

King County Metro Transit **2011 Service Guidelines Report**

March 2012



We'll Get You There

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SECTION 2

ROUTE PERFORMANCE ANALYSIS

Metro applies performance guidelines to assess the productivity and service quality of its routes. We evaluate individual routes and identify where adjustments could make service more cost-effective and could reduce crowding and improve on-time performance.

Productivity measures

Two productivity measures are used to evaluate individual route performance:

1. **Rides per platform hour** is the total rides per hour that a bus provides from the time it leaves its base until it returns. Routes with many riders boarding the bus during each trip tend to perform well on this measure.
2. **Passenger miles per platform mile** is the sum of miles traveled by all passengers per mile the bus operates from its base until it returns. Routes that have full, even loading tend to perform well on this measure—including routes that pick up many riders at transit centers or park-and-rides, then travel long distances with few people getting on or off on the way to their destination.

Rides per platform mile and passenger miles per platform hour measure different types of performance. The comparison of routes 10 and 101, in the box at right, illustrates the differences between the two measures.

We also divide routes into two categories based on the market served:

- **Seattle core** routes serve downtown Seattle, First Hill, Capitol Hill, South Lake Union, the University District, or Uptown.
- **Non-Seattle core** routes serve other areas of Seattle and King County.

Routes serving the Seattle core are expected to perform at a higher level because their potential market is greater than for routes serving other areas of King County.

Defining high and low performance

Within the two markets, we analyze route productivity for peak, off-peak, and night periods. In accordance with the guidelines,



How two productivity measures give the full picture

Route 10 provides service between Capitol Hill and downtown Seattle. It tends to have many riders on board between downtown Seattle and Broadway, with fewer riders on board east of that point. It is among the top 25 percent of routes in rides per platform hour but among the bottom 25 percent in passenger miles per platform mile. In other words, it serves many riders per hour of service, but since many riders don't ride the full length of the route, it has fewer passenger miles relative to the total miles that it operates.

Route 101 provides service between Renton and downtown Seattle. Many riders board Route 101 near the ends of the route and ride almost the full length. It is among the top 25 percent of routes in passenger miles per platform hour, indicating a full and even load. However, it is not among the top routes for rides per platform hour, because it has fewer individual riders boarding the route each hour than the top routes have.

Both of these routes provide value to the transit network, but illustrate how looking at performance on just one measure does not give a full picture of route performance.

we consider routes to be high performers if they rank in the top 25 percent of routes that operate in the same time period and serve the same market. We consider routes to be low performers if they rank in the bottom 25 percent.

Since the thresholds for performance are defined as the top and bottom 25 percent, the numerical value of the thresholds changes for every analysis. For the spring 2011 analysis, the values of the route performance thresholds were higher than they were in fall 2010, indicating a systemwide improvement in productivity. This improvement resulted from growth in Metro's systemwide ridership, from service cuts targeting low-performing trips, and from actions taken to improve scheduling efficiency that focused on reducing platform hours while maintaining existing trips. The charts below illustrate the threshold values for route performance for spring 2011.

Threshold values for route performance were highest for the off-peak on both measures, followed by threshold values for peak and night periods. This was true for both Seattle core and non-Seattle core routes. This difference occurred because buses spend more time and miles carrying no passengers during peak hours as they travel to places where they will provide single-direction service to major employment centers.

Spring 2011 Threshold Values

Routes that serve Seattle core	Peak		Off-peak		Night	
Top 25%	42.0	12.9	52.6	15.2	32.0	8.4
Bottom 25%	18.6	7.9	29.4	9.8	17.7	5.8

Routes that do not serve Seattle core	Peak		Off-peak		Night	
Top 25%	27.0	7.2	27.4	9.3	20.3	6.2
Bottom 25%	9.8	2.9	12.7	3.3	8.8	2.6

RESULTS

The 2011 analysis compared the performance of 244 routes — 161 routes serving the Seattle core and 83 routes not serving the Seattle core. School and custom bus routes were not included. Local and express variants with the same number were analyzed separately if both routes operated in the same direction and time period. Routes with parts (e.g. Route 2 North and 2 South) were analyzed separately. We calculated performance measures based on ridership and service levels in spring 2011.

The following table shows the number of low- and high-performing Metro routes. Some routes were high or low performers on both measures, clearly indicating how a route was performing. However, some routes performed highly on one measure but not the other.

Of the 244 bus routes examined, 65 routes are in the bottom 25 percent on both performance measures in at least one time period. Of these 65 routes, 39 serve the Seattle core and 26 do not serve the Seattle core. Four routes that serve the Seattle core and nine that do not serve the Seattle core are in the bottom 25 percent on both measures in multiple time periods.

Routes and their associated hours as depicted in the table may be counted in more than one performance category since routes are evaluated for different time periods and measures. For example, a route may be a top performer during the peak, but a low performer at night.

Low-and High-Performing Metro Routes

Performance	# Seattle core routes			# Non-Seattle core routes			Annual hours
	Peak	Off-peak	Night	Peak	Off-peak	Night	
Top 25% in both measures	18	8	8	17	13	9	755,000
Top 25% in rides per platform hour only	21	10	9	2	4	2	381,000
Top 25% in passenger miles per platform mile only	23	10	9	2	3	2	461,000
Bottom 25% in both measures	24	11	8	15	11	9	274,000*
Bottom 25% in rides per platform hour only	15	7	9	3	5	1	274,000*
Bottom 25% in passenger miles per platform mile only	14	6	8	3	4	1	197,000
*It is coincidental that the number of hours in services in the bottom 25% in rides per platform hour only matches the number of hours in bottom 25% in both measures.							

Using the results to improve efficiency and effectiveness

This analysis highlights areas where we might make adjustments to improve the overall performance of the Metro system. As the table shows, for spring 2011 Metro had 274,000 annual service hours invested in routes that were low performers on both performance measures. We review low-performing routes to identify opportunities to revise, consolidate, or eliminate services in order to improve performance. Reducing investments in low-performing routes and reallocating resources to better-performing routes is one way to make our system more efficient. In other instances, modifying routes can make them more attractive to riders. Service restructures that address multiple routes are another way to help the system work better.

