

## **Chapter 9: Automobile and Freight Truck Arterial Networks -2023**

### **Arterial Streets and Traffic Control**

Arterial streets, traffic signals, and roundabouts provide benefit to all users (pedestrian, bicycle, transit, automobile, and freight truck), but previous chapters have discussed pedestrian, bicycle, and transit networks and this chapter focuses on arterial streets and infrastructure as it relates to automobile and freight truck use. The [Multimodal Transportation Chapter of the Bellingham Comprehensive Plan](#) describes the existing and planned arterial street network needed to support motorized transportation, such as transit busses, private automobiles, and freight trucks. Arterial streets and traffic control devices are depicted on Figure 8.1.

Major transportation improvements take several years to strategically plan, fund, and construct at great cost. Bellingham adopts a rolling [6-Year Transportation Improvement Program \(TIP\)](#) each June, which shows how the City plans to fund and construct major transportation projects.

Bellingham arterial streets are locally classified into Principle, Secondary, and Collector arterials, as follows:

- **Principal Arterial:** Major regional transportation corridors, including State and federal highways, that provide inbound/outbound connections between Bellingham and other cities, Whatcom and Skagit Counties, and British Columbia, Canada. Typically very high traffic volumes.
- **Secondary Arterial:** Major local transportation corridors that provide connections across, within, and between different parts of Bellingham. Typically higher to medium traffic volumes.
- **Collector Arterial:** Local transportation corridors that provide connections from neighborhood residential streets to secondary and principal arterial streets. Typically medium to lower traffic volumes.
- **Residential Street:** Local access to individual homes with driveways within residential neighborhoods. Typically lower traffic volumes.

In **2022**, Bellingham's arterial street network measures **313** linear miles, but with multi-lane streets, the arterial network measures **670**-lane miles and includes the following major features:

#### **Vehicle Lane Miles**

- 109 lane miles of principal arterial (16.2%)
- 110 lane miles of secondary arterial (16.4%)
- 60 lane miles of collector arterial (9.0%)
- 391 lane miles of residential streets (58.4%)

#### **Intersection Traffic Control**

- 142 intersection traffic signals (+1 in 2023 construction; +1 in 2024 construction)
- 7 multimodal roundabouts (+2 in 2023 construction; +1 seeking funding)

#### **User-Activated Crossing Signals**

- 59 flashing yellow crosswalks (Overhead and RRFB)
- 10 flashing red pedestrian hybrid beacon (HAWK) signals

#### **Automated Safety Warning Signs**

- 51 automated school zone flashing signs
- 2 variable message radar speed signs
- 7 flashing lights

Figure 9.1. Bellingham's Arterial Street Network



Figure 9.2

# Posted Speed Limits for Arterial Streets in Bellingham





## Bellingham's Posted Speed Limits on Arterial Streets

The default posted speed limit on all residential streets in Bellingham is 25 miles per hour (mph). As shown in Figure 9.2., the posted speed limit on Bellingham arterial streets varies from 25 mph to 45 mph, as follows:

- **78.1%** (242 miles) of posted speed limits are **25 mph**;
- **13.7%** (42.6 miles) of posted speed limits are **30 mph** or **35 mph**; and
- **8.2%** (25.4 miles) of posted speed limits are **more than 35\*** mph.

\*As shown in red on map **Figure 9.2.** (previous page), with the exception of Interstate 5, there are **only 3 principal arterial street segments in Bellingham that have posted speed limits higher than 35 mph** and all 3 are at the northern and eastern edge of the Bellingham urban area as it transitions into rural Whatcom County. Two of these principal arterials are multilane State Highways - SR 539 Guide-Meridian and SR 542 Mt. Baker Highway – and the third – Northwest Avenue – is two lanes with 4- to 6-foot-wide shoulders from the City limits north to Smith Road, which was just resurfaced by Whatcom County in 2020.

## Designated Freight Truck Network

Bellingham has classified several arterial streets and all state and federal highways as Designated Freight Truck Routes, as depicted below. The City encourages major freight shipping companies to direct their drivers to primarily use the designated freight truck routes, but freight delivery trucks cannot be prevented from using any public street for deliveries unless there are weight restrictions on bridges or other public safety access restrictions. As an example, if a family is moving into or out of a house and has hired a moving company to load or unload their belongings, then the large semi-sized moving van must have access to their house via the local residential street. The same is true for large construction vehicles arriving to residential remodel sites.

Bellingham works with WCOG to collect freight truck counts and update Designated Freight Truck Route classifications by annual freight tonnage according to [WSDOT Freight and Goods Transportation System](#) requirements, as shown below. The classifications shown below and on maps in Bellingham transportation planning documents are subject to change based on the findings of these freight traffic counts.

Bellingham Designated Freight Truck Route Classifications		
Classification	Annual Tonnage	Example (see map)
<b>T-1</b>	<b>&gt; 10 million</b>	<b>Interstate 5</b>
<b>T-2</b>	<b>4 - 10 million</b>	<b>SR 539 (Guide Meridian)</b>
<b>T-3</b>	<b>300,000 - 4 million</b>	<b>SR 542 (Mt. Baker Highway)</b>
<b>T-4</b>	<b>100,000 - 300,000</b>	<b>12<sup>th</sup> St-State-Boulevard</b>
<b>T-5</b>	<b>&lt; 100,000</b>	<b>None designated</b>

**Figure 9.3. Bellingham Designated Truck Route Network**

