Mode	Q4 2016	Q4 2017	%Δ	YTD 2016	YTD 2017	%Δ	YTD Budget	% YTD
ST Express	4,456,893	4,388,116	-1.5%	18,470,408	18,374,233	-0.5%	18,680,000	98.4%
Sounder	1,068,549	1,132,182	6.0%	4,312,113	4,438,374	2.9%	4,480,000	99.1%
Tacoma Link	240,494	251,966	4.8%	938,315	972,405	3.6%	1,040,000	93.5%
Link	5,186,228	5,666,253	9.3%	19,011,368	23,186,633	22.0%	22,900,000	101.3%
Paratransit	12,738	15,411	21.0%	48,243	60,136	24.7%	80,000	75.2%
Total Boardings	10,964,902	11,453,928	4.5%	42,780,447	47,031,781	9.9%	47,180,000	99.7%
Average Weekday Boardings	149,048	153,866	3.2%	143,250	156,778	9.4%		

Total Sound Transit ridership increased by 4.5% during the fourth quarter of 2017 compared to the same period in 2016. All modes, with the exception of ST Express, saw increases during the quarter. System-wide average weekday boardings increased by 3.7% compared to the fourth quarter of 2016.

ST Express bus ridership decreased slightly by 1.5% compared to the fourth quarter of 2016. Average weekday boardings came to 61,526, which was a slight decrease over the same quarter of 2016. Ridership growth has been tempered by low fuel prices, which tends to depress bus ridership.

Sounder ridership and average weekday boardings increased in the fourth quarter versus last year by 6.0% and 4.8%, respectively. Average weekday boardings on the South line increased by 5.5% and ridership on the North line decreased slightly by 1.1%. Ridership growth on the South line is attributed to the new two additional roundtrips added in the September 2017 service change.

Tacoma Link ridership increased 4.8%, or 11K, compared to the fourth quarter of 2016. Average weekday boardings increased by 5.7% compared to the same quarter last year.

Link light rail ridership continued its strong growth during the fourth quarter, with a 9.3% increase compared to the same period last year. Average weekday boardings were 71,058, which was 8.3% increase compared to the fourth quarter of 2016. The continued increase in ridership and average weekday boardings is attributed to the two service expansions in 2016 as well as the addition of the Angle Lake Garage with more than 1,100 parking stalls. The region has enthusiastically adopted Link as a convenient transportation choice.

Paratransit ridership services increased by 21% for the fourth quarter of 2017. Paratransit service is provided along the Link corridor under contract with King County Metro. The increase in Paratransit ridership is attributed to the opening of the Link extensions in 2016 and additional customers requesting access to the Link system.

ST Express

	Q4 2016	Q4 2017	Q4 Budget	YTD 2016	YTD 2017	YTD Budget
Revenue Vehicle Hours Operated ¹	155,710	154,387	150,625	609,563	608,817	602,500
Revenue Vehicle Miles Operated	3,009,482	2,977,529	2,999,650	11,920,347	11,991,374	11,998,600
Trips Operated	120,873	120,389	120,400	475,159	481,226	481,598
Platform Hours Operated	194,924	197,758	194,362	764,880	780,534	777,448
Boardings	4,456,893	4,388,116	4,750,707	18,470,408	18,373,658	18,680,000
Boardings per Revenue Vehicle Hour	29	28	32	30	30	31
Boardings per Trip	37	36	39	39	38	39
Cost per Boarding ²	\$7.03	\$7.42	\$7.04	\$6.46	\$6.92	\$7.15
Percentage of Scheduled Trips Operated	99.8%	99.9%	≥ 99.8%	99.8%	99.9%	≥ 99.8%
On-Time Performance ³	83.3%	83.4%	≥ 85.0%	82.8%	83.1%	≥ 85.0%
Customer Complaints per 100K Boardings	19.1	18.4	< 15.0	17.6	17.2	< 15.0
Prev. Accidents per 100K Platform Miles ⁵	0.85	0.69	< 0.80	0.85	0.69	< 0.80

(Refer to footnote explanations on P.4)