Before any service reductions or changes are made, however, routes are reviewed within the context of the network and according to the guidelines. Some routes provide value because they are the only connection between activity centers or the only service in a community.

When we are faced with making service reductions, the guidelines ensure that social equity and geographic value are primary considerations as those decisions are made. We do not propose reduction or elimination of low-performing services that offer the only public transportation option in a geographic area, or that serve a community with a high proportion of people who depend on public transportation, until other opportunities are considered. In some instances, Metro may identify alternative service delivery strategies to meet the mobility needs of communities served by low-performing routes. These strategies could include dial-a-ride-transit as an alternative to existing fixed-route service, or other services such as ridesharing, community vans, or Community Access Transportation.

The table shows the hours of low-productivity services by their reduction priority. (For a full discussion of reduction priorities, see page SG-16 in the Service Guidelines.) The services at the top of the table would be the first to be considered for reduction. If more hours were needed for reductions or reinvestments, services farther down the list would be considered.

Priority for Reducing Services in the Bottom 25% on Both Measures*

Category	Number of Seattle core routes	Number of non-Seattle core routes	Annual hours
Peak routes not meeting one or more peak criteria	8	0	70,000
All-day routes that operate on over-served corridors	3	6	31,000
All-day routes that operate on adequately served corridors	6	14	68,000
All-day routes that operate on under-served corridors	5	3	23,000
*Additional low productivity hours (approximately 80,000 hours) are on peak routes meeting peak criteria or on routes that are not on the All-Day and Peak Network.			

Sources: Spring 2011 APC, 2011 corridor analysis

The guidelines analysis also helps guide service investments. For example, when new service hours or funds are available, investment in top-performing routes is another way to improve overall system performance.

PERFORMANCE HIGHLIGHTS

Routes that do not serve the Seattle core

Top 25 percent on both measures

Top performers among routes that do not serve the Seattle core included seven routes that were in the top 25 percent in all time periods on both measures: the A Line between Federal Way and Tukwila and the routes shown in the table below. This set of top-performers includes routes on all three of Metro's six proposed RapidRide corridors that will not serve Seattle. The 253 was one of the routes replaced by the B Line in fall 2011, and the 140 will be replaced by the F Line in fall 2013.

The other top routes offer all-day service primarily in south King County, to regional growth and activity centers such as Des Moines, Green River Community College, Kent, Southcenter, Renton, and West Seattle's Alaska Junction.

Top Performers on Both Performance Measures, Non-Seattle Core, Spring 2011

Route	Between	And	Via
A Line	Federal Way	Tukwila	Kent, Des Moines and SeaTac
128	Southcenter	Admiral District	Alaska Junction and White Center
140	Burien	Renton	Tukwila and Southcenter
164	Kent	Green River Community College	Lake Meridian P&R
166	Des Moines	Kent	Highline Community College
169	Renton	Kent	Kent East Hill
253	Redmond	Bellevue	Overlake

Connections between centers

Other top performers in multiple time periods and measures included routes connecting activity centers and regional growth centers. All-day routes in south and east King County that performed well connect many of the largest regional growth centers outside of Seattle, including Auburn, Bellevue, Federal Way, Kent, Overlake, Renton, Redmond, and SeaTac. All-day routes in north Seattle and Shoreline that performed well include the network of routes in north Seattle that were created through a service restructure in the early 2000s. These top-performing routes are shown in the table on the next page.

Top Performers Connecting Regional Centers, Spring 2011

Route	Between	And	Via
<i>South & East</i>			
105	Renton Highlands	Renton	Renton Technical College
180	Burien	Auburn	Kent and SeaTac
181	Federal Way	Green River CC	Auburn
187	Twin Lakes	Federal Way	SW 320th Street
230 East	Redmond	Bellevue	Crossroads and Overlake
230 West	Kingsgate P&R	Bellevue	Kirkland
240	Bellevue	Renton	Newcastle, Factoria, and Eastgate
<i>North</i>			
330	Shoreline	Lake City	Fircrest
331	Shoreline Community College	Kenmore	Lake Forest Park
345	Shoreline	Northgate	North Seattle Community College
346	Aurora Village	Northgate	Meridian Avenue
347	Mountlake Terrace	Northgate	North City
348	Richmond Beach	Northgate	North City

Routes that serve the Seattle core

Top 25 percent in both measures

Top performers among Seattle core routes were the 49 and 72—the only routes that performed in the top 25 percent on both measures in all time periods. These two routes travel between downtown Seattle and the University District, the most popular transit destinations in King County. Route 72 also provides service north of the University District to Lake City. Other routes between downtown Seattle and the University District were also top performers, as were cross-town services to the University District. Several routes in the future RapidRide D and E line corridors were also top performers. These top performing routes are shown in the table below.

Top Performers on Both Measures, Seattle Core, Spring 2011

Route	Between	And	Via
15	Blue Ridge	Downtown Seattle	Ballard and Uptown
15EX	Blue Ridge	Downtown Seattle	Ballard
18	North Beach	Downtown Seattle	Ballard
18EX	North Beach	Downtown Seattle	Ballard and Uptown
43	University District	Downtown Seattle	Capitol Hill
44	Ballard	University District	Wallingford
48 South	Mount Baker	University District	Capitol Hill and Montlake
49	University District	Downtown Seattle	Capitol Hill and Broadway
71	Wedgwood	Downtown Seattle	University District
72	Lake City	Downtown Seattle	University District
73	Jackson Park	Downtown Seattle	University District
358	Aurora Village	Downtown Seattle	Green Lake

Connections within Seattle

Routes connecting downtown Seattle with central Seattle neighborhoods and employment centers were also among the top performers, especially in rides per platform hour. Routes 1, 2N, 3N, 4N, and 13 connecting Queen Anne and downtown Seattle as well as routes 2S, 3S, and 4S connecting Capitol Hill and central Seattle were top performers on this measure. They illustrate a characteristic of many central-Seattle routes that have high rides per platform hour but are not top performers in passenger miles per platform mile. In central Seattle many routes begin in residential neighborhoods where relatively few riders are on board the bus at the beginning of a route. While many riders may be on board at other points, if a route has relatively few riders at some points it will have lower performance on passenger miles per platform mile.

