

Intelligent Transportation Systems Policy Brief and Data Summary

ITS (Intelligent Transportation Systems) refers to communication-based and other types of traffic management technologies that increase the efficiency of the transportation system. These technologies are designed to improve traffic flow, reduce congestion, and enhance the safety and reliability of the system.

Beginning in 2018, PSRC staff worked with member agencies to collect data for a regional ITS inventory, which was identified by stakeholders and peer MPOs as an important effort to support regional and local ITS planning. The purpose of the inventory is to highlight where various ITS assets are located across the region, serving as a tool to identify where ITS needs and opportunities exist, and to inform regional and local planning efforts.

ITS Inventory Data Collection Approach

An online survey was developed to collect data from local jurisdictions across the region and WSDOT. The data requested included:

- The location of all signalized intersections along the National Highway System (NHS)
- Various ITS features associated with those signals (more detail provided below)
- Optional technical information on signal hardware, software, cabinet, and communication network
- The location of additional ITS assets including Traffic Management Centers, data collection tools, and Active Traffic Management corridors.

Survey distribution and subsequent data collection occurred during the period between December 2018 and July 2019 and resulted in a 100% response rate. The data provided comprehensive information on traffic signal locations and ITS features across the region.

Data Summary/Assessment

There are a total of about 6,400 intersections along the NHS in the central Puget Sound region, including 680 intersections where two NHS roadways meet (i.e., “NHS-to-NHS intersections”). **According to the survey, just under 2,600 (or ~40%) of the 6,400 total intersections are signalized.** Of the 680 NHS-to-NHS intersections – which are more likely to have higher traffic volumes – 90% are signalized.