

Policy Brief

DRAFT GIS and Data at RTC

February 2023

RTC's Vision

In the next year and looking forward, RTC plans on expanding its data footprint by growing the GIS program through online tools and applications and becoming a greater resource for the communities that make up the three-county RTPO region.

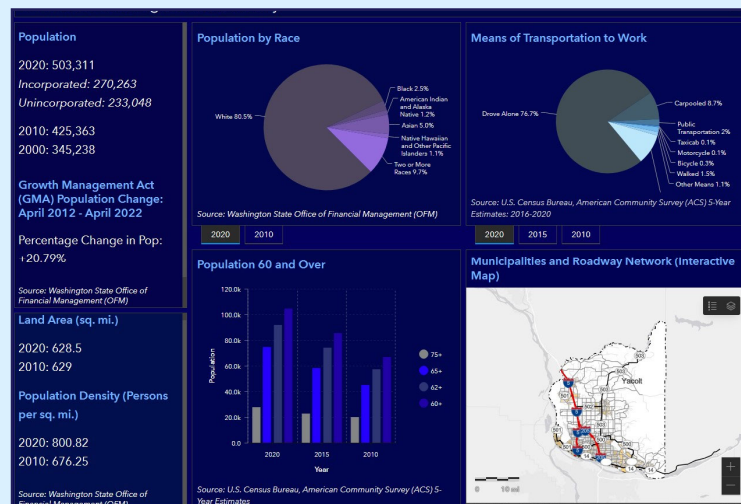
Introduction

Data plays a vital role in transportation planning at the regional level. It is integrated within numerous regional plans and programs to inform, monitor trends, and measure the effectiveness of a given strategy or program. Data can be visualized in a variety of styles and formats, including thematic maps, and in charts, graphs, and tables, where viewers can look for patterns and develop insights.

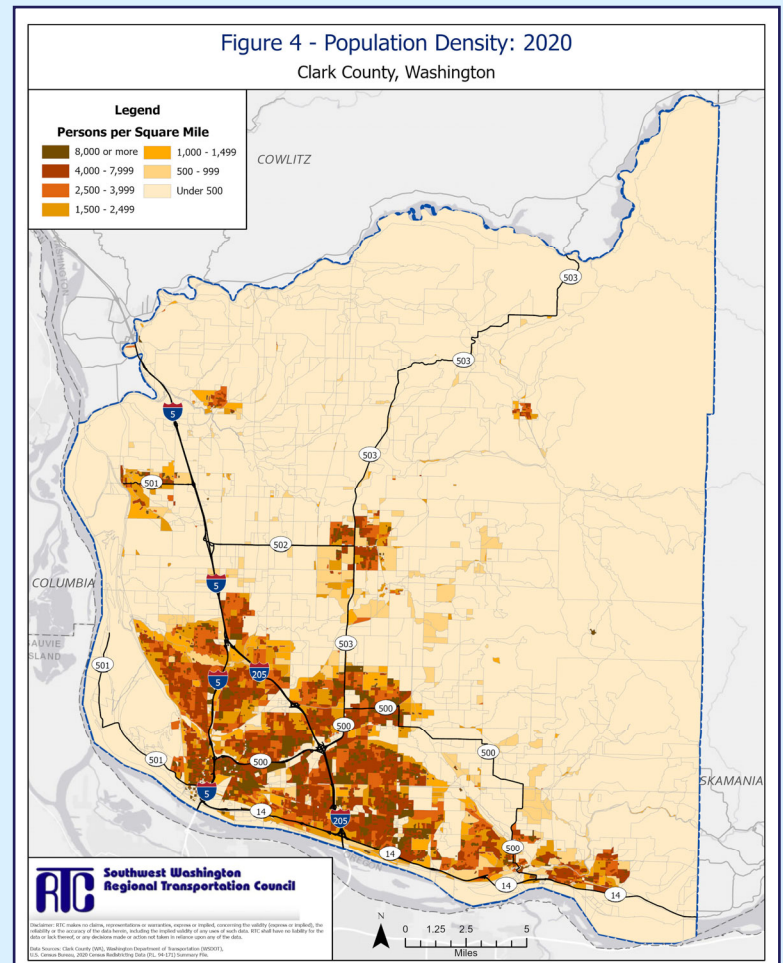
Regional planning organizations use a wide range of data for planning and programming. As examples, the U.S Census Bureau biennial information is used to gather demographic and employment-related information; and the Census Bureau's American Community Survey (ACS) is used to show regionwide changes, including changes in mobility.

Data Tools

Technology has changed dramatically over the past decade, and the same can be said of the tools that regional planners can use to perform an analysis and provide data visualizations. A Geographic Information System (GIS) allows regional planners to analyze data and produce maps that can provide a visual snapshot of the region now and in the future. Online maps and online-based tools are common approaches for providing information to regional stakeholders.



ArcGIS Dashboard



ArcGIS Map—HSTP 2020 Population Density

Planning Policy and Data

In addition to supporting regional planning and programming activities, such as the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), data plays an important role in addressing policy-related needs at the federal and state levels.

Federal Policy

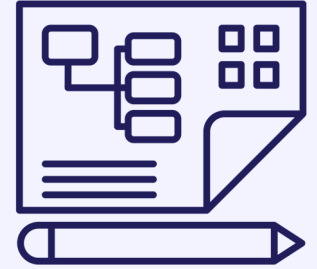
In the latest reauthorization bill, the Bipartisan Infrastructure Law (BIL), data and a data-driven approach are the focal points of many of the programs. This includes new safety and project prioritization processes and enhancements to existing programs related to travel-demand modeling and performance management.