ST Express Average Weekday Boardings by Route

		Q4 2016	Q4 2017	%Δ	YTD
510-513	Everett-Seattle	8,358	8,472	1.4%	8,702
522	Woodinville-Seattle	5,140	4,933	-4.0%	5,059
532	Everett-Bellevue	2,008	2,007	-0.1%	2,053
535	Lynnwood-Bellevue	1,952	2,044	4.7%	1,921
540	Kirkland-U. District	606	579	-4.4%	598
541	Overlake-U. District	692	739	6.9%	778
542	Redmond-U. District	2,157	2,091	-3.1%	2,206
545	Redmond-Seattle	8,807	8,361	-5.1%	9,234
550	Bellevue-Seattle	10,505	9,451	-10.0%	10,269
554	Issaquah-Seattle	3,979	3,994	0.4%	4,116
555/556	Issaquah-Northgate	1,506	1,449	-3.8%	1,549
560	West Seattle-SeaTac-Bellevue	1,687	1,725	2.3%	1,724
566/567	Auburn-Kent-Overlake	1,993	1,976	-0.8%	2,025
574	Lakewood-SeaTac	2,319	2,270	-2.1%	2,236
577/578	Seattle-Federal Way/Puyallup	3,373	3,631	7.6%	3,609
580	Lakewood-Puyallup	562	750	33.4%	621
586	Tacoma-U. District	446	479	7.5%	458
590-595	Lakewood/Tacoma-Seattle	6,039	6,044	0.1%	6,273
596	Bonney Lake-Sumner	465	530	14.0%	493
Total Average Weekday Boardings		62,595	61,526	-1.7%	63,924

ST Express was slightly outside of the target range for on-time performance and customer complaints per 100K boardings for the quarter and for the year. Performance has improved compared to the same time last year, but overcrowding and traffic congestion continue to negatively impact performance and the customer experience. ST Express met the target for preventable accidents per 100K platform miles. The metrics show significant improvement compared to the prior year. Staff and partners continue to work together to identify trends and implement changes to reduce preventable accidents, with a focus on safety as the highest priority.

The Overlake Park and Ride (ST) and the South Bellevue Park and Ride (KCM) closed in May for East Link construction. Despite the closures, routes 550 (Bellevue-Seattle) and 545 (Redmond-Seattle) remain Sound Transit's busiest routes.

Sounder Commuter Rail

	Q4 2016	Q4 2017	Q4 Budget	YTD 2016	YTD 2017	YTD Budget
Revenue Vehicle Hours Operated ¹	14,852	18,692	16,644	59,275	63,812	66,576
Revenue Vehicle Miles Operated	445,419	555,395	515,314	1,794,741	1,916,536	2,061,257
Trips Operated	1,877	2,158	2,225	7,351	7,917	8,078
Boardings	1,068,549	1,132,182	1,193,282	4,312,113	4,438,374	4,480,000
Boardings per Revenue Vehicle Hour	72	61	72	73	70	67
Boardings per Trip	569	525	536	587	561	555
Cost per Boarding ²	\$11.30	\$10.70	\$12.48	\$10.31	\$10.20	\$12.70
Percentage of Scheduled Trips Operated	98.7%	99.6%	≥ 99.5%	98.7%	98.6%	≥ 99.5%
On-Time Performance ³	87.3%	95.3%	≥ 95.0%	92.8%	91.2%	≥ 95.0%
Customer Complaints per 100K Boardings	20.0	11.8	< 15.0	10.8	13.4	< 15.0
Prev. Accidents per 100K Platform Miles ⁵	0.00	0.00	≤ 1.00	0.00	0.00	≤ 1.00

(Refer to footnote explanations on P.4)

Sounder Commuter Rail Average Weekday Boardings by Corridor

	Q4 2016	Q4 2017	%Δ	YTD
North Line, Everett - Seattle	1,756	1,737	-1.1%	1,737
South Line, Tacoma - Seattle	15,114	15,950	5.5%	15,950
Total Average Weekday Boardings	16,870	17,686	4.8%	17,686

Sounder operational performance has improved compared to previous quarters as construction wraps up and slow speed orders are lifted. Although percentage of scheduled trips operated and on-time performance in the fourth quarter were above target, the year-to-date results were impacted by freight interference and track blockage events at ROW crossings earlier in the year. The number of customer complaints per 100K boardings decreased in the fourth quarter versus the same period last year. Overall complaints this year were mainly related to service delays and schedule reliability.

Tacoma Link Light Rail

	Q4 2016	Q4 2017	Q4 Budget	YTD 2016	YTD 2017	YTD Budget
Service Hours Operated	2,502	2,493	2,475	9,868	9,887	9,900
Service Miles Operated	19,267	19,201	19,000	75,983	76,151	76,000
Trips Operated	12,522	12,440	12,299	49,353	49,328	49,194
Boardings	240,494	251,966	268,921	938,315	972,405	1,040,000
Boardings per Service Vehicle Hour	96	101	109	95	98	105
Boardings per Trip	19	20	22	19	20	21
Cost per Boarding ²	\$5.12	\$5.54	\$4.99	\$4.70	\$4.64	\$4.72
Percentage of Scheduled Trips Operated	99.9%	99.9%	≥ 98.5%	99.9%	99.8%	≥ 98.5%
On-Time Performance ³	99.9%	99.9%	≥ 98.5%	99.9%	99.8%	≥ 98.5%
Customer Complaints per 100K Boardings	0.0	0.0	< 15.0	0.5	0.0	< 15.0
Prev. Accidents per 100K Platform Miles ⁵	1.31	1.31	≤ 1.66	1.31	1.31	≤ 1.66

