Chapter 4.5:
Freight Access and Distribution

Introduction

Freight mobility (the physical movement of goods and services) is a critical component of Redmond's transportation system. While large delivery and manufacturing firms rely on Redmond's transportation network, especially at key locations in Southeast Redmond, hundreds of small businesses depend on reliable movement of goods and services throughout the city in order to thrive.

In Redmond, efficient, reliable freight mobility depends entirely on trucks moving over local and regional streets. Manufacturers, large retailers, extraction operations, and warehousing and distribution companies require reasonable access to a well-functioning network of freeways and major arterials. Small retailers, restaurants, and other businesses rely on delivery service vehicles that must circulate on regional and local streets and also must be able to park somewhere near businesses. Vehicle sizes range widely from small vans to large tractor-trailer units. In recent years, there has been a trend toward larger food and beverage delivery vehicles, while at the same time there has been a trend toward smaller local parcel delivery vehicles.

Compared to the rest of the city, Southeast Redmond has a high concentration of major businesses with substantial delivery needs. These include companies that manufacture construction equipment and materials, regional retail and grocery stores, and mail and package service centers such as UPS and USPS. Downtown Redmond, Overlake, and smaller commercial areas depend on daily deliveries by a wide variety of operators – a relationship that will be key to the economic viability of these areas in the future.

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The City completed a Freight Mobility Study in 2009. Based on information from that study, this plan accommodates freight mobility in three ways:

1. Establishes a two-tier freight route system to facilitate reliable connections between Redmond streets and regional routes and facilitate access between major manufacturing sites and Redmond streets. (Though only a portion of Redmond streets, the freight route system forms a complete and connected system.) The intent of establishing the freight route system is that in this system, it is a priority to support truck operations as part of improving, maintaining, and operating streets. Appropriate street design standards (pavement depth, turning radii at intersections, etc.) that are context sensitive to individual streets, will address the needs of truck operations. Outside of this system, truck operations are accommodated. However, supporting truck operations, especially those of large-size trucks, is not a priority for improving, maintaining, and

operating streets outside of the freight route system. Instead, other considerations such as keeping narrower and slower streets in residential neighborhoods have priority.

2. Addresses congestion and truck traffic bottlenecks with strategic capital improvement projects.
3. Provides guidance for ensuring accessibility of local delivery services to small retailers, restaurants, and other businesses, especially in the two urban centers: Downtown and Overlake.

Two-Tier Freight Route System

The two-tier freight route system (Figure 1) includes "primary truck streets" and "truck access streets." Primary truck streets accommodate through truck traffic in Redmond, which are arterials that directly connect with regional roadways; e.g., SR 520, or arterials that currently have high volumes of trucks and expect to remain so in the future. Truck access streets connect the major industrial and commercial area in the Southeast Redmond neighborhood with primary truck streets. The intent of designating truck access streets is to support access and movement of trucks between manufacturing companies and primary truck streets, which are important to the economic vitality of manufacturing companies. However, designating truck access streets is not meant to increase truck volumes on those streets, nor intended to increase the speed of trucks on truck access routes. When making improvements on truck access streets, it is important to integrate the needs of trucks and other users. For example, in some locations in Redmond homes front truck access streets, so it is important to have safe pedestrian crossings across truck access streets.

Primary truck routes include:

- SR 520 from 148th Avenue NE to its terminus at Redmond Way (SR 202)
- Redmond Way from 132nd Avenue NE to West Lake Sammamish Way
- Redmond Way (SR 202) from SR 520 to the east city limits
- Avondale Road from Redmond Way (SR 202) to the north city limits
- Bellevue-Redmond Road from West Lake Sammamish Parkway to NE 20th Street
- West Lake Sammamish Parkway from Redmond Way (SR 908) to West Lake Sammamish Parkway 148th Avenue NE from Redmond Way to the south city limits
- West Lake Sammamish Parkway from south city limits (1900 block) to Redmond Way
- NE 51st Street from 148th Avenue NE to SR 520
- NE 90th Street from Willows Road to 154th Avenue NE
- 154th Avenue NE from NE 90th Street to West Lake Sammamish Parkway
- 148th Avenue NE from Redmond Way to Willows Road
- Willows Road from NE 90th Street to the city limit
- NE Union Hill Road for its entire length in Redmond

