



TRANSIT ACCESS ASSESSMENT: EXECUTIVE SUMMARY



As part of its Livable Communities 2 work program, the Puget Sound Regional Council conducted a Transit Access Assessment. This assessment builds on existing work around the region to identify regional transit access needs. The products of this effort are findings related to transit access, particularly at major sites of transit service, and recommended next steps for PSRC to improve transit access and to inform the next update to Transportation 2040, the region's long range transportation plan.

PSRC's Transit Access Assessment was supported by a Transit Access Working Group, consisting of staff from each of the region's transit agencies—particularly those working on their own transit access projects and studies—and local jurisdictions throughout the region. The working group met 13 times between March 2014 and December 2015. PSRC's Transportation Operators Committee (TOC) oversaw the Transit Access Assessment and received periodic briefings on the progress of this effort.



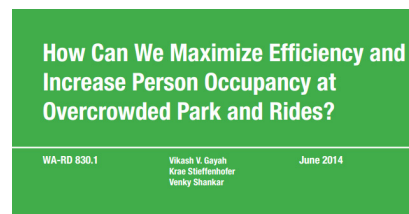
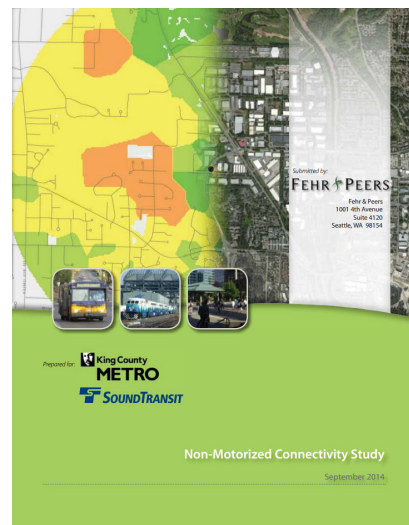
TRANSIT ACCESS CONTEXT

PSRC's Transit Access Assessment took place in the context of several other more targeted transit access studies and projects, including (but not limited to) the following:

- King County Metro and Sound Transit's [Non-motorized Connectivity Study](#), which presents new methods to help planners analyze biking and walking access to transit service.
- Sound Transit's [Parking Management Pilot Project](#), which is testing several strategies for helping transit customers access public transit by managing parking more efficiently.
- Washington State Department of Transportation's research report titled [How Can We Maximize Efficiency and Increase Person Occupancy at Overcrowded Park and Rides](#), which provided detailed information on the use of 17 of the region's busiest park and ride facilities.
- King County Metro's Access to Transit Study, which sought to better understand how people access Metro's services by considering infrastructure that provides access, how access needs are reported and funded, and regional coordination and policies.

Considering that these efforts each approached transit access from slightly different perspectives, the work program language and the TOC instructed PSRC to take a comprehensive approach when conducting the Transit Access Assessment.

While PSRC's Transit Access Assessment was a wide-ranging examination of the topic, PSRC staff and the Transit Access Working Group focused primarily on major sites of transit service, which included the following places: transit centers, park and rides, light rail stations, Sounder stations, ferry terminals, and high-frequency transit corridors. And though no formal definition of "transit access" was developed, the term came to refer to the infrastructure, facilities, and services that support a person's ability to easily reach these places.



PROCESS

PSRC's Transit Access Assessment took place over two phases, organized here by work accomplished in 2014 and 2015.

2014 Work

The focus of the Transit Access Assessment in 2014 was on gathering information on the topic of transit access and identifying what exactly had the greatest impact on how people accessed major sites of transit service. This was accomplished in three ways:

- 1) Learning from the ongoing studies mentioned above by hearing detailed presentations at Transit Access Working Group meetings, reviewing draft products, and providing input and feedback to project staff. In addition to those studies listed above, the working group also received briefings on Sound Transit's Puyallup and Sounder Access Improvement projects, and System Access Issue Paper accompanying their updated Long Range Plan.
- 2) Gathering information on the topic of transit access from academic literature and best practices around the county (see the [Literature and Best Practices Review](#) document).
- 3) Conducting fourteen interviews with local elected officials throughout the region to gather additional local jurisdiction perspective on the region's transit access needs and challenges (see the [Stakeholder Interviews](#) document). Figure 1 shows the fourteen jurisdictions where interviews were conducted.