Planning Emphasis Areas, developed by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) each year, involve data as part of their development process. This includes the initiatives of *Tackling the Climate Crisis* and *Complete Streets*.

State Policy

The Growth Management Act (GMA), first adopted in the state of Washington in 1990, requires cities and counties to develop a comprehensive plan to manage their population growth.

Regional Transportation Planning Organizations (RTPOs) were established as part of the response to the GMA. As such, RTPOs, like RTC, provide data and GIS resources toward GMA efforts.

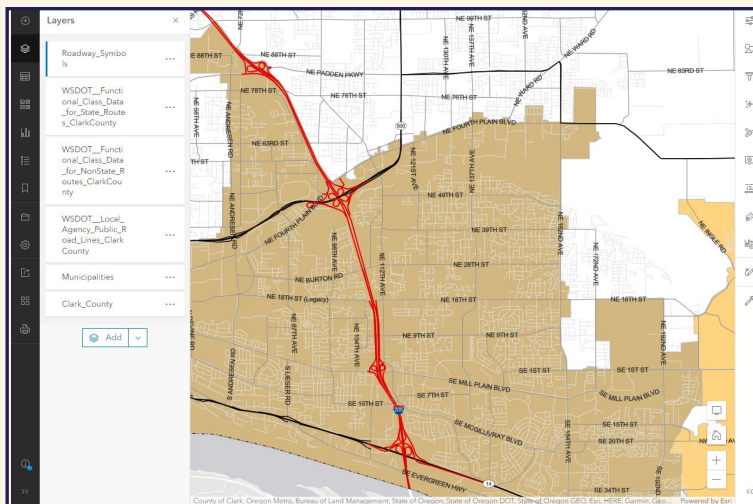
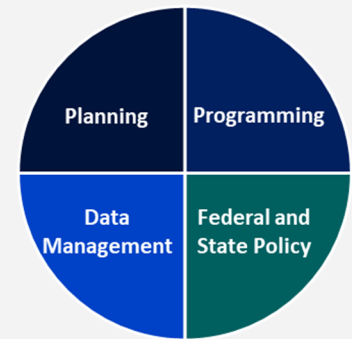


GIS and Data Support at RTC

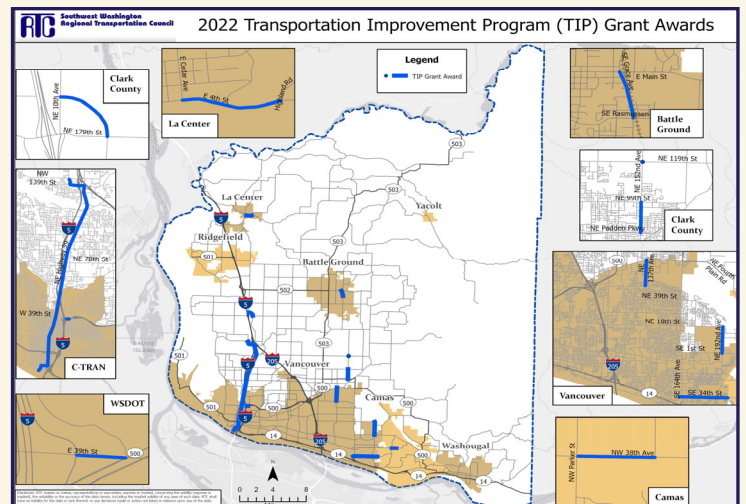
RTC staff provide internal GIS and data support to planning (RTP), programming (TIP), and policy-related requests throughout the year. RTC staff also monitor various regional datasets for future decision-making. RTC is in the early stages of integrating online-based tools into regional planning efforts.

The chart to the right shows the different components of the regional transportation planning process that receive support from the GIS and Data Management programs at RTC.

Components of GIS and Data at RTC



ArcGIS Online Map of I-205 Corridor, Clark County, WA



ArcGIS Map of 2022 TIP Grant Award in SWRTC Region

RTC Planning, Programming, Policy Support, and Data Development

RTC staff produce a wide range of data, information, maps, and models in support of regional planning. The following table provides the four components mentioned on p. 2—**Planning, Programming, Policy Support, and Data Management**—and the specific planning areas that are supported by GIS and Data.

GIS and Data at RTC

Component	Areas Supported
Planning Support	<ul style="list-style-type: none"> • Regional Transportation Plans (RTPs), (Clark, Skamania, and Klickitat Counties) • Performance-Based Planning • Congestion Management Process (CMP) • Human Services Transportation Plan (HSTP) • Vancouver Area Smart Trek (VAST) Program • Active Transportation Planning • Air Quality Planning • Freight Planning • Traffic Safety • Public Engagement • Regional Studies
Programming Support	<ul style="list-style-type: none"> • Transportation Improvement Program (TIP) • Projects Database • Transportation Alternatives (TA) • Unified Planning Work Program (UPWP) • Performance-Based Programming • Public Engagement
Policy Support Federal Policies State Policies	<ul style="list-style-type: none"> • Federal Planning Emphasis Areas • Bipartisan Infrastructure Law (BIL) Implementation • State Planning Emphasis Areas and Growth Management Act (GMA)
Data and GIS Management	<ul style="list-style-type: none"> • Traffic Counts • Traffic Modeling • Demographic Collection and Analysis • Regional Planning Boundaries • Regional Roadway Classifications • Visual Resources • Regional Data Repository