The following streets within the Southeast Redmond area are truck access routes:

- NE 76th Street from SR 520 east to 188th Avenue NE
- 178th Place NE/180th Avenue NE from Union Hill Road to Redmond Way
- 185th Avenue NE from Union Hill Road to Redmond Way
- 188th Avenue NE from Union Hill Road to Redmond Way

Freight System Plan

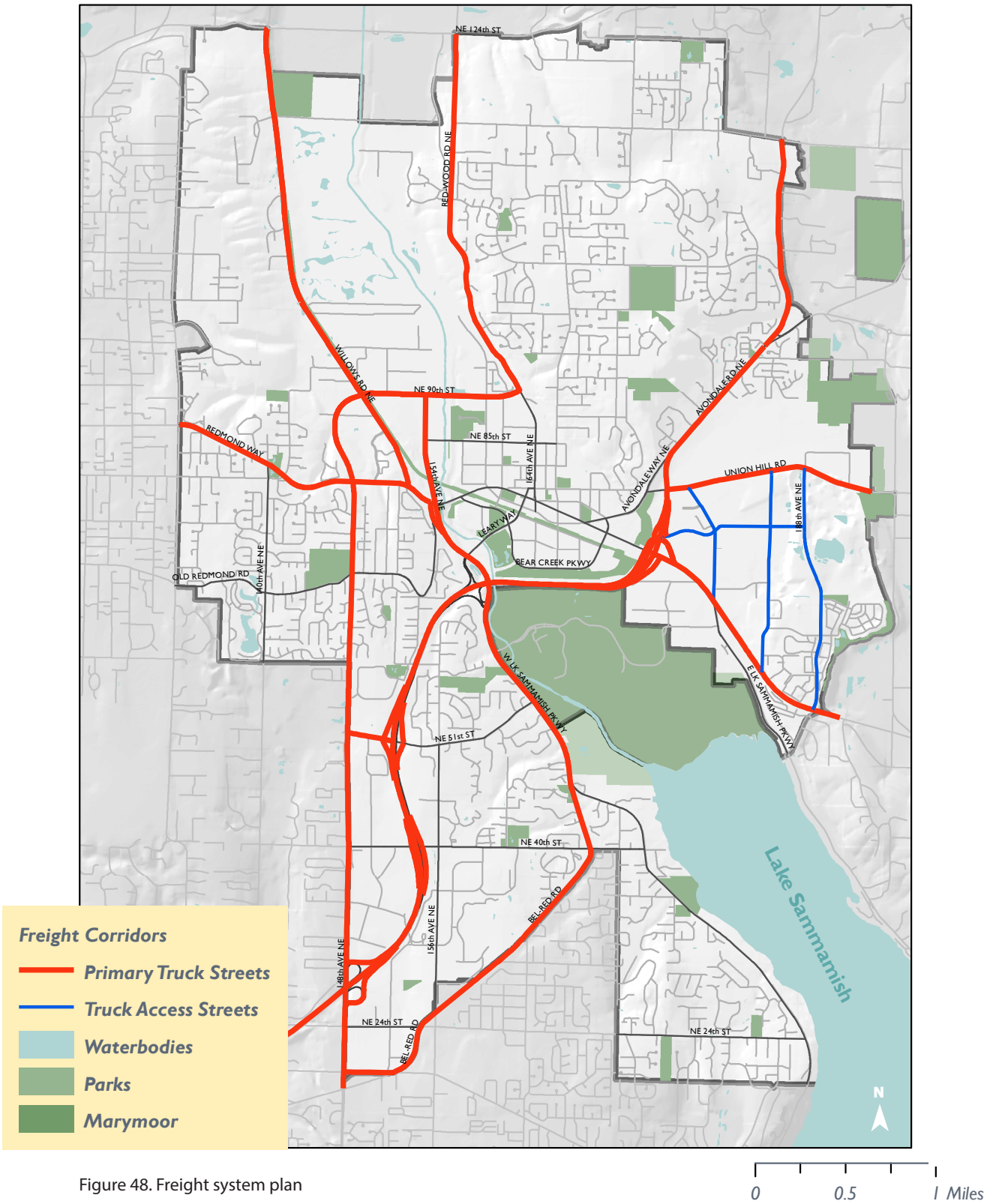


Figure 48. Freight system plan

Implementation

Capital Improvements Addressing Congestion and Bottlenecks

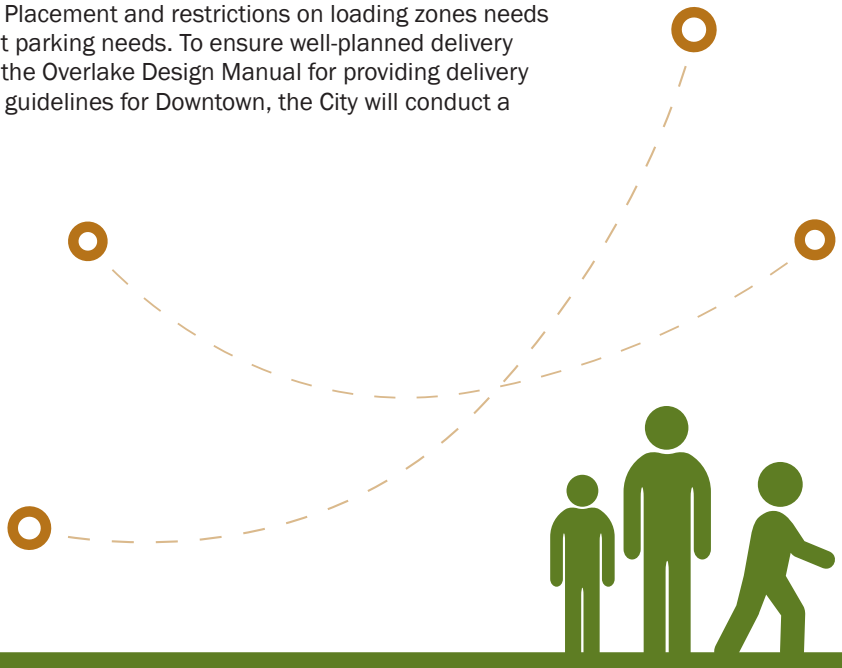
The Buildout Plan addresses congestion and bottlenecks for freight traffic as well as general traffic through intersection and roadway improvements and adding new connections. One example is the Union Hill Road Phase III project, for which the City recently received a grant.

In addition to capital improvements included in the Buildout Plan, Redmond is actively working with WSDOT on the SR 520 Corridor Planning Study. This study will identify improvements at the end of SR 520 in the vicinity of Union Hill Road, which is a bottleneck for trucks from manufacturing companies and the UPS distribution center along Union Hill Road.

Local Truck Loading and Unloading

Over the past couple of decades, Redmond's retailers, restaurants, office buildings, grocery stores, and a wide range of other businesses have become increasingly dependent on frequent delivery of commodities and parcels. Retailers no longer have significant on-site storage, relying instead on a steady flow of incoming parcels, resulting in significantly lower lease costs for a given amount of active sales floor space. Restaurants increasingly emphasize fresh produce — from fresh fish, to fruits and vegetables, to milk and bread — in their menus, which require multiple deliveries each day. Offices and civic buildings depend on reliable overnight parcel deliveries. Even a small office building may receive deliveries from two or three different services, with each coming one or two times a day.

This steady, high-frequency flow of commodities and parcels throughout the city is essential to the vitality and growth of Redmond's businesses. These delivery services have specific needs, including a highly connected street network to facilitate efficient circulation and the availability of delivery parking near businesses. The need for a highly connected street network was identified and addressed in the City's 2005 Transportation Master Plan, and is also a major focus of this update.

Redmond businesses and customers depend on the steady flow of goods throughout the city.

Addressing the need for accessible delivery parking, or truck loading and unloading, is an element of the City's efforts to guide and encourage the development of Redmond's two urban centers — Downtown and Overlake. In addition, as infill development and redevelopment proceeds in these urban centers, the City is working to ensure that alleys, drive aisles, and streets have substantial on-street parking provided as part of the fabric of the centers. Placement and restrictions on loading zones needs to be planned and coordinated with general on-street parking needs. To ensure well-planned delivery access, the City has developed guidelines as part of the Overlake Design Manual for providing delivery parking in the Overlake Village area. To provide such guidelines for Downtown, the City will conduct a parking study as part of the Three-Year Action Plan.