Top Performers With Connections within Seattle, Spring 2011

Route	Between	And
1	Kinnear	Downtown Seattle
2	West Queen Anne	Downtown Seattle
2	Madrona	Downtown Seattle
3	North Queen	Downtown Seattle
3	Madrona	Downtown Seattle
4	East Queen Anne	Downtown Seattle
4	Judkins Park	Downtown Seattle
13	Seattle Pacific University	Downtown Seattle

Suburban King County and downtown Seattle connections

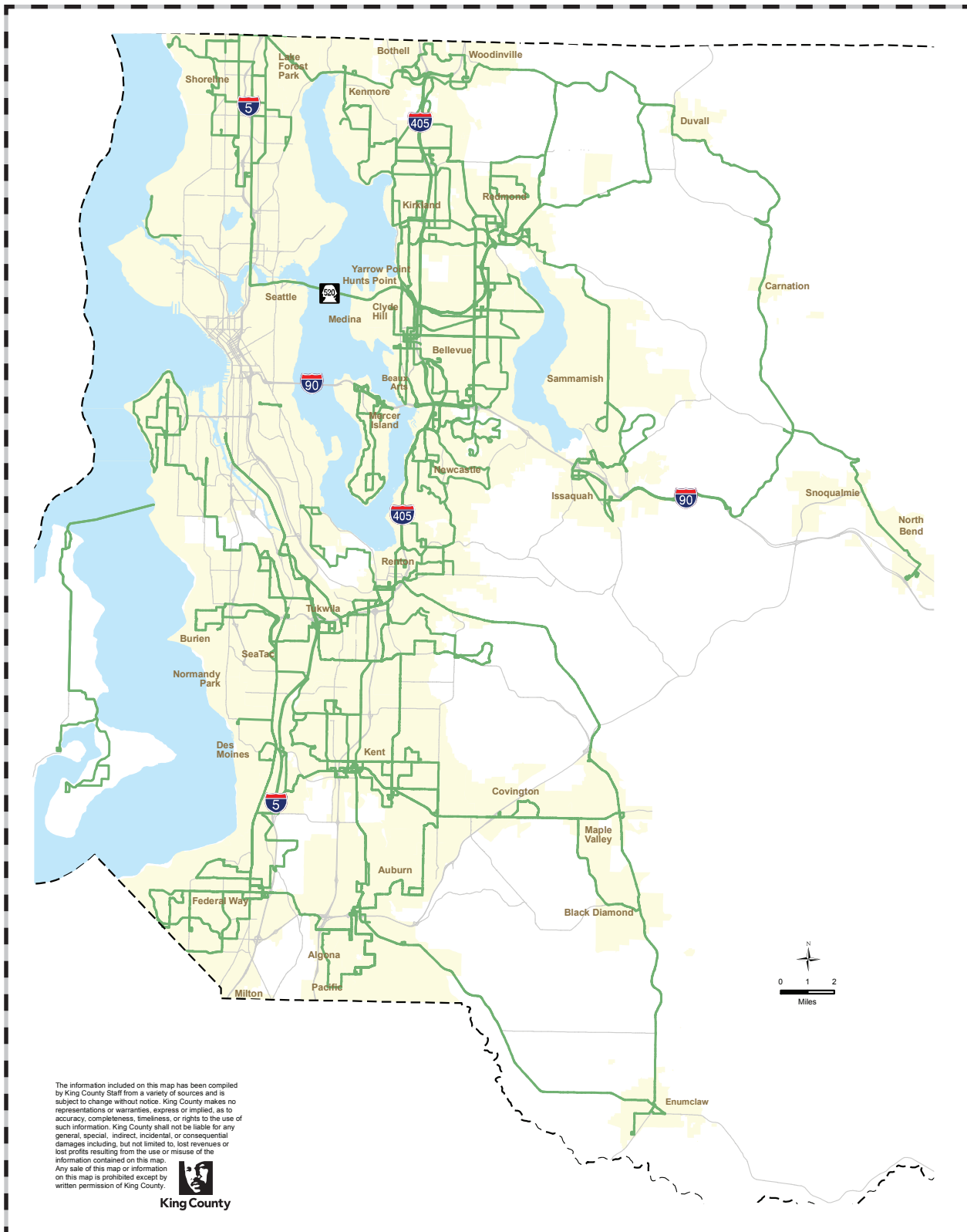
Routes connecting east and south King County to downtown Seattle included several top performers. All-day routes 101, 120, and 150, providing connections with Burien, Kent, Renton, and Tukwila, were among the top performers on passenger miles per platform mile in all time periods. However, only Route 120 was also a top performer in rides per platform hour in any time period. The two top performers overall for passenger miles per platform mile were peak-only Route 218 serving Eastgate and Issaquah Highlands and Route 301 serving Richmond Beach and Shoreline. Riders on these routes generally board very close to the beginning of the route and ride long distances relative to the total route distance.

