

# Transportation Data & GIS Office



## What We Do

We support the maintenance, preservation and operation of the Washington State transportation system by providing customers with timely, accurate and reliable roadway, traffic and crash data. We collect, process, analyze and report data for over 7,000 miles of state routes and over 80,000 miles of public roads. We deliver specialized GIS products and services in support of business operations throughout WSDOT.

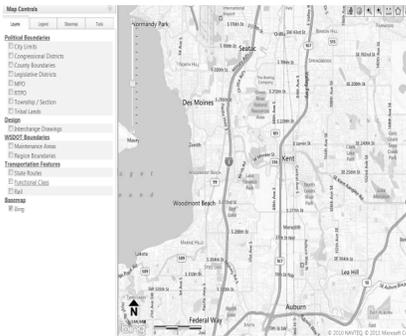
## Key Customers

FHWA  
Cities  
State Agencies

Legislature  
Public  
Law Enforcement

Governor's Office  
Congress  
Private Businesses

Counties  
Academic Institutions  
Traffic Safety Commission



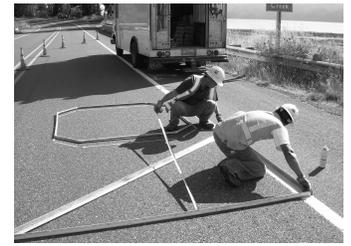
## Goals

- Gather once, share with many
- Be responsive to our customers data needs
- Meet state and federal reporting requirements
- Maximize efficiency by applying Lean methodologies

## Key Products

### Data

- **Crash Data** - Current and past crash information, used to improve public safety.
- **Traffic Data** - Vehicle information (type, weight) and traffic volumes, used to improve mobility.
- **Roadway Data** - Current and past roadway information (number of lanes and surface type), used for project planning and improvement.
- **Federal Functional Class** - Inventory of over 80,000 miles of public roads, used in determining the apportionment of federal funds.
- **Highway Performance Monitoring System (HPMS)** - Information on the condition, performance and safety of all public roads, used in determining the apportionment of federal funds.
- **Roadway Classification Report** - Spatial datasets including State Routes, Freight and Goods, Urban Growth Areas, used by state, local and federal agencies.
- **Maps** - Provides cartographic representation of WSDOT data products, used to represent Functional Class, HPMS, milepost locations, and state highway features.



## Reports and Maps

- **Annual Traffic Report** - Summarizes traffic data maintained by WSDOT for the State Highway System, used to report traffic data for all state highways.
- **State Highway Log** - Provides mile post locations of features on or along state routes. Features include intersections, lane mileage, and jurisdiction, used to support HPMS and other operational activities.
- **Quarterly Speed Report** - Evaluates vehicle speed trends to assist in highway design and safety improvements, used by the Washington State Patrol to identify locations for emphasis patrols.
- **Road Life Report** - Provides historical pavement information on all state routes, used by the Washington State Pavement Management System to forecast highway construction projects.
- **Horizontal/Vertical Alignment Report** - Provides curve data for all state routes, used by designers in determining recommended curve speed and sight distance requirements for safe passing zones.
- **Roadway Classification Report** - Provides jurisdictional information of all state routes, used for establishing tax rates charged in construction projects.
- **Mapping Products** - Provides cartographic representation of data for visualization and analysis, including State Route System, Infrastructure Assets, Functional Class, Highway Features, Crashes, Performance Measures, and many others.

## Applications

- **GIS Application Development** - Interactive mapping applications are developed and supported for use throughout the agency and by the public. These applications support data collection, stewardship and analysis to improve operations, reporting and decision making.
- **GeoPortal** - An easy to use customizable system which provides web mapping to Maintenance and Operations, Freight, Aviation, Traffic and the public.
- **SRview** - State route video log, used to reduce costs by eliminating field visits while increasing safety.



## Services

- **Crash Analysis** – Custom crash data analysis used to support highway safety studies.
- **Highway Travel Analysis** – Custom traffic analysis used for mobility and freight projects, traffic forecasting, and capacity analysis.
- **GIS Training and Support** - Provides technical support and organizational services related to the use of GIS software applications, data and commercial products to WSDOT's GIS community.
- **Traffic Sensor Installation and Support** – Installs automatic data collection and weigh-in-motion devices in the roadway surface which provide data on congestion and pavement stress.
- **Cloud Hosted GIS** - Governance and support of WSDOT's ArcGIS Online environment for the WSDOT Enterprise; provides an open collaborative environment which is used by many WA state agencies and many other DOTs for interactive mapping.

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[HTTP://WWW.WSDOT.WA.GOV/MAPSDTA/TDGO\\_HOME.HTM](http://www.wsdot.wa.gov/mapsdta/TDGO_HOME.HTM)