



Vancouver Area Smart Trek (VAST)

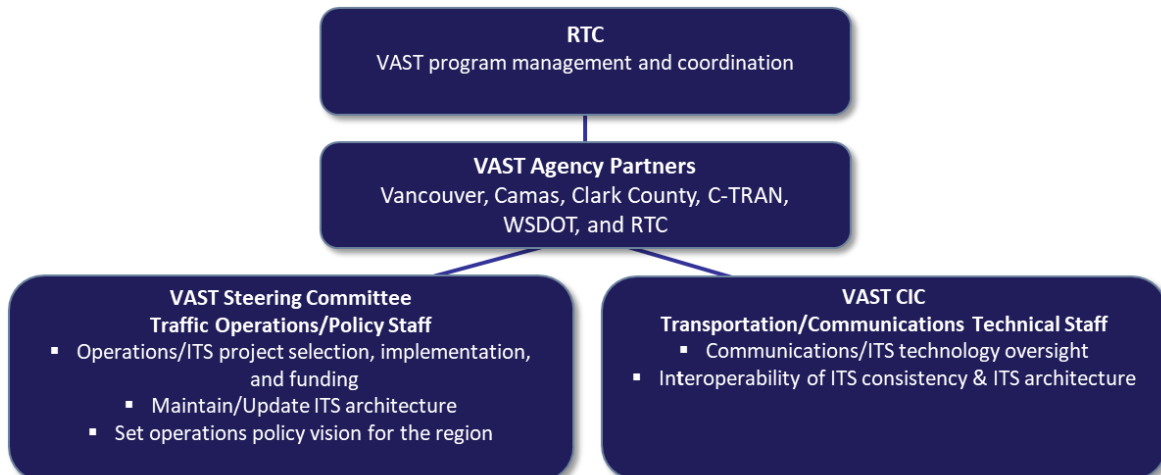
Annual Program Report FFY 2023

A regional partnership of:



TSMO Vision for Clark County

Transportation System Management and Operation (TSMO) strategies promote more efficient and cost-effective use of the existing transportation system, providing increased accessibility, reliability, and safety



The VAST Program (Vancouver Area Smart Trek) was established in 2001 and is a coalition of state, regional, and local agencies that have been working actively together implementing ITS and operations solutions to address the region's transportation needs. The VAST/TSMO Program focuses on low-cost operational and Intelligent Transportation System (ITS) technology approaches that make better use of existing transportation facilities by improving system efficiency and performance and leverages technology to manage the system without adding new roadway capacity.

RTC implements the program in coordination with the City of Vancouver, WSDOT, Clark County, C-TRAN, and the City of Camas.

RTC manages the VAST Steering Committee and the VAST Communications Infrastructure Committee to facilitate VAST coordination.

The VAST Steering Committee discusses transportation operations and technology and has been both a successful collaboration and an effective way for the agencies to coordinate on project delivery, joint project funding, monitoring project development, and project integration.

The VAST Communications Infrastructure Committee (CIC)—which addresses sharing, maintenance, and standards for communications infrastructure and equipment—is made up of both transportation and communications technical staff from the VAST agencies.

VAST PLANS

The TSMO Plan sets the policy and performance guidelines for the consideration of regional operational strategies in Clark County. The Regional Communications Plan describes the communications and network needs. The ITS Regional Architecture provides a framework for integrating existing and planned ITS systems for transportation agencies in the region. Fiber is shared between agencies through a permit process.

Plans Update Schedule

Program Activity	Status	Next Update
TSMO Plan	2016	2026
Regional Communications Plan	2023	2028
ITS Regional Architecture	2022	2027
Fiber Sharing Permits	Current	Ongoing

FEDERAL REQUIREMENTS

The ITS element of the VAST program meets federal requirements for planning, development, and implementation of ITS projects. Federal regulation 23 CFR 940 requires that regions develop and maintain a *regional ITS architecture* to ensure that ITS technology projects are interoperable and that it must include participation from transportation stakeholders so that projects are coordinated and integrated.

Federal regulation 23 CFR 450.320(c) for the CMP requires that agencies collaborate to utilize operational management, demand management, transit, and ITS technology to address travel demand before adding roadway capacity.

MODEL for REGIONAL COLLABORATION

The VAST Program recognizes that the successful implementation of operational strategies requires cooperation between transportation agencies and interoperability between ITS technologies. VAST agency collaboration and federal funding through RTC has also led to successful agency partnerships. The following examples demonstrate some of the more noteworthy efforts.