Top Performers Connecting Seattle and Suburban King County, Spring 2011

Route	Between	And	Via
101	Renton	Downtown Seattle	ML King Jr. Way
120	Burien	Downtown Seattle	White Center and Delridge
150	Kent	Downtown Seattle	Southcenter
218	Issaquah Highlands P&R	Downtown Seattle	I-90
301	Richmond Beach	Downtown Seattle	Shoreline

FIG. 6

Routes that Do Not Serve the Seattle Core, Spring 2011



Route Data

Spring 2011 Route Performance: Routes that Do Not Serve the Seattle Core

Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
A Line	Federal Way	Tukwila	Kent, Des Moines, SeaTac	35.6	10.6	42.8	14.6	27.6	9.1
38	Beacon Hill	Mount Baker	S. McClellan St.			14.6	1.3		
51	Alaska Junction	Admiral District	35th Ave SW, Admiral Way	25.1	3.2	19.5	3.6		
53	Alaska Junction	Alki	Beach Dr Harbor Ave SW			12.5	3.6		
105	Renton Highlands	Renton Transit Cntr	Renton Technical College	39.2	8.2	39.2	8.9	20.4	4.1
107	Renton	Rainier Beach	Rainier Ave S.	26.1	6.6	25.1	7.7	15.7	4.9
110	Southwest Renton	N Renton Tukwila Sounder Station	Renton Transit Center	16.6	1.8				
118	Vashon Island	Tahlequah	Vashon Hwy SW	23.3	4.6	9.6	2.4	4.6	1.0
119	Vashon Island	Dockton	Vashon Hwy SW	16.3	4.8	13.9	3.1	2.5	0.3
128	Southcenter	Admiral District	White Center	38.7	13.4	36.5	17.1	20.4	6.4
129	Riverton Heights	Tukwila Int'l Blvd Station	24th Ave S – Military Rd S	7.9	0.8				
139	Burien	Highline Comm Hosp	4 Ave-164St – 21 St SW – SW 152..	20.9	2.9	14.8	2.5	8.0	1.1
140	Burien via	Renton	Tukwila and Southcenter	28.8	9.7	31.0	11.2	29.2	10.6
148	Fairwood	Renton		23.5	6.5	25.5	8.9	21.1	6.1
149	Enumclaw	Renton	Maple Valley	3.7	2.2	4.6	2.7		
153	Renton	Kent	E Valley Road	23.6	5.4	29.0	8.3		
154	Tukwila	Federal Center S	E Marginal Way	14.5	3.9				
155	Southcenter	Carriagewood	S Center Prkwy – S 80	16.3	3.9	19.4	5.7		
156	Tukwila	SeaTac South Center	Intl Blvd – S 176 – Military Rd	13.1	3.2	11.2	3.3		
164	Kent	Green River CC	Lake Meridian P&R	50.9	11.2	54.8	14.9	29.8	6.3
166	Des Moines	Kent	Highline Community College	36.5	11.9	35.2	13.5	22.7	7.1
168	Kent	Timberlane	Lake Meridian P&R	25.1	5.9	25.7	6.9	15.8	4.7
169	Renton	Kent	Canyon Dr 104th/108th Ave SE	45.6	16.4	42.2	18.0	26.1	8.4
173	Federal Way	Federal Center S	E. Marginal Way – I-5	9.8	4.7				
180	Burien	Auburn	Kent	35.0	12.1	32.2	13.1	15.3	5.5
181	Federal Way	Auburn	SW 320 St – Peasley Canyon Rd	31.3	9.4	29.9	10.2	20.2	4.9
182	Federal Way	Twin Lakes	Federal Way TC – Auburn Station	17.3	3.7	23.4	7.6	10.8	2.6
183	Kent	Federal Way	Star Lake	23.3	5.9	28.7	11.1		

KEY: Spring 2011 threshold values for routes that do not serve the Seattle core	Top 25%	27.0	7.2	27.4	9.3	20.3	6.2
	Bottom 25%	9.8	2.9	12.7	3.3	8.8	2.6

Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
186	Auburn	Enumclaw	Auburn-Enumclaw Rd	14.5	3.8	17.4	6.6		
187	Twin Lakes	Federal Way	S 320 St	34.0	5.9	39.4	8.5	14.9	2.7
200	North Issaquah	Downtown Issaquah	Pickering Place, Gilman Village	9.3	1.7	14.7	3.8		
201*	S Mercer Island	N Mercer Island	W Mercer Way	4.0					
203*	N Mercer Island	E Mercer Island	Mercer Island City Hall	17.7		32.4			
204*	N Mercer Island	S Mercer Island	78 Ave – Island Crest Way			13.9			
209	North Bend	Issaquah	I-90	10.4	5.6	12.8	8.1	5.4	2.3
213*	N Mercer Island	E Mercer Island	Covenant Shores			23.1			
219	Newcastle	Factoria	Newport Hills	4.2	0.5				
221	Redmond	Eastgate	Crossroads	17.0	5.0	17.8	5.7	12.4	2.7
222 (241)	Bellevue	Eastgate	Beaux Arts, Factoria	15.6	3.3	16.0	4.7	8.3	2.4
224	Redmond	Fall City	Duvall, Stillwater, Carnation	4.4	1.4	4.8	1.7		
230E	Redmond	Bellevue	Crossroads, Overlake	36.3	8.6	25.9	9.6	26.1	6.5
230W (235)	Kingsgate P&R	Bellevue	Kirkland	28.2	7.2	21.4	7.9	11.9	4.5
232	Duvall	Bellevue	Redmond, Overlake	15.5	4.8				
233 (226)	Bellevue	Bear Creek P&R	Overlake	23.0	5.5	22.2	6.4	13.5	3.2
234	Kenmore	Bellevue	Kirkland TC	16.2	5.7	12.7	5.6	8.8	3.3
236	Woodinville	Kirkland	Brickyard P&R	9.8	2.8	9.3	3.3	4.8	1.3
237	Woodinville	Bellevue	I-405	13.7	5.1				
238	Bothell	Kirkland	Brickyard P&R	13.6	3.7	14.1	4.6	6.3	2.1
240	Bellevue	Renton	Newcastle, Factoria, Eastgate	27.9	9.9	24.5	12.6	12.9	5.5
242	Northgate	Overlake	Greenlake P&R	16.7	9.1				
244EX	Kenmore	Overlake	Kingsgate	11.7	4.7				
245	Kirkland	Factoria	Overlake, Crossroads, Eastgate	22.4	6.2	20.2	6.0	15.7	3.7
246	Bellevue	Eastgate	Factoria	9.6	1.8	8.5	2.0		
247	Kent/Renton	Overlake	Eastgate	4.8	1.3				
248	Kirkland	Avondale	Redmond, Bear Creek P&R	20.1	5.5	17.5	5.0	12.4	3.2
249	Bellevue	Overlake	South Kirkland	15.6	4.5	14.9	5.3	5.0	1.4
251	Bothell	Redmond	Woodinville	8.6	2.9	9.8	3.5	5.9	1.3
253	Redmond	Bellevue	Overlake	35.2	11.3	36.4	12.5	31.6	8.9
269	Overlake	Issaquah	Sammamish	8.0	3.2	11.0	5.0	8.6	3.1
330	Shoreline	Lake City	Fircrest	29.3	5.9				

