Draft Purpose and Need for a High Capacity Transit Project in the Southwest Corridor

October 21, 2013

Introduction

In July 2013, the Southwest Corridor Plan Steering Committee recommended further study of a set of High Capacity Transit (HCT) alternatives, along with community investments in roadway, bicycle, pedestrian, parks, trails and natural area projects that would support the success of transit. The combination of transit and community investments are designed to support the land use vision for the Southwest Corridor. The corridor vision, built on plans developed by the local jurisdictions, seeks to:

- balance enhancing employment, housing choices, the environment and quality of life
- use public resources efficiently, thoughtfully and equitably
- stimulate private and public investment.

The Southwest Corridor High Capacity Transit Project proposal has emerged from extensive regional land use and transportation planning beginning in 1975, and regional policy that is intended to maximize the transportation system by implementing strategies that make better use of the existing system prior to building new motor vehicle capacity. The Background section attached provides additional detail on previous planning.

Purpose

The purpose of the Southwest Corridor Transit project is to identify and then implement the transit investments necessary to connect the cities of Tualatin and Tigard to the Portland central city, meet the forecast travel demand in the corridor, and support the Southwest Corridor Land Use Vision and local land use planning strategies developed by cities in the Corridor, and implement regionally adopted plans. Specifically, the project is intended to:

- increase multimodal transportation options in the corridor
- serve the existing and projected travel markets in the corridor
- improve transit service reliability in the corridor
- improve mobility and reliability along the congested routes in corridor
- provide the transit capacity to meet existing and future demand in the corridor
- improve multimodal access to a range of housing types in growing communities
- provide transit service that is cost-effective to build and operate with limited local resources
- partner with jurisdictions to implement transit supportive development
- partner with jurisdictions and resource agencies to implement transportation projects that are sensitive to the environment and explore opportunities to improve natural resources, habitat, and parks in the corridor.

Need for the Southwest Corridor Transit Project

This section describes the problems in the Southwest Corridor that a high capacity transit project would address, which include:

- Transit service to places where people need or want to go is limited
- Limited street connectivity and gaps in pedestrian and bicycle facilities create barriers to transit access

- Transit travel in mixed traffic is slow on congested roadways
- Travel times are not reliable for motor vehicles and transit
- There is increasing unmet demand for transit service in the corridor
- The supply and range of housing options with good access to multimodal transportation are limited
- Current development and anticipated growth threaten water quality and other natural resources, such as air quality and wildlife habitat.
- Areas of the corridor lack parks, trails and natural areas that would improve livability and development potential.

Transit service to places where people need or want to go is limited. There is a need to connect the region and the corridor to the economic and educational opportunities and services in the corridor. The corridor has 11 percent of the region's population and 26 percent of the region's employment. There are five colleges or universities in the corridor that serve over 45,000 students. The region's largest shopping destinations are located in the corridor. However, transit options in the corridor are limited because transit service varies in availability and frequency and struggles to serve areas with an incomplete road network and with bottlenecks. Existing transit service is most frequent along OR-99W to and from downtown Portland, primarily on TriMet lines 94 and 12, and less frequent crossing the corridor's main OR-99W/I-5 axis. There is a need to improve transit connections to and within the corridor and provide more comprehensive transit access to other destinations in the corridor. Many of the more heavily-traveled areas of the corridor, major employment centers, and industrial areas do not have frequent transit service. Frequent service is most competitive and beneficial to a broad array of riders but can only be provided if it is cost-effective. Taking transit between some of the major destinations in the corridor can take four to six times as long as driving. Many people remain dependent on cars due to a lack of transit options as well as lack of sidewalk and bicycle connectivity.

Limited street connectivity and gaps in pedestrian and bicycle facilities create barriers to transit access. Travel options are also constrained by the geography and development patterns in the corridor. A safe and complete pedestrian network is needed in order to maximize transit use. Currently there are areas that do not have safe pedestrian and bicycle networks to access existing transit. The roads in much of the corridor are winding and discontinuous. There is not a well-connected street grid that would facilitate transit access, make it easier and safer to make short trips on foot or by bike, or provide travelers alternative routes. Sidewalks and safe crossings are lacking in many places, which impedes walking to take transit or to meet other needs. The bicycle network also has gaps that hinder connectivity.

Transit travel in mixed traffic is slow on congested roadways. A lack of arterials results in traffic funneling onto a few key travel routes, such as OR-99W and I-5. Because of the limited choices for travel, transit operating in mixed traffic is often slowed by congestion, especially at key bottlenecks. Travel times for automobiles are expected to increase by 17 percent with average speeds slowing to 20 mph. Bus trips operating in mixed traffic between Portland central city and Tigard that take 42 minutes during the peak hour today are projected to take more than 47 minutes in 2035 (in-vehicle times). These times and are likely to have an even wider variability due to congestion, incidents, and variation in traffic levels.

Travel times are not reliable for motor vehicles and transit. Travel time reliability is the consistency or dependability of travel times from day to day or at different times of day. Lack of reliable travel times means travelers must plan extra time for a trip to ensure they will arrive on time. Sections of OR-99W, the major transit route in the corridor, are among the most unreliable road segments in the corridor; on a 1.7 mile segment in Portland (north of Multnomah Boulevard) and a 2.8 mile segment in Tigard travelers need to budget more than double the average travel time in the PM peak hour to ensure reaching their destinations on time. Transit travel times are subject to the same lack of reliability and can be expected to vary significantly from the forecast "average condition" because of unreliable travel conditions on congested roadways.