Regional Transportation Data Archive

RTC and the VAST agencies have an ongoing partnership with Portland State University to support the regional transportation data archive known as *Portal* (<http://portal.its.pdx.edu/home/>). The Portal archive contains, in a single location, historical and real-time transportation data from agencies in the Vancouver-Portland region.

Shared Communications Fiber

VAST agencies have had a Communications and Interoperability Agreement in place since July 2006, which authorizes agencies to enter into fiber asset sharing permits. The agreement has led to better use of existing fiber and communication equipment by sharing available capacity among agencies.

Asset Management

VAST agencies are using a shared GIS mapping cloud database (OSPInSight) that displays communications fiber and equipment, as well as their detailed attributes. This asset management tool facilitates and supports fiber sharing among partner agencies and also allows them to manage their own assets more effectively.

VAST PROGRAM AGREEMENTS

The VAST agencies adopted a memorandum of understanding in 2001 that outlines how agencies collaborate on ITS project coordination, integration, review, guidance, and endorsement and to ensure that the communications network for VAST is integrated. A Communications MOU executed in 2004 addresses the use, sharing, maintenance, and standards for communications infrastructure and equipment.



Fourth Plain Boulevard Lane Closure Signs

VAST Funding

The VAST program has been primarily implemented through federal grants awarded by RTC Board. A wide range of projects to improve transportation operations and build the supporting communications and technology have been funded since the initiation of the program. They include central signal system upgrades, new signal controllers, signal optimization projects, freeway and arterial detection, cameras, variable message signs, ramp meters, and transit signal priority, as well as the fiber and network communications needed for connecting ITS devices and infrastructure. These investments are a small but effective part of the overall transportation funding program. The TSMO category makes up less than 1% of the total program in the annual TIP.

Recently Implemented Projects

Mill Plain BRT

Upgrade fiber assets along the Mill Plain corridor between downtown Vancouver and approximately 184th Avenue.

Regional Communications Plan

This plan presents a strategy to meet the regional communications needs of the transportation system. This plan recommends actions and standards to maintain and enhance the regional communications network's ability to contribute to an efficient, accessible, and connected transportation system.

SW Washington Joint Operations Center (JOC)

This project builds on WSDOT's operations center by expanding staff for 24/7 operation to actively manage the regional transportation network in a real-time environment.



Bus-on-Shoulder

Recently Obligated Projects

I-5 NB Fourth Plain Ramp Meter

Install ramp meter, signals, cameras, and associated electrical work at the I-5/Fourth Plain northbound on-ramp.

I-205 SB 134th St. to Mill Plain Blvd. Ramp Meter

Install ramp meters, signals, cameras, and associated electrical work on I-205 southbound on-ramps.

Southwest Washington Regional Signal System

This project will enhance active traffic management systems' capabilities at intersections on WSDOT arterial corridors.

Regional Signal Timing Plans

This project will update signal timing plans along priority corridors within Clark County.



Ramp Meter Warning Signs

Programmed Agency Projects

The following projects are programmed in the 2024-2027 Transportation Improvement Program:

Salmon Creek/Hazel Dell Adaptive Signal Operations

This project will implement adaptive signal operations, including the installation of radios, cameras, and modification of detection systems in the Salmon Creek and Hazel Dell area.

Orchards Sifton Adaptive Signals

This project will add adaptive devices to county intersections in the Orchards and Sifton areas.

SR 500, I-5 at 39th St–Corridor Connection

This project will improve access from westbound SR 500 to northbound I-5 by constructing right-turn lane from E 39th Street to I-5 northbound ramp.

Highway 99 Bus Rapid Transit

Upgrade fiber assets along the Highway 99 corridor between Vancouver Waterfront and Salmon Creek.

I-5, SR 502 to Cowlitz Way SB Ramp Meters

Install ramp meters, signals, cameras, and associated electrical work on I-5 southbound on-ramps.

Fourth Plain Bus Rapid Transit Extension

Upgrade fiber assets along Fourth Plain Boulevard and 162nd/164th avenues between Vancouver Mall and Fishers Landing Transit Center.

Camera view, variable speed and warning signs



Fourth Plain Bus Rapid Transit Project



Sifton Orchards Adaptive Project



Sifton Orchards Adaptive Signals Project



Warning Signs