KEY: Spring 2011 threshold values for routes that do not serve the Seattle core	Top 25%	27.0	7.2	27.4	9.3	20.3	6.2
	Bottom 25%	9.8	2.9	12.7	3.3	8.8	2.6

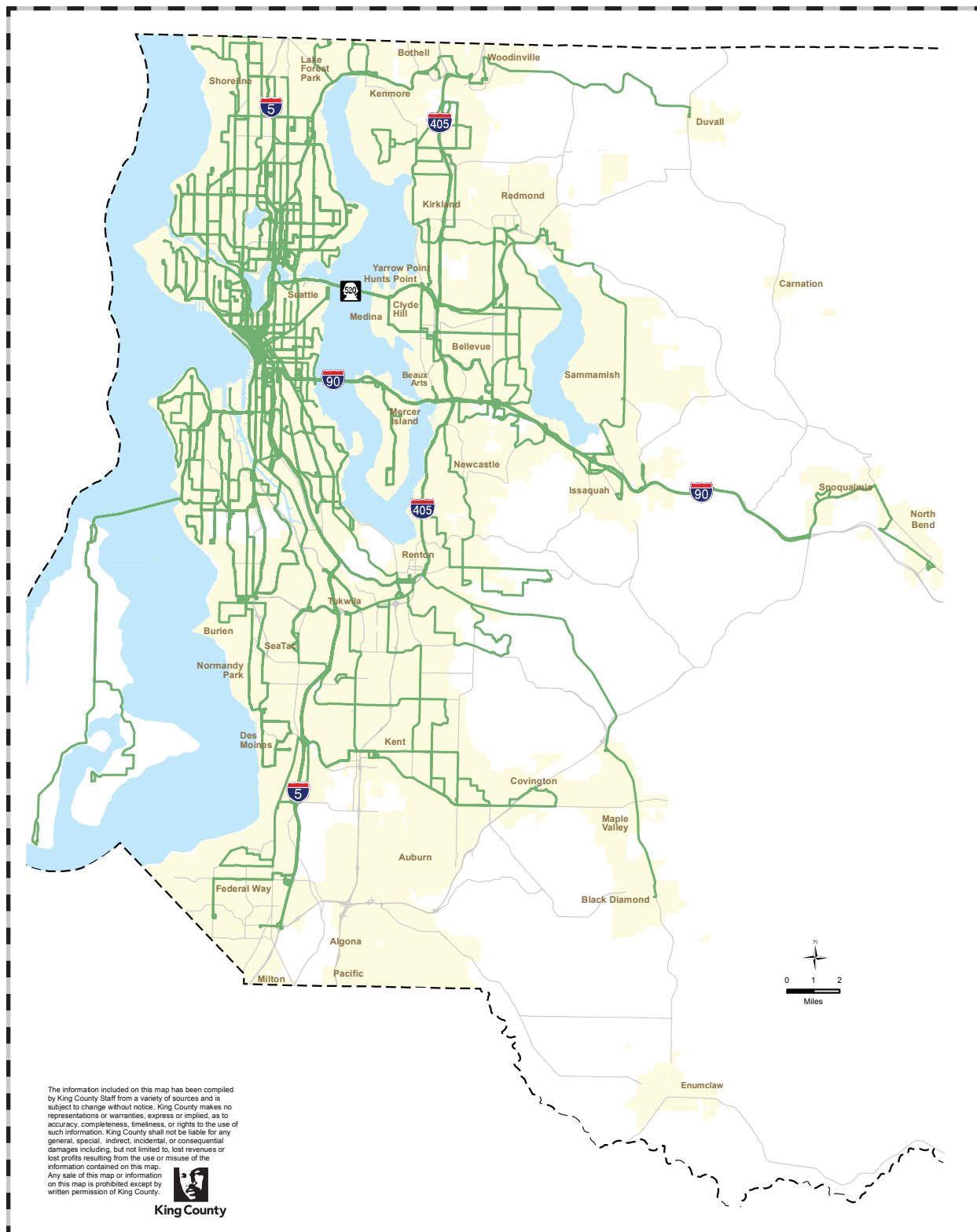
Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
331	Shoreline CC	Kenmore	LFP	19.4	7.2	23.0	8.1	9.7	3.8
342	Shoreline	Renton	Bellevue	14.7	4.7				
345	Shoreline	Northgate	North Sea CC, NW Hosp	41.5	11.1	40.1	12.1	16.2	6.3
346	Aurora Vllg Trnst Cntr	Northgate	Meridian Avenue	40.1	10.8	32.8	10.8	15.1	5.7
347	Mountlake Terrace	Northgate	North City	28.2	8.0	26.5	8.5	19.8	5.4
348	Richmond Beach	Northgate	North City	29.7	7.4	27.7	9.6	18.1	6.5
901DART	Federal Way DART		SW 312 – SW Dash Rd	18.6	3.2	19.0	2.8	14.3	2.4
903DART	Federal Way DART		Federal Way Community Center	18.1	4.3	15.9	3.6	11.8	3.6
908DART	Renton Highlands	Renton	Group Health, Renton Technical College	7.8	2.0	6.6	1.8		
909DART	Kennydale	Renton DART	Group Health	12.5	3.1	10.8	2.8		
910DART	N Auburn	Supermall	Auburn Station			7.5	1.7		
912	Enumclaw	Covington	Black Diamond	1.2	0.3				
913DART	Riverview	Kent	Riverside Blvd S, 76th Ave S	4.3	1.2	4.3	1.1		
914DART	Kent DART		Kent East Hill			19.7	6.9		
916DART	Kent DART		76th Ave S			17.1	9.8		
917DART	Auburn	Pacific	Algona	14.7	3.9	13.1	3.4		
918DART	North Kent	Kent	64th Ave S, 76th Ave S	10.3	1.9				
919DART	Auburn DART		Auburn Way S			15.4	3.7		
925DART	Newcastle	Factoria	Newport Hills	1.0	0.5				
926DART	Eastgate	Crossroads DART	Phantom Lake	8.4	2.2	7.4	1.9		
927DART	Issaquah	Sammamish	Issaquah Commons, Highlands	6.0	2.6	5.2	2.1		
930DART	Redmond	Totem Lake	Willows Rd	8.4	2.7				
935DART	Kenmore	Totem Lake	Juanita Dr NE – NE 141 – 84th Ave	4.8	1.7	3.4	1.2		