(Refer to footnote explanations on P.4)

Tacoma Link Light Rail Average Weekday Boardings

	Q4 2016	Q4 2017	%Δ	YTD
Total Average Weekday Boardings	3,242	3,427	5.7%	3,239

Tacoma Link ridership during the fourth quarter increased compared to last year but fell short of the quarterly and YTD target. Preventable accidents per 100K miles was 1.31 due to one preventable accident that occurred during service in June 2017.

Link Light Rail

	Q4 2016	Q4 2017	Q4 Budget	YTD 2016	YTD 2017	YTD Budget
Revenue Vehicle Hours Operated ¹	60,653	66,347	53,725	204,824	254,466	214,900
Revenue Vehicle Miles Operated	1,239,079	1,360,032	1,063,754	4,103,169	5,200,856	4,255,015
Trips Operated	26,255	25,723	25,654	102,312	104,021	102,616
Boardings	5,228,684	5,666,253	5,713,946	19,011,368	23,186,633	22,900,000
Boardings per Revenue Vehicle Hour	86	85	106	93	91	107
Boardings per Trip	199	220	223	186	223	223
Cost per Boarding ²	\$4.33	\$4.33	\$4.51	\$4.29	\$3.92	\$4.47
Percentage of Scheduled Trips Operated	98.0%	98.7%	≥ 98.5%	98.4%	98.6%	≥ 98.5%
Headway Performance ⁴	93.7%	89.9%	≥ 90.0%	90.7%	89.2%	≥ 90.0%
Customer Complaints per 100K Boardings	1.4	1.6	< 15.0	2.0	2.0	< 15.0
Prev. Accidents per 100K Platform Miles ⁵	0.05	0.00	< 0.30	0.05	0.00	< 0.30

Link Light Rail Average Weekday Boardings by Station

	Q4 2016	Q4 2017	%Δ	YTD 2017
University of Washington	9,259	9,792	5.8%	9,691
Capitol Hill	6,747	7,695	14.0%	7,297
Westlake	10,148	11,417	12.5%	11,417
University Street	5,074	5,444	7.3%	5,565
Pioneer Square	3,865	4,034	4.4%	4,215
International District / Chinatown	5,277	5,772	9.4%	5,771
Stadium	1,135	1,125	-0.9%	1,640
SODO	1,966	2,188	11.3%	2,180
Beacon Hill	2,661	2,784	4.6%	2,781
Mount Baker	2,260	2,460	8.8%	2,369
Columbia City	2,377	2,554	7.5%	2,578
Othello	2,350	2,531	7.7%	2,492
Rainier Beach	1,839	1,865	1.4%	1,956
Tukwila International Boulevard	2,688	2,818	4.9%	2,899
SeaTac / Airport	5,138	5,072	-1.3%	5,629
Angle Lake	2,810	3,506	24.8%	3,549
Total Average Weekday Boardings	65,594	71,058	8.3%	72,028

Paratransit Boardings

	Q4 2016	Q4 2017	%Δ	YTD 2017
Link Service Area Average Daily Boardings	138	169	22.3%	332

Link was slightly outside the quarterly target for boarding performance goals but met the YTD target. Headway performance fell slightly below target during the quarter due to delays in the DSTT and along the MLK corridor.

The decline in average weekday boardings at SeaTac Airport station is attributed to the station no longer being the southern terminus. Many boardings that were previously seen at SeaTac are now occurring farther south at Angle Lake, as reflected in the double-digit percent increase in boardings at Angle Lake.

1-Revenue hours: The total amount of time during which service is available to carry passengers. Tacoma Link reports as service hours since it does not collect fares.

2-Cost per boarding is calculated as the total actual operating costs (including Agency overhead) before depreciation divided by the total number of riders.

3-On-time performance standards are described in the budget.

4-Headway Performance: 2015 and 2016 are reported using a tolerance of +/- 2 minutes (a tolerance of +/- 3 minutes was used for 2014).

5-Preventable accident: An accident in which the operating employee failed to do everything reasonable to prevent the accident.

6-Link Total Ridership by Station is calculated using a different methodology than total system level boardings.