The major output of these three efforts was a list of characteristics that influence transit access, which were organized in the following categories:



Urban Form and the Built Environment. This category concerns the physical, demographic, and land use characteristics in the vicinity of major sites of transit service and includes current and future population and employment totals; street network and roadway characteristics like street network connectivity, road volumes, and traffic speeds; and nonmotorized connectivity features like the presence or absence of nonmotorized facilities, topography, and signalized arterial crossings.

Transit Service. This category concerns the transit service characteristics available at major sites of transit service and includes the number of routes, their peak and off-peak headways, the destinations served, the reliability and quality of transit service, and boarding data by route and time of day.

Parking. This category concerns parking characteristics at and adjacent to major sites of transit service and includes the capacity and utilization rate of park and ride spaces, the time by which these spaces are filled, and the availability and utilization of on-street parking adjacent to major sites of transit service.

These categories provided the organizing framework for the remainder of the work and serve as useful shorthand for broadly classifying transit access issues and challenges. At the same time, there are transit characteristics that don't neatly fit the above categories (e.g. station-area amenities or the presence of transportation demand management programs) that were also noted. The characteristics themselves were refined during the case study phase of work described below. For the full list of characteristics, please see the [Draft Case Study Methodology](#) document.

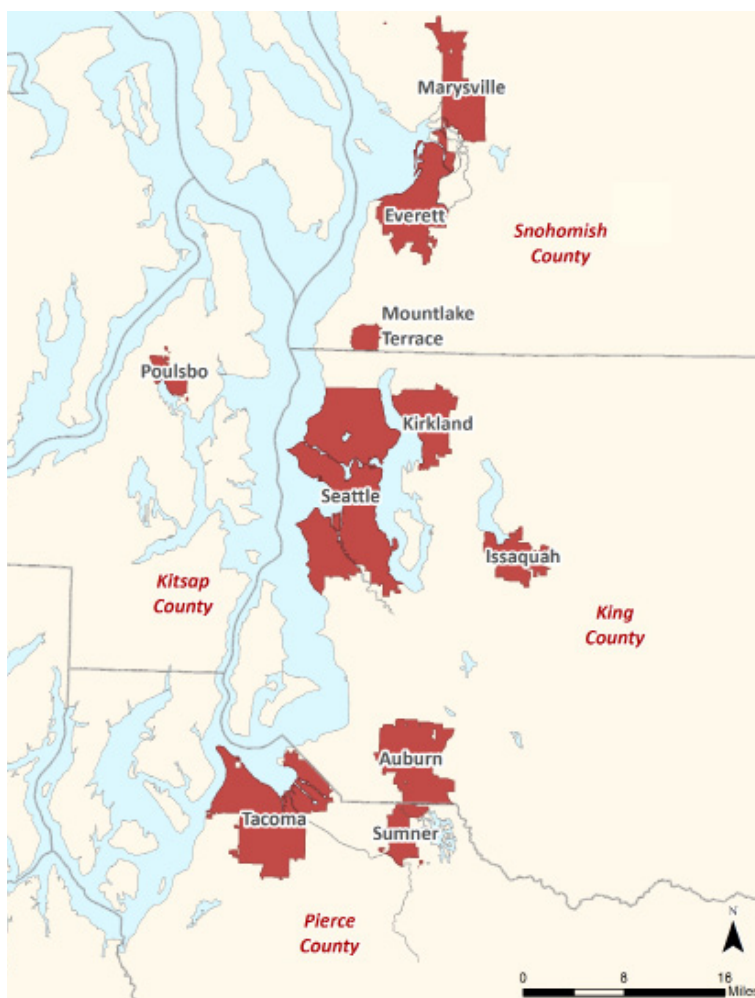


Figure 1: Jurisdictions Interviewed

2015 Work

The focus of the Transit Access Assessment in 2015 was on operationalizing the transit access characteristics by conducting case studies of major sites of transit service throughout the region. The purpose of the case studies was to assess the transit access characteristics in a variety of major sites of transit service and identify common issues, challenges, and opportunities in the region. Figure 2 shows the Transit Access Assessment's case study locations.

