



Short Duration Traffic Count Services

WSDOT Traffic Counting Services



The Washington State Department of Transportation utilizes traffic data to support planning, analysis and roadway design functions. This data also serves as a primary input to federal apportionment calculations that return 350 million dollars to the state annually. Given the significance of these applications, a comprehensive and professional traffic data collection program is demanded.

This program, housed in the department's Statewide Travel and Collision Data Office

(STCDO), may be contracted with by other governmental organizations in order to meet their traffic data collection needs. With eleven full-time data collection staff headquartered in Olympia and Spokane, as well as three data processors, even extensive traffic studies can be conducted in a timely, efficient manner. Cost quotes are provided to each customer based on the scope of the project, and can often be reduced if the job can be scheduled in conjunction with other STCDO data collection efforts in the area.

Team Experience and Certifications

| Years of Experience | Total Years | Flagger Cert. | First Aid & CPR Cert. | Defensive Driving Cert. | Travel Statewide | Vans & Distance Measuring Instruments | Manual Count Cert. | Flexible Schedule | Permanent Workers | Visual Pavement Inspections | Pedestrian Counts, Bicycles, Ferries, & School Zones | Speed Studies | Summarize Field Collection Data | Blue Tooth |
|---------------------|-------------|---------------|-----------------------|-------------------------|------------------|---------------------------------------|--------------------|-------------------|-------------------|-----------------------------|--|---------------|---------------------------------|------------|
| Crew | 49 | Yes | Yes | Yes | Yes | 9 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Supervisor | 47 | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | | Yes | Yes | Yes | Yes |
| Processing | 42 | | | | | | | | Yes | | Yes | Yes | Yes | Yes |

Mechanical Traffic Counts



STCDO services include the collection of vehicle volume, speed and classification data through the use of portable traffic counters. Counts are usually performed from Monday afternoon through Friday morning, but may be conducted for longer or shorter durations upon request. This type of data has numerous applications, from the assessment of the localized traffic impacts of property development to the refinement of regional traffic planning models.

Quality assurance procedures are robust, and have been refined over decades of program

operation. These begin with comprehensive training and procedures manuals for field staff, based on best practices guidelines published by the Federal Highway Administration and the American Association of State Highway and Transportation Officials. Counting equipment is checked daily to ensure proper functioning, and potential sources of atypical traffic patterns are documented. This information is passed to our highly trained data processing staff, who perform numerous additional quality assurance checks.

Origin and Destination Studies

Mobile Traffic Information

Point A



Point B



This type of study is the compilation of interview responses from travelers regarding where their trips began and where they are headed. Such studies are invaluable for ascertaining information on commodity flows over the entire roadway network and the geographic sources of traffic demand on that network.

Turning Movement Counts

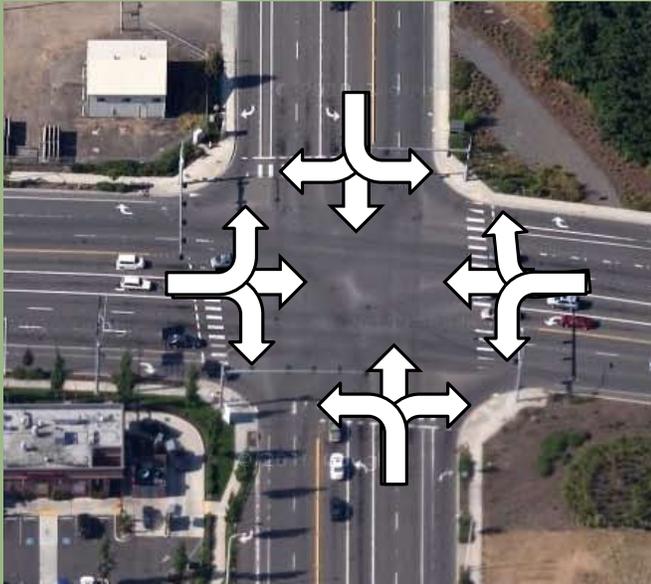
STCDO services also include the visual counting of vehicle passages through an intersection. By documenting the direction of each vehicle's approach and departure from the intersection, the traffic demand on each lane of the roadway can be ascertained. This information assists in determining

if improvements to the intersection are warranted and, if so, what form they should take (for example, the construction of a turn lane or addition of a traffic signal).

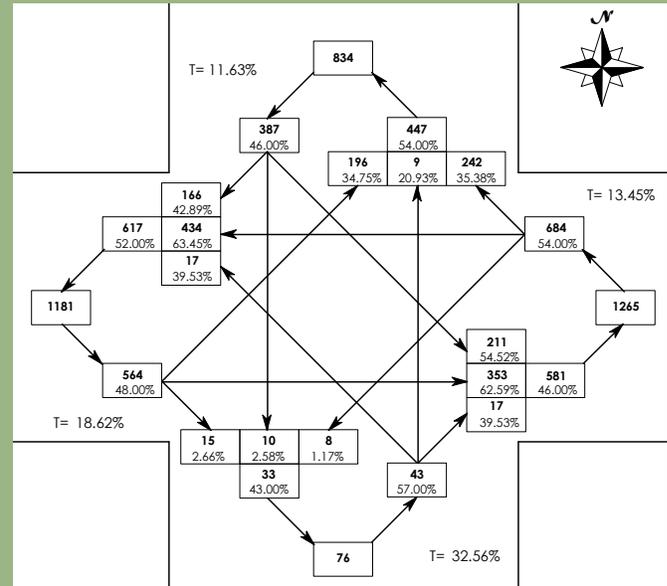
As with mechanical traffic counting, STCDO implements a robust quality assurance program

for turning movement counts. This program includes annual testing of all data collection staff to ensure the accuracy of their counts meets strict requirements. It also includes systematic quality assurance procedures carried out by data processing staff.

Four-Way Intersection: Visual Manual Count



Turning Movement Schematic: Traffic Volume by Approach/Movement



| Norther Approach | | Southern Approach | | Eastern Approach | | Western Approach | |
|------------------|--------|-------------------|--------|------------------|--------|------------------|--------|
| Movement | Volume | Movement | Volume | Movement | Volume | Movement | Volume |
| North | N/A | North | 9 | North | 242 | North | 196 |
| South | 10 | South | N/A | South | 8 | South | 353 |
| East | 211 | East | 17 | East | N/A | East | 15 |
| West | 166 | West | 17 | West | 434 | West | N/A |

Travel Time Studies



STCDO also performs studies of vehicle travel times over roadway segments defined by the customer. By quantifying the amount of delay due to traffic congestion, the datasets resulting from these studies can assist in identifying

priorities for roadway improvement. When studies are performed both before and after an improvement project, they also serve as a highly effective method for quantifying the benefits of that project to constituents.

Contact Information

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Before and After Travel Time Study – Example