KEY: Spring 2011 threshold values for routes that do not serve the Seattle core	Top 25%	27.0	7.2	27.4	9.3	20.3	6.2
	Bottom 25%	9.8	2.9	12.7	3.3	8.8	2.6

* Passenger miles data was unavailable on some routes and time periods due to lack of APC data; see page 4 for details.

FIG. 7

Routes that Serve the Seattle Core, Spring 2011



Spring 2011 Route Performance: Routes that Serve the Seattle Core

Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
1	Queen Anne Hill	Downtown Seattle	Olympic Way	74.8	14.7	68.9	15.4	34.0	6.6
2N	Queen Anne Hill	Downtown Seattle	Queen Anne Ave.	66.8	11.7	76.2	15.7	34.6	6.0
2NEX	Queen Anne Hill	Downtown Seattle	Queen Anne Ave.	30.9	5.1				
2S	Madrona	Downtown Seattle	Queen Anne Ave.	57.2	10.3	57.8	11.6	29.1	5.8
3N	N Queen Anne Hill	Downtown Seattle	East Queen Anne	72.2	12.1	71.9	13.4	37.7	8.7
3S	Madrona	Downtown Seattle	E Jefferson St.	58.2	10.3	57.5	12.0	28.3	5.9
4N	E Queen Anne Hill	Downtown Seattle	Seattle Center	76.3	14.0	63.7	11.2	31.4	7.2
4S	Judkins Park	Downtown Seattle	E Jefferson St.	51.1	10.5	44.9	9.9	26.9	5.9
5	Greenwood	Downtown Seattle	Phinney Ave	46.8	12.1	49.0	14.6	30.1	8.3
5EX	Greenwood	Downtown Seattle	I-5	37.3	13.4				
7	Rainier Beach	Downtown Seattle	Rainier Ave	43.6	13.6	53.0	17.4	27.9	7.9
7EX	Rainier Beach	Downtown Seattle	Rainier Ave	25.0	6.4				
8	Rainier Beach	Queen Anne	Capitol Hill	52.4	11.8	42.6	12.0	32.1	8.3
9EX	Rainier Beach	Capitol Hill	Columbia City	38.1	10.7	40.4	15.9		
10	Capitol Hill	Downtown Seattle	15 Ave – Pine St.	51.0	7.7	56.7	10.9	34.0	4.8
11	Madison Park	Downtown Seattle	E. Madison – Pine St.	50.4	8.7	56.3	12.0	34.9	5.6
12	Capitol Hill	Downtown Seattle	E. Madison	50.3	9.5	44.7	10.5	19.3	3.7
13	Sea Pac U, Queen Anne	Downtown Seattle	East Queen Anne	67.7	11.6	66.3	13.3	29.2	6.2
14N	Summit	Downtown Seattle	Pine – 3rd Ave	46.1	6.2	46.2	6.8	19.9	3.3
14S	Mount Baker	Downtown Seattle	S. Jackson – 31st Ave S.	34.8	6.3	43.4	9.7	21.3	3.7
15	Blue Ridge	Downtown Seattle	Ballard	64.0	13.8	64.5	16.9	31.2	8.4
15EX	Blue Ridge	Downtown Seattle	Ballard, Uptown	47.1	16.5				
16	Northgate	Downtown Seattle	Green Lake, Wallingford	37.7	12.5	36.1	12.6	20.5	7.7
17EX	Ballard	Downtown Seattle	Ballard	42.1	14.6				
17	Loyal Heights	Downtown Seattle	Ballard, S Lake Union	38.4	10.2	36.5	12.6	17.8	6.9
18EX	N Beach	Downtown Seattle	Ballard	49.7	16.5				
18	N Beach	Downtown Seattle	Ballard, Uptown	58.0	12.0	59.9	15.3	33.0	8.1
19	W Magnolia	Downtown Seattle	Seattle Center	23.1	7.7				
21EX	Arbor Heights	Downtown Seattle	35th Ave SW, Alaskan Way Viaduct	32.8	12.9				
21	Arbor Heights	Downtown Seattle	35th Ave SW, 4th Ave S	24.9	7.4	24.2	9.9	14.0	5.1
22	White Center	Downtown Seattle	Alaska Junction, SODO	25.2	8.3	20.3	8.8		
23	White Center	Downtown Seattle	Highland Pk Wy	37.5	14.4	28.2	11.0	15.0	5.8
24	Magnolia	Downtown Seattle	Viewmont Way – Elliott Ave W.	39.2	10.7	29.3	9.0	13.8	4.9
25	Laurelhurst	Downtown Seattle	U District	18.7	4.9	13.1	4.9		
26	Wallingford	Downtown Seattle	Fremont	59.4	11.8	52.9	11.7	32.8	7.0
26EX	Wallingford	Downtown Seattle	NE 40th St-N35th-Dexter Ave N	37.9	9.2				

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	Bottom 25%	18.6	7.9	29.4	9.8	17.7	5.8

Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
27	Colman Park	Downtown Seattle	Yesler Way	40.0	7.5	31.1	7.0	18.7	5.2
28	Broadview	Downtown Seattle	Fremont	48.5	10.9	48.1	13.0	29.9	7.4
28EX	Broadview	Downtown Seattle	Whittier Heights	36.3	11.7				
30	Sand Point	Queen Anne	U District	36.4	11.6	30.6	10.1	25.4	7.7
31	Magnolia	U District	Fremont	35.2	9.7	24.4	9.6		
33	Magnolia	Downtown Seattle	Elliott Ave W	47.9	11.1	30.5	8.5	15.0	4.2
34EX	Seward Park	Downtown Seattle	Rainier Ave	22.3	6.3				
35	Harbor Island	Downtown Seattle	4th Ave	8.6	1.6				
36	Othello Station	Downtown Seattle	Beacon Hill	44.9	11.2	47.9	14.6	24.6	6.7
37	Alaska Junction	Downtown Seattle	Beach Dr, Harbor Ave SW	16.6	6.4				
39	Rainier Beach	Downtown Seattle	Seward Park, Beacon Hill	28.0	7.7	23.6	8.5	9.9	3.4
41	Northgate	Downtown Seattle	I-5	48.4	16.9	45.4	21.8	34.8	17.0
42	Pioneer Square	Columbia Public Health Center	Rainier Ave – ML King Jr Way	9.1	1.8	10.3	2.5		
43	U District	Downtown Seattle	Capitol Hill	48.4	14.1	44.0	14.1	30.3	8.2
44	Ballard	U District	Wallingford	56.8	18.1	49.7	19.6	31.5	7.7
45EX	Queen Anne	U District	N 40th	19.7	5.2				
46	Shilshole	U District	Fremont	19.8	4.2	6.6	1.2		
48N	Loyal Heights	U District	Greenlake	47.8	8.8	51.7	10.9	31.3	6.3
48NEX	Loyal Heights	U District	Greenwood	32.3	9.1				
48S	Mount Baker	U District	Capitol Hill Montlake	66.5	14.8	60.8	13.9	33.8	7.6
49	U District	Downtown Seattle	Capitol Hill, Broadway	50.8	16.9	54.2	17.5	48.5	12.8
54	White Center	Downtown Seattle	Fauntleroy	29.5	11.5	36.2	14.6	24.7	10.2
54EX	Fauntleroy	Downtown Seattle	Alaskan Way Viaduct	34.3	12.6				
55	Admiral District	Downtown Seattle	California Ave – Alaskan Way Viaduct	38.9	15.1	31.9	12.6	17.4	7.2
56	Alki	Downtown Seattle	SW Admiral Way	30.4	10.1	23.2	8.8	11.4	4.2
57	Alaska Junction	Downtown Seattle	Admiral	21.6	8.1				
60	Broadway	White Center	Georgetown, Beacon Hill	31.3	9.3	29.8	9.5	16.1	4.7
64EX	Lake City	First Hill	Wedgwood, U District	30.0	11.2				
65	Lake City	U District	Wedgwood	39.6	8.4	38.3	9.7	19.8	4.9
66EX	Northgate	Downtown Seattle	Roosevelt Dist, Eastlake	35.8	12.4	28.2	12.2	20.6	7.1
67	Northgate	U District	Roosevelt Way, 11th Ave – 12 Ave	44.5	9.3	61.0	14.7	43.6	6.8
68	Northgate	U District	Roosevelt, 25th Ave NE	60.0	13.8	66.3	17.0		
70	U District	Downtown Seattle	Eastlake	39.8	10.4	32.2	10.2	15.9	3.5
71	Wedgwood	U District	Latona	54.3	16.6	48.8	19.0	32.6	10.8
72	Lake City	Downtown Seattle	Ravenna	52.2	17.1	53.2	20.7	34.0	11.1
73	Jackson Park	Downtown Seattle	Maple Leaf – U District	48.5	14.3	48.9	18.2	36.9	11.9

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Route	Between	And	Via	Peak		Off-peak		Night	
				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
74EX	Sand Point	Downtown Seattle	U District	43.2	11.6				
75	Ballard	U District	Northgate	45.8	12.7	41.2	11.7	25.8	8.0
76	Wedgwood	Downtown Seattle	Hawthorne Hills	40.3	12.4				
77EX	North City	Downtown Seattle	Maple Leaf	28.1	10.8				
79EX	Lake City	Downtown Seattle	Ravenna – U District	18.5	5.9				
81	Owl: Downtown Seattle	Loyal Hghts	Ballard					18.5	3.4
82	Owl: Downtown Seattle	Greenwood	Queen Anne, Greenlake					19.7	8.4
83	Owl: Maple Leaf	Downtown Seattle	U District					24.3	9.8
84	Owl: Downtown Seattle	Madison Park	Madrona					7.7	2.2
85	Owl: Downtown Seattle	White Center	West Seattle					17.5	8.8
99	Intl Dist	Waterfront	Jackson	32.0	7.4	21.1	5.1		
101	Renton	Downtown Seattle	I-5 – ML King Jr Way	32.5	17.3	38.8	20.5	28.1	15.5
102	Renton/Fairwood	Downtown Seattle	Tukwila, I-5	29.0	16.7				
106	Renton	Downtown Seattle	S Beacon Hill, Georgetown	31.7	10.0	30.1	12.1	19.9	8.2
111	Renton	Downtown Seattle	I-90	20.8	12.8				
113	Shorewood	Downtown Seattle	White Center, SR-509	25.6	10.8				
114	Renton	Downtown Seattle	I-90	17.8	10.4				
116EX	Fauntleroy	Downtown Seattle	SODO	12.4	5.3				
118EX	Downtown Seattle	Vashon Heights, Tahlequah	SODO	13.7	5.7				
119EX	Downtown Seattle	Vashon Heights, Dockton	SODO	13.0	7.2				
120	Burien	Downtown Seattle	White Center, Delridge	44.3	17.4	47.2	21.9	36.2	16.6
121	Des Moines	Downtown Seattle	Burien	25.2	10.4	21.6	9.3		
122	Highline CC	Downtown Seattle	Normandy Park, Burien	25.9	11.4				
123EX	Burien	Downtown Seattle	SR-509	15.2	7.5				
124	SeaTac	Downtown Seattle	Marginal Way S	39.0	16.1	36.3	17.3	22.4	9.5
125	Shorewood	Downtown Seattle	SSCC	36.2	12.3	33.6	13.4	17.6	7.1
131	Midway/Des Moines	Downtown Seattle	Burien	20.3	8.0	20.0	9.8	14.6	6.8
132	Highline CC	Downtown Seattle	Burien	26.2	10.9	27.6	12.9	12.4	6.0
133	U District	Burien	White Center	17.3	10.5				
134	Burien	Downtown Seattle	Georgetown	10.6	4.1				
143EX	Maple Valley	Downtown Seattle	Renton	19.8	11.7				
150	Kent via Tukwila	Downtown Seattle	I-5	29.1	17.1	30.7	20.7	24.5	16.6
152	Auburn	Downtown Seattle	I-5	13.2	10.1				
157	Lake Meridian P&R	Downtown Seattle	I-5	11.5	7.1				
158	Lake Meridian	Downtown Seattle	Kent	19.3	12.9				
159	Timberlane	Downtown Seattle	Kent	15.6	9.9				
161	Kent East Hill	Downtown Seattle	Tukwila	15.2	7.5				
162	Kent	Downtown Seattle	Tukwila	15.1	8.7				

