

Schedule reliability

Metro measures schedule reliability to identify routes that are candidates for investment because they provide poor quality service.

Schedule reliability is measured for all Metro transit service. Service should adhere to published schedules, within reasonable variance based on time of day and travel conditions. "On time" is defined as an arrival at designated points along a route⁹ that is no more than five minutes late or one minute early relative to the scheduled arrival time. When identifying candidates for remedial action, Metro focuses on routes that are regularly running late.

To do this, Metro identifies trips that exceed the lateness thresholds (shown below). If a trip experiences lateness that exceeds the thresholds, it can be identified for investment. Investment can include improvements in route design, schedule, or traffic operations. Schedule reliability can also be improved through speed and reliability improvements, such as business access and transit lanes, queue jumps, transit signal priority and other transit priority treatments.

Time Period	Lateness Threshold
Weekday average	> 20%
Weekday PM peak average	> 35%
Weekend average	> 20%

Metro allows for a higher lateness threshold in the PM peak period to account for increased passenger demand and higher levels of roadway congestion experienced during this time period.

Metro actively manages the headways of RapidRide service, primarily in peak periods, with a goal of providing riders with a high-frequency service where they do not rely on paper timetables. High frequencies and real-time information are intended to give riders a reliable service. When actual service has gaps that are three minutes more than the intended headway, service is considered late. With that difference in mind, "lateness" on RapidRide service uses the same thresholds as shown above.

Routes that operate with a headway that is less frequent than every 10 minutes that do not meet performance thresholds will be given priority for schedule adjustment or investment. Routes that operate with a headway of every 10 minutes or more frequent that do not meet performance thresholds will be given priority for speed and reliability investments to improve traffic operations. It may not be possible to improve through-routed routes¹⁰ that do not meet performance thresholds because of the high cost and complication of separating routes.

Other considerations: External factors affecting reliability

Action alternatives:

- Adjust schedules/add run time
- Adjust routing
- Invest in speed and reliability improvements.

⁹ Metro measures schedule reliability based on the arrival time of a given coach at designated points along a route. At the time the Strategic Plan and Service Guidelines were transmitted to the King County Council, Metro calculated this measure using the coach's arrival at time points. As Metro transitions with the Stop-Based Scheduling project, Metro will calculate this measure based on the coach's arrival at stops along a route, providing Metro with more data and improved accuracy for measuring schedule reliability.

¹⁰ Through-routed services are routes that arrive at the end of one route and continue on as a different route. For example, Route 5 between Shoreline and Downtown Seattle continues on as Route 21 between downtown Seattle and Westwood Village.