Case studies were conducted by PSRC staff in consultation with relevant local jurisdiction and transit agency staff. Preliminary findings were reviewed and discussed with the Transit Access Working Group. The case studies form the foundation for the transit access findings and recommended next steps detailed in this Executive Summary. Completed case studies can be viewed by clicking on the case study locations in Figure 2 below.

PSRC staff and the Transit Access Working Group also developed a draft list of strategies to increase transit access in 2015. While these strategies remain draft, they are certain to inform a major next step of this effort, described in the following section. To review the draft strategies, please see the [Draft Transit Access Strategies](#) document.



Figure 2: Transit Access Case Study Locations (click to view the relevant case study)

REGIONAL TRANSIT ACCESS FINDINGS

The following are findings based on the eight case studies in PSRC's Transit Access Assessment and on other transit access studies and efforts recently completed in the region. The findings are organized in four categories: 1) overall findings, 2) urban form and the built environment, 3) transit service, and 4) parking.

Overall Findings

- **Local conditions matter.** Many characteristics influence transit access, which vary greatly throughout the region. Increasing transit access will require context-specific approaches that take into account local conditions and the interplay of transit access characteristics in specific places and corridors.
- **Many actors, unclear roles.** Transit agencies, local jurisdictions, the Washington State Department of Transportation, and many others play a role in providing transit access in the region. These roles aren't always clearly defined, and policies and priorities among and between agencies and local jurisdictions aren't always aligned. This lack of clarity and alignment creates challenges for investing in improvements to transit access.
- **Absence of consistent transit access policies.** The region currently lacks policies addressing transit access and transit parking management and expansion. Local jurisdictions, transit agencies, and state agencies also lack consistent transit access policies and priorities. The absence of consistent policies creates challenges when making access improvements in the region.



Urban Form and the Built Environment

- **Street networks matter.** Well-connected street networks improve access for all users and modes. Dependency on major roadways and superblock land patterns reduces nonmotorized access opportunities, and forces all vehicles and users onto the same limited number of roads.
- **The variability of growth creates opportunities and challenges.** Transit access issues are closely related to the types of places where major sites of transit service are located. Seven of the transit access case studies are in, or are directly adjacent to, regional and local centers that plan for some form of growth to occur. The type of anticipated growth can indicate transit access needs, but can be challenged by the pace (e.g. too fast, too slow) or character (e.g. more residential than mixed-use) of the actual growth occurring.
- **Safety and security perceptions can be barriers.** If people believe major sites of transit service or the primary pathways to accessing them are unsafe or not secure, they are less likely to use transit at that place. This applies particularly to nonmotorized modes like walking and biking, where the absence of nonmotorized facilities and the reality/perception of crime can reduce transit access.
- **TOD is access.** Transit-oriented development (TOD) is typically considered as a separate issue from transit access. Nevertheless, transit-supportive land uses and densities increase nonmotorized access to transit by putting people in close proximity to good transit service, and will be an important strategy for increasing access in the region.
- **New tools help, but are incomplete.** The connectivity analysis tool created as part of King County Metro and Sound Transit's Non-Motorized Connectivity Study provide a new way to understand the relative impact and priority of different nonmotorized investments on increasing transit access, but its data coverage is incomplete. Where these tools can be applied they should be used. Efforts should be made to standardize nonmotorized data sources and to expand the tool's data coverage.