There is increasing unmet demand for transit service in the corridor. In 2010 there were 85,100 households in the corridor; projections show this number growing to 126,000 households in 2035. The number of transit trips in the corridor is projected to increase by 78 percent in the next 25 years (without significant new transit capital investment). In 2010, there were 100,700 average weekday transit trips in the corridor. The 2035 forecast shows an increase to 178,900 average weekday transit trips. Today eight bus lines serve the corridor with up to 26 buses per hour in each

direction in peak periods, with buses arriving approximately every 2 minutes on average in some locations. In 2035, with service adjusted to accommodate projected demand, the number of buses would increase to over 35 per hour.

The supply and range of housing options with good access to multimodal transportation are limited. As the region grows, providing a variety of housing options and increased housing supply in the corridor will be necessary to accommodate the additional residents. Presently, the majority of housing in the project area consists of low density, single family housing. Little or no affordable housing is available and there is a need for more housing types, such as apartments and condominiums, that provide density and concentrated development that will support and compliment future transit facilities. Providing additional housing options near good jobs and transit access will reduce reliance on automobile travel. Options for lower cost housing are lacking in the portions of the corridor that have better access to educational facilities, employment, and other community assets, and higher land values in the corridor have limited the opportunities to develop affordable housing. The Housing Authority of Portland has approximately 1,350 people on the waiting list for the three affordable housing facilities it owns in the corridor.

Current development and anticipated growth threaten water quality and other natural resources, such as air quality and wildlife habitat. The area is rich in natural resources, which are a primary value for residents and must be protected according to local, regional, and federal policy. As stewards of the environment, this project should explore opportunities to enhance natural resources and improve transportation without harming the environment.

Areas of the corridor lack parks, trails and natural areas that would improve livability and development potential. Only about 45 percent of the residentially zoned land in the corridor is within a 10-minute walk to a park, trail or natural area compared to approximately 69 percent regionally. The Tigard Triangle and the areas to the north and northeast have very few parks or natural areas. People in the region want to live and work near parks, trails, and natural areas; these amenities increase development potential and can offer opportunities for environmental protection as well. Recent passage of local and regional bond measures to fund acquisition and maintenance of parks and natural areas, which will help meet some of the current needs, demonstrates the desire of residents for better access to parks, trails, and nature.

Background

High capacity transit (HCT) has played a significant role in defining the Portland, Oregon region for almost 40 years. Planning for HCT in the region began following the region's decision to move away from plans for large new freeways in favor of more modest street projects and a network of transitways to meet future travel demand. These plans were codified in the 1975 Interim Transportation Plan and refined in the Light Rail System Plan adopted by the Metro council in 1982. In 1978, the voters in the metropolitan areas of Clackamas, Multnomah and Washington counties made Metro responsible for coordinating the land-use and regional transportation plans of the region's 27 jurisdictions.

In 1995, the Metro Council adopted the 2040 Growth Concept to guide the growth of the region. The 2040 Growth Concept and the Regional Framework Plan, adopted in 1997 and updated in 2005, encourage growth in centers and corridors within an urban growth boundary and call for HCT to serve the larger regional centers. The Regional Framework Plan requires transportation system management strategies, transit, bicycle and pedestrian system improvements, traffic calming, and land use strategies be considered to meet transportation needs prior considering motor vehicle capacity improvements. The Regional Transportation Plan (RTP) sets the course for future transportation decisions and links transportation investments to land use policy to implement the 2040 Growth Concept. These plans have resulted in over 80 miles of light rail, commuter and streetcar built or planned for construction by 2016.

Beginning in 2008, working in collaboration with regional partners and the public, Metro developed the High Capacity Transit System Plan to guide the next HCT investments, including light rail, commuter rail, bus rapid transit and rapid streetcar. The HCT System Plan is designed to focus on the frequent, fast and regional transit investment of the public transportation system. The Regional HCT System Plan functions to support the 2040 Growth Concept and the RTP to move the metropolitan area toward accomplishing regional transportation, land use and environmental goals. In order to support these broader livability goals, the HCT plan was developed and alternatives were evaluated as part of a strategy that included supportive land use, transit oriented development, comprehensive parking programs, well developed access for pedestrians and cyclists, park and rides, and feeder bus networks. In 2009, the Metro council adopted 16 potential high capacity transit corridors in four priority tiers.

High capacity transit in the vicinity of Barbur Boulevard and Oregon Highway 99W was identified as a near term priority, one of the four corridors that were most viable for implementation in the next four years. The HCT System Plan recommendations were included as an element of the 2035 Regional Transportation Plan adopted in 2010. In response to the HCT System Plan recommendations, this comprehensive transportation and land use planning effort, the Southwest Corridor Plan, was initiated in 2011.

Project partners include:

- City of Beaverton
- City of Durham
- City of King City
- City of Portland
- City of Sherwood
- City of Tigard
- City of Tualatin
- Multnomah County
- Washington County
- TriMet
- Oregon Department of Transportation
- Metro