

Metro Transit: service productivity

What makes a bus route productive?

One of the ways transit agencies measure their productivity is by counting the number of people who board the bus each hour the bus operates. Another way is to measure the distance passengers travel on buses per mile the buses operate. Metro’s service guidelines emphasize productivity, and value both of these measures equally. When planning service reductions or increases, Metro seeks to provide the most productive service for as many riders as possible and serve areas that rely on transit the most, including low income and minority populations. As Metro has used the guidelines to revise service over the past two years, its productivity on both measures has improved.

The service guidelines were adopted in 2011. Before the guidelines were in place, the majority of Metro’s new investments were made in east and south King County. These areas are less densely populated than the county’s urban areas, so service there tends to be less productive. While ridership has grown rapidly in these areas over the past decade, the average boardings per hour in both areas is lower than the systemwide average. Other new services also resulted in boardings-per hour below the systemwide average. This included service provided in partnership with cities or businesses and increased service in rapidly growing areas.

In recent years, Metro added service that affected the ratio of boardings to hours. For example, RapidRide and Alaskan Way Viaduct mitigation service resulted in above-average boardings.

Performance on the passenger miles per bus mile measure dropped after 2008, mainly because Metro’s average trip length (passenger miles divided by passengers) decreased from 4.6 miles to 4.3 miles. This occurred in part because the recession meant fewer people were taking buses

to work, and commute trips tend to be longer than other trips. Another reason is that Metro restructured service when Link light rail and RapidRide service began between 2009 and 2014, focusing more service on shorter all-day routes rather than longer-distance commuter routes. For example, Metro’s Route 194 between Seattle, SeaTac and Federal Way was replaced with Link and Sound Transit Express bus service. Route 194 had accounted for about 4 percent of Metro’s total passenger miles. Increased ridership on Sounder commuter rail also likely replaced some long Metro trips.

Since the service guidelines have been in place, performance on this measure has improved.

	Boardings per Hour	Passenger Miles per Bus Mile
2006	29.8	11.2
2007	31.4	11.5
2008	33.7	12.4
2009	31.3	11.2
2010	30.9	10.4
2011	31.7	10.7
2012	31.9	11.0
2013	32.7	NA