

Chapter 11: Truck Freight Systems

Introduction

Truck freight systems serve a vital role in the economy of Bend's Metropolitan planning area. The majority of movement of raw and furnished goods is moved via truck; efficient truck mobility is crucial to the economic survival of the region.

Policies

The importance of freight to the local economy was highlighted by the Oregon Department of Transportation in planning documents, including: "Freight Moves the Oregon Economy" and the Oregon Highway Plan. The Oregon Highway Plan provides guidance on the standards of performance necessary for freight movements. The Plan includes key policies regarding freight movement:

- Maintain and improve the efficiency of freight movement on the state highway system and access to intermodal connections.
- Balance the needs of long distance and through freight movements and local transportation needs on highway facilities in both urban areas and rural communities.

Goals and objectives were developed for the Bend Metropolitan Transportation Plan and are included in a previous section of the report. The applicable goals and objectives related to freight mobility include:

- Provide a variety of practical and convenient means to move people and goods to, from and within the MPO area.
- Identify and support the development of local freight routes
- Support the through movement of goods and people on the state transportation system
- Implement transportation improvements that foster economic development and business vitality.

Truck freight specific policies include:

- Work with the city of Bend, ODOT, and Deschutes County to identify and implement appropriate signage for designated freight routes
- Work with the city of Bend and Deschutes County to identify and implement appropriate design standards for designated freight routes
- Work with the city of Bend and Deschutes County to identify and possibly implement freight route roadway classifications

- Work with the city of Bend, Deschutes County and ODOT to identify a designated freight route on the north and east sides of Bend to allow trucks traveling on US20 to avoid coming into the city of Bend or using Empire Avenue and 27th Street.
- Evaluate opportunities to establish other designated routes in the urban area as truck volume or noise issues change.
- Support implementation of the surface transportation recommendations developed through the Oregon Clean Air Initiative

Facilities

The designation of through truck routes help provide for the efficient movement of goods while balancing and maintaining neighborhood livability, public safety, and minimizing maintenance costs of the roadway system. ODOT¹ identifies Highway 97 (Bend Parkway) as a designated federal truck route and a state freight route. Highway 20 is designated a federal truck route through the entire study area. The following two sections of Highway 20 are designated state freight routes: 1) from the west study area limits to Empire Avenue and 2) from NE 11th Street to the east study area limits. The City of Bend's TSP identifies Highway 97 (Bend Parkway), Business 97, and Highway 20 as designated freight routes. The TSP also identifies Century Drive as a designated truck route. Both Highway 97 and Highway 20 have either a four-lane or five-lane section throughout the urban area. Generally, truck traffic in the urban area is largely confined to roadways adjacent to industrial, commercial and surface mining zoned properties. The surrounding arterial street system provides links from these state highways with the nearby businesses.

In addition to these regional freight routes, local freight routes were also developed for freight travel through the City of Bend. A Freight Advisory Committee, comprised of local freight industry representatives, developed these local and future local route designations. The benefit of these designations is related to the potential design and operations considerations on the local routes to accommodate large vehicles (e.g. turning radii and grades). The local freight routes and future local freight routes tie into the regional system and provide additional connections, primarily on arterial roadways. Regional, local and future local freight routes are shown in Figure 11-1.

Table 11-1 summarizes the available 2004 truck traffic as a percentage of average daily traffic (ADT) at several permanent ODOT automatic traffic recorder stations within the City of Bend.

¹ 1999 Oregon Highway Plan, Oregon Department of Transportation. May 1999.

Table 11-1: Existing Truck Volumes

Route	Automatic Traffic Recorder Location	2004 Average Daily Traffic	Truck ADT	Truck %
Highway 97	South of Revere Avenue	38,600	2,740	7.1
Highway 97	South of Empire Boulevard	41,300	3,550	8.6
Highway 97	0.9 miles south of Bend	22,150	1795	8.1
Highway 20	5 miles east of Bend	2,750	650	23.5

Freight Generators and Receivers

The main truck freight generators in Bend are manufacturing firms that ship their products throughout the region or cross country. A few regional trucking and delivery firms are based in the city. All of Bend's existing manufacturing and shipping areas are within 1 ½ miles of US 97 or US 20. The local arterial street system links these areas to the highways to provide efficient and direct movement of freight goods through the City of Bend and onto the state highway system.

Bend's population and role as a regional center has generated the development of large retailers—including supermarkets, vehicle sales, and restaurants—that receive all of their goods by truck. The large retailers are primarily located along US 97 and US 20. Other retailers and service providers that receive large or frequent truck deliveries are on local arterial streets that connect to state highways to prevent heavy vehicle from using neighborhoods routes.

Forecasts and Future Needs

The majority of the truck traffic through the Bend Metropolitan planning area is served by the state highway system. In the future, Highway 97 and 20, and 3rd Street (Business 97) will continue to serve as the desired through freight truck routes in the community.

Additionally, the completion of the City's arterial street system will improve the local movement of goods to commercial areas within the City and provide an efficient system of roads to ship products from Bend. Key improvements include the completion of Empire Avenue and planned improvements to Reed Market Road will particularly benefit the major industrial areas in the Bend Metropolitan planning area.