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				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
167	S Renton P&R	U District	Bellevue	22.3	16.7				
175	W Federal Way	Downtown Seattle	Midway	11.4	7.0				
177	Federal Way	Downtown Seattle	I-5	18.4	11.6				
179	Twin Lakes P&R	Downtown Seattle	Federal Way- I-5	18.1	13.4				
190	Star Lake via I-5	Downtown Seattle	I-5	17.9	9.4				
192	Star Lake P&R	Downtown Seattle	Kent-Des Moines P&R	15.6	7.8				
193EX	Star lake via I-5	First Hill	Kent-Des Moines P&R	25.2	14.1				
196	S Federal Way	Downtown Seattle	I-5	13.2	9.1				
197	Federal Way	U District	Kent-Des Moines P&R	17.1	12.0				
202	Mercer Island	Downtown Seattle	I-90	12.3	4.4				
205EX	Mercer Island	U District	First Hill	17.4	5.2				
210	Issaquah	Downtown Seattle	Factoria	10.7	5.0				
211EX	Issaquah Hghlnds P&R	First Hill	Eastgate	16.9	4.8				
212	Eastgate P&R	Downtown Seattle	I-90	36.7	15.8				
214TB	Issaquah	Downtown Seattle	I-90	20.0	9.0				
215	Snoqualmie	Downtown Seattle	I-90	19.7	11.1				
216	Sahalee	Downtown Seattle	Sammamish, Issaquah	21.2	13.9				
217	Issaquah	Downtown Seattle	Eastgate	30.4	16.0				
218	Issaquah Hghlnds P&R	Downtown Seattle	I-90	37.6	20.8				
225	Overlake	Downtown Seattle	164th Ave SE, I-90	24.5	12.4				
229	Overlake	Downtown Seattle	156th Ave SE and I-90	27.2	14.3				
243	Jackson Park	Wilburton P&R	Bellevue Trnst Cntr	24.2	8.9				
250	Overlake	Downtown Seattle	SR-520	9.2	4.5				
252	Kingsgate	Downtown Seattle	SR-520 – I-405	21.4	12.5				
255	Brickyard P&R	Downtown Seattle	Kirkland	27.0	14.7	20.5	12.1	17.5	11.8
256	Overlake Trnst Cntr	Downtown Seattle	SR-520	17.9	9.4				
257	Brickyard P&R	Downtown Seattle	I-5–SR-520–I-405	18.5	11.4				
260	Finn Hill	Downtown Seattle	I-5–SR-520–I-405	12.5	7.9				
261	Overlake	Downtown Seattle	Crossroads, Bellevue	17.2	7.2				
265	Overlake	First Hill	Rose Hill, downtown Seattle	11.0	5.6				
266	Redmond	Downtown Seattle	148th Ave NE, SR-520	13.5	7.1				
268	Bear Creek	Downtown Seattle	I-5–SR-520	16.8	10.0				
271	U District	Issaquah	Bellevue	23.3	10.0	26.7	13.6	16.9	7.9
272	Eastgate via	U District	Houghton P&R	14.3	6.1				
277	Juanita	U District	Kingsgate & Houghton P&R	13.0	5.1				
280*	Owl: Downtown Seattle	Renton	Bellevue					9.8	
301	Richmond Beach	Downtown Seattle	Shoreline	34.8	20.3				
303EX	Shoreline	First Hill	I-5	36.7	14.8				

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				Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour	Rides/ Platform hour	Passenger miles/ Platform hour
304	Richmond Beach	Downtown Seattle	I-5	23.3	14.6				
306EX	Kenmore P&R	Downtown Seattle	Lake City	26.8	13.5				
308	Horizon View	Downtown Seattle	NE 45th St	21.6	11.4				
309EX	Kenmore	First Hill	Lake Forest Park, Lake City	21.6	9.2				
311	Duvall	Downtown Seattle	I-5—SR-520 — I-405	15.1	10.4				
312EX	Bothell	Downtown Seattle	Kenmore	25.0	11.8				
316	Aurora Village Trnst Cntr	Downtown Seattle	Green Lake	41.8	12.9				
355EX	Shoreline CC	Downtown Seattle	Bitter Lake, Greenwood	24.1	9.8				
358EX	Aurora Village	Downtown Seattle	Green Lake	48.6	19.5	51.7	26.5	36.0	17.7
372EX	U District	Woodinville	Kenmore	32.5	11.2	38.5	14.1	26.4	6.6
373EX	Aurora Village Trnst Cntr	U District	Jackson Park	32.1	12.7				
600	South Base Tukwila	Downtown Seattle	S Boeing Access Rd	11.5	1.9				
661	NE 145th	Downtown Seattle	I-5			5.2	3.7		
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