Transit Service

- **Transit service drives demand.** People want to use transit that is fast, reliable, and gets them where they need to go. As a result, the places with the fastest, most reliable, and most convenient transit service experience the greatest demand and therefore are most likely to experience transit access challenges. Changes to transit service have access implications whether additional service is added (increasing demand at an existing location) or reduced/reallocated (shifting demand to other locations).
- **Local transit to regional transit as an access opportunity.** Because the case studies focused on major sites of transit service, many of these locations were well-served by both regional and local transit service. In some case study locations, however, the Transit Access Working Group believed that local transit service connections can be improved to increase the number of people accessing these places using local transit.
- **Transfers must be made easy.** Recognizing that the region's network of high-capacity transit will continue to expand, transit trips that include a transfer will become a greater proportion of transit trips in the region. Making transfers easy will be increasingly important, and comes with transit-to-transit access implications related to bus-rail integration, the station area environment, wayfinding, customer information, and fare policy.



Parking

- **First-come, first-served parking creates challenges.** All of the region's permanent park and ride facilities are operated on a first-come, first-served basis. This creates challenges for facility owners, transit riders, and local jurisdictions where these facilities are located. In many areas, customer demand for parking far exceeds available supply, creating overcrowded lots that fill very early in the morning, congested local streets surrounding these facilities, and crush-loaded trains and buses that bypass riders down the line.
- **There isn't an integrated approach for transit parking management or expansion.** There are overcrowded park and rides (i.e., park and rides that fill to capacity very early) throughout the region, but currently there is no integrated approach for managing that demand at a system-wide level. In addition, the region's permanent park and ride capacity has stayed flat for several years and there is no major capacity expansion expected in the near term.
- **Transit parking as a regional system.** The location of parking facilities in the transportation network has important access implications. While there are many overcrowded facilities, there are also several facilities with abundant available capacity, suggesting that there is a mismatch between available capacity and demand for that capacity. Planning for and managing these assets as a regional system may lead to approaches that better address how to distribute existing and new transit parking supply to meet demand across the system.
- **Vanpool formation consumes parking supply.** Significant vanpool formation occurs at some overcrowded transit parking facilities in the region. The impact of this behavior means that some number of parking spaces at overcrowded facilities are not used by fixed route transit riders when there may be other locations for vanpool users to use when meeting up with their vanpool groups.



RECOMMENDED NEXT STEPS FOR PSRC

Based on this Transit Access Assessment, the following recommended next steps were identified in coordination with the Transit Access Working Group and the Transportation Operators Committee. These recommendations address the urban form, transit service, parking, and overall findings identified above. Recommended next steps are organized in the following areas: 1) transit access toolkit, 2) parking, 3) TOD, and 4) data and innovation.

Transit Access Toolkit

- Create a transit access toolkit that gives transit agencies and local jurisdictions the ability to assess transit access needs and help to apply tools and strategies to improve access based on existing and anticipated needs throughout the region
 - Produce a report on transit access funding across the region and recommend improvements for how access investments can be funded
 - In consultation with the Transportation Operators Committee, consider developing a regional transit access policy as part of the update for Transportation 2040 that includes an access hierarchy and station typology to provide a framework for identifying transit access emphasis and priority investments

Parking

- In consultation with the region's transit parking facility owners and federal partners, develop a regional policy regarding parking management at transit parking facilities
- In consultation with the region's transit agencies and WSDOT, develop a regional strategy regarding expansion of transit parking capacity





TOD

- Contribute to and advance ongoing efforts around transit-oriented development in the region in support of increasing the number of people in the region with good access to transit
- Assess the regional benefits, including access improvements, of providing transit supportive densities and land uses in high-capacity transit station areas

Data and Innovation

- Expand the data coverage associated with the nonmotorized connectivity tool and also consider other data tools and products to support an improved understanding of transit access issues
- Contribute to and advance ongoing efforts around integrating transit with alternative and emerging mobility options and technologies provided